NATIONAL MARINE FISHERIES SERVICE REPORT

National Marine Fisheries Service (NMFS) Northwest Region will briefly report on recent regulatory developments relevant to groundfish fisheries and issues of interest to the Pacific Fishery Management Council (Council).

NMFS Northwest Fisheries Science Center (NWFSC) will also briefly report on groundfish-related science and research activities.

Council Task:

Discussion.

Reference Materials:

1. Agenda Item E.1.a, Attachment 1: Federal Register Notices- Groundfish and Halibut Notices- March 14, 2007 through May 30, 2007.
2. Agenda Item E.1.a, Attachment 2: NMFS Report on New National Environmental Policy Act (NEPA) Processes for Developing Fisheries Actions.
3. Agenda Item E.1.a, Attachment 3: Federal Register Notice 72 FR 27759: Temporary Rule Prohibiting Participation in the 2007 Whiting Fishery By Vessels Without a History of Sector-Specific Participation in the Whiting Fishery between January 1, 1997 and January 1, 2007.
4. Agenda Item E.1.a, Attachment 4: NMFS Report on Vessel Ownership Interest in the Limited Entry Fleet for Vessels Registered to Permits with Sablefish Endorsements.

Agenda Order:

a. Regulatory Activities — Frank Lockhart
b. Science Center Activities — Elizabeth Clarke
c. Reports and Comments of Advisory Bodies
d. Public Comment
e. Council Discussion

Agenda Item E.1.a
Attachment 1
June 2007

FEDERAL REGISTER NOTICES

Groundfish and Halibut Notices
March 14, 2007 through May 30, 2007

Documents available at NMFS Sustainable Fisheries Groundfish Web Site
http://www.nwr.noaa.gov/1sustfsh/gdfsh01.htm

72 FR 11792. Pacific Halibut Fisheries; Catch Sharing Plan. Final Rule. The Assistant Administrator for Fisheries (NMFS: AA), on behalf of the International Pacific Halibut Commission, publishes annual management measures promulgated as regulations for the Pacific Halibut Fishery - 3/14/07

72 FR 12770. National Standard 1 Guidelines; Scoping Process. NMFS announces several scoping meetings for the environmental impact statement for implementation of annual catch limit and accountability measure for Magnuson-Stevens Act Re-authorization - 3/19/07

72 FR 12771. Pacific Coast Groundfish Fishery; Overfishing Determination of Petrale Sole. This action serves as a notice that NMFS on behalf of the Secretary of Commerce, has determined overfishing is occurring in fisheries for Petrale Sole - 3/19/07

72 FR 13043. Pacific Coast Groundfish Fishery; Biennial Specifications and Management Measures; Correction. This document contains corrections to the final regulations that were published in the Federal Register December 29, 2006 - 3/20/07

72 FR 17469. Pacific Coast Groundfish Fishery. NMFS issues a proposed rule to establish catch accounting requirements for persons who receive, buy, or accept Pacific Whiting deliveries of 4,000 pounds or more from vessels using mid-water trawl gear - 4/9/07

72 FR 19390. Pacific Coast Groundfish Fishery; Biennial Specifications and Management Measures; Inseason Adjustments. This final rule takes two actions. It establishes the 2007 harvest specifications for Pacific Whiting and it announces inseason changes to management measures in the commercial and recreational Pacific Coast Groundfish fishery – 4/18/07

72 FR 27759. Pacific Coast Groundfish Fishery; A Temporary Rule. NMFS publishes a temporary rule to prohibit any vessel from participating in either the mothership, catcher-processor or shoreside delivery sector of the directed Pacific whiting fishery off the West Coast in 2007 if it does not have a history of sector-specific participation in the whiting fishery between January 1, 1997 and January 1, 2007 – 5/17/07

NMFS REPORT ON NEW NATIONAL ENVIRONMENTAL POLICY ACT (NEPA) PROCESSES FOR DEVELOPING FISHERIES ACTIONS

NMFS's headquarters recently revised nation-wide processes for developing actions under NEPA analyses. One notable change is that our headquarters has delegated authority to the Regional Administrators (D. Robert Lohn for the Northwest Region and Rod McInnis for the Southwest Region) to sign Findings of No Significant Impact (FONSIs) for Environmental Assessments and, with some possible exceptions, Records of Decision (RODs) for Environmental Impact Statements (EISs).

As part of the delegation of authority to the regions, the regions are required to conduct early internal scoping meetings on actions likely needing analysis under NEPA. Among other topics, these meetings are intended to discuss: a rough schedule for the action's development and analysis; whether the action requires analysis under NEPA and, if so, whether the analysis should be in the form of an EA or an EIS; and whether and how the action has the potential to significantly impact any of a series of resource groups. This internal scoping process is somewhat more straightforward for NMFS's non-Council Endangered Species Act (ESA) actions , which usually involve applicants requesting permission to take some action, than for Magnuson-Stevens Act actions, which are developed through the collaborative and public fishery management council process.

NMFS's Northwest Region tested this internal scoping process in advance of the June Council meeting for two issues: open access license limitation and Amendment 15 to the FMP. Our goal for these test meetings was to comply with our headquarters' requirements for internal scoping without overstepping the agency's role as part of the collaborative Council process. We have provided the results of those meetings in separate reports under agenda items E.4. and E.11. For both of those reports, we recommend to the Council: whether we believe the action should be analyzed via an EA or an EIS, any relevant comments on the Council's Purpose and Need Statement or potential range of alternatives to be analyzed, and our initial thoughts on how biological and socio-economic resources might be affected by the potential action. Our Regional NEPA Coordinator has developed a standard list of resources that are to be considered, some of which come from traditional groundfish NEPA analyses, and some of which come from federal law on implementing NEPA:

- Overfished Groundfish
- Non-Groundfish Species (Non-ESA salmonids, Pacific and California Halibut, coastal pelagic species, highly migratory species, Dungeness crab, shrimp/prawns, sea cucumbers)
- ESA-listed salmonids
- Marine mammals and turtles
- Seabirds
- Treaty rights/trust obligations
- Tourism and recreation
- Environmental justice
- Safety of human life at sea
- Air quality
- Geology, soils, groundwater, and hydrology
- Water quality
- ESA-listed plants and general vegetation
- Cultural resources

- Marine ecosystem and fish habitat (including wetlands, if applicable)
- Community and economic impacts
- Noise
- Land use and ownership
- Cumulative impacts

In our reports on open access licensing and Amendment 15, we list those resource groups that we believe might be affected by the action. Resource groups that we believe will not be affected by the action are not listed in our reports to the Council.

NMFS intends to work collaboratively with the Council to find the most effective means of implementing the NEPA delegation policy while remaining cognizant of the established Council process. We welcome Council suggestions and comments on implementing this new delegation of authority, and look forward to developing a coordinated, comprehensive, and effective approach.

(Catalog of Federal Domestic Assistance No. 83.100, ''Flood Insurance.'')

Dated: May 3, 2007.

David I. Maurstad,

Federal Insurance Administrator of the National Flood Insurance Program, Federal Emergency Management Agency, Department of Homeland Security.

[FR Doc. 07–2385 Filed 5–16–07; 8:45 am]

BILLING CODE 9110–12–P

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Part 660

[Docket No. 070510101–7101–01]

RIN 0648–AV57

Fisheries Off West Coast States; Pacific Coast Groundfish Fishery; a Temporary Rule

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Temporary rule; emergency action; request for comments.

SUMMARY: NMFS publishes a temporary rule to prohibit any vessel from participating in either the mothership, catcher-processor or shoreside delivery sector of the directed Pacific whiting (whiting) fishery off the West Coast in 2007 if it does not have a history of sector-specific participation in the whiting fishery between January 1, 1997, and January 1, 2007. This rule is intended to prevent serious conservation and management problems that could be caused by new entrants in 2007 and to maintain the status quo while the Pacific Fishery Management Council (Council) addresses the issue of increased effort in the whiting fishery through an amendment to the Pacific Groundfish Fishery Management Plan (FMP) for the long term.

DATES: The amendments in this rule are effective May 14, 2007 through November 13, 2007, except for amendments to §§ 660.333 and 660.335, which are effective May 14, 2007.

Comments must be received by June 18, 2007.

ADDRESSES: Comments on the management measures and the related environmental assessment (EA) may be sent to Frank Lockhart, Assistant Regional Administrator for Sustainable Fisheries, Northwest Region, NMFS, 7600 Sand Point Way NE., Seattle, WA 98115–0070, fax: 206–526–6376.

Comments may be submitted via e-mail at *Whiting.emergencyrule2007@noaa.gov* or at the Federal e-Rulemaking Portal: *http://www.Regulations.gov.*

Copies of the FONSI and its supporting EA and other documents cited in this document are available from Frank Lockhart at the address Assistant Regional Administrator for Sustainable Fisheries, Northwest Region, NMFS, 7600 Sand Point Way NE., Seattle, WA 98115–0070. Information presented by the Council for this temporary rule is available for public review during business hours at the office of the Council at 7700 NE Ambassador Place, Portland, OR 97220, phone: 503–820–2280. Copies of additional reports or testimony referenced in this document may also be obtained from the Council.

FOR FURTHER INFORMATION: Frank Lockhart (Northwest Region, NMFS), phone: 206–526–6142; fax: 206–526–6736) and e-mail: *Frank.Lockhart@noaa.gov.*

SUPPLEMENTARY INFORMATION:

Electronic Access

The temporary rule also is accessible via the Internet at the Office of the **Federal Register's** Web site at *http://www.gpoaccess.gov/fr/index.html.* Background information and documents, including the EA, are available at the Council's Web site at *http://pcouncil.org.*

Background

The whiting fishery off the West Coast is managed under the Groundfish FMP prepared by the Council and approved by the Secretary of Commerce under the Magnuson-Stevens Act. The Council has adopted a formal process through which, every two years, it establishes allowable catches and associated fishery conservation and management measures for most of the groundfish fishery sectors for a biennial management cycle. The whiting fishery is managed somewhat differently because there is an annual stock assessment on which the Council bases an annual determination of the U.S. optimum yield (OY) and the sub-quotas of the U.S. OY. Beginning in 1997, the Council makes annual allocations of the U.S. OY available to each of three directed fishing sectors: Mothership, catcher-processor, and shoreside delivery. Further, the directed whiting fishery has a distinct seasonal structure, with the primary season start dates for each of the three commercial sectors being the same since 1997. The primary seasons for the non-tribal catcher/processor and mothership sectors begins May 15. The shoreside primary season in most of the Eureka statistical area (between 42° north latitude (N. lat.) and 40°30′ N. lat.) begins on April 1, and the fishery south of 40°30′ N. lat. begins April 15. The Pacific whiting shoreside fishery north of 42° N. lat. begins on June 15. No more than five percent of the shore-based sector allocation may be taken in the early season fishery off California before the primary season north of 42° N. lat. opens on June 15. This is intended to ensure an opportunity for all sectors of the shoreside industry to have fair opportunity to engage in the fishery when fish are available to them without excessive risk that any one area will receive disproportionately large opportunities. It also supports efforts to minimize bycatch of rockfish and salmon.

The current management regime with specific sector allocations and differences in area and sector season start dates was first implemented for the 1997 fishery (**Federal Register:** May 20, 1997 (Volume 62, Number 97)). At that time, the benefits of the sector allocations were to: Reduce the uncertainty of the amounts available for each sector, make the fishery easier to monitor, and eliminate the ''first-come-first-serve'' derby style incentives in the fishery associated with the ''no-action'' alternative as separate allocations encourage each sector to operate at a more leisurely and safe pace. By reducing the race for fish, separate sector allocations would provide greater incentives for vessels to move to other fishing grounds if necessary to lower bycatch levels, particularly of yellowtail rockfish and salmon. In addition, with separate allocations, each sector would have greater accountability and opportunity to minimize bycatch while providing each sector the flexibility of starting at different times without losing any competitive advantage. It also supported efforts to minimize bycatch of rockfish and salmon.

Since 1997, when sector specific allocations were made, the fishery has been fairly stable except for a few recent instances where additional rules had to be put in place to protect overfished species (2004) and endangered salmon (2005). As in many fisheries, when the fishery is stable, most of the participants know each other and have a shared interest in maintaining a stable situation. In this instance, cooperation includes a common interest in ensuring that bycatch is limited because excessive bycatch could close the fishery before the whiting quota is reached. Therefore, there is frequent sharing of information to ensure that

areas of high bycatch rates are known and avoided. This communication happens throughout the season but is especially crucial early in the season when the target species (whiting) and the sensitive bycatch species (overfished rockfish and salmon) are highly mobile. This communication allows fishing to be prosecuted in areas with high probability of large whiting catches with low bycatch. In turn, this has provided the directed whiting fishery with a long period to pursue the fishery and kept whiting vessels from engaging in other groundfish fishing sectors that were under severe economic stress. These are all benefits related to the enhanced communication among fishermen within a stable fishery.

In addition, keeping shoreside processing facilities open for longer periods also has helped maintain employment opportunities for many who otherwise would have been displaced by the severe cutbacks the Council had made in other groundfish fishery sectors to prevent overfishing and achieve rebuilding of overfished rockfish stocks. There is a further benefit to whiting fishers and processors, as the quality of the whiting is much better later in the season because the fish had regained weight lost during the spawning season. Finally, by shifting whiting fishing to later in the season, and through other industry voluntary actions and communications, the industry was able to reduce its likelihood of high bycatch of overfished rockfish and salmon.

In 2006, however, there was several shifts in fishery conditions that led to Council concern about the potential for major disruptions in the whiting fishery and related non-whiting groundfish fisheries. There was a significant increase in the ex-vessel price for whiting. This attracted several new vessels to the whiting shoreside fishery in 2006. Second, as rationalization of the Alaska pollock fishery was achieved, some vessels, including some American Fisheries Act-qualified vessels (AFA vessels), found they could engage in fishing for whiting off the West Coast in the spring and early summer and then shift to Alaska to take their shares of pollock later in the summer when Alaskan fishing conditions were more favorable. Among the new entries to the whiting fishery were several AFA vessels. The entry of new vessels to the whiting fishery resulted in achievement of the whiting harvest limits earlier in the year in 2006 than in 2005 and an earlier closure than anticipated of the shoreside sector, adversely affecting processors as well as fishers. The Council understood that there was the prospect of additional entry of AFA vessels in 2007, as well as perhaps additional other vessels in the groundfish fishery.

The Council originally considered the issue of limiting new vessel entry to the whiting fishery in September 2006. At that time, the Council recommended that NMFS implement an emergency rule to prevent new entry of certain, but not all, vessels into the whiting fishery for the 2007 season, as well as prohibit certain vessels that participated in the 2006 season. The Council stated its belief that the conservation problems that would arise from an accelerated ''race for fish'' if certain AFA vessels were allowed to remain in the fishery, or if additional AFA vessels were allowed to enter the fishery. The prospect of more participation was alarming to the Council, which was concerned that additional vessels would result in an accelerated ''race for fish,'' with increased harvest rates for whiting. Increased harvest rates, especially if the new vessels are of larger capacity or piloted by masters unfamiliar with the fishery, could lead to greater (and potentially disastrous) bycatch of overfished species of rockfish. In addition, the Council was advised by current whiting fishery participants that this accelerated race for fish would likely lead to higher levels of fishing earlier in the season by the at-sea portion (i.e., motherships and catcher/processors) of the fishery; such an occurrence could result in higher bycatch of endangered or threatened salmon as bycatch rates are documented to be higher in the spring. The Council concluded that serious conservation and management problems would result from this accelerated ''race for fish'' caused by new entry of AFA vessels to the fishery. The Council also noted a concern was that new entry of AFA vessels could result in early achievement of the U.S. directed harvest quotas, leaving West Coast-based vessels facing no fishing or very limited fishing while the AFA vessels could return to the rationalized pollock fisheries in which they had an interest. However, the Council proposal would have prohibited only certain AFA vessels from entry to the fishery for the fist time in 2007, and would have removed from the fishery only AFA vessels that had participated for the first time in 2006. The Council's recommendation would not have prevented additional non-AFA vessels from entering the fishery.

In a letter dated January 11, 2007, the Northwest Regional Administrator (RA), NMFS, notified the Council that he denied its request for an emergency rule. He noted that the Council's action was intended to address actual or potential harm to West Coast fishers from the AFA, but that the evidence they presented to indicate harm (i.e., an earlier closure of the whiting fishery in 2006 than in 2005) was due to new participation by both AFA vessels and non-AFA vessels. While acknowledging that new market conditions were likely to attract additional vessels, he pointed out that the proposed action would have denied new entry to a selected category of vessels (i.e., AFA vessels) but not all vessels. The RA noted that the guidelines for the use of emergency rules call for use of notice-and-comment procedures when there are controversial actions with serious economic effects, especially when the decision is largely related to allocation and not conservation. Further, the Council's remedy would not have fully addressed the valid conservation concerns raised by the Council. Therefore, the proposal, as with other allocation decisions, would more appropriately be handled through the Council's full rulemaking process even if there were valid conservation concerns.

The RA subsequently advised the Council on February 13, 2007, that if it were to submit a proposal that dealt more fully with the issue of conservation risks and management problems due to potential new entry of any new vessels into the directed whiting fishery, NMFS would review that proposal on its own merits. NMFS would continue to be concerned if the request based the proposed action on the AFA rather than on the Magnuson-Stevens Act.

The Council discussed the issue at its meeting March 9, 2007, including the history of the issue, its earlier action, NMFS' rejection and indication of a possible remedy, and alternatives available to the Council. There were four new pieces of information presented at the Council meeting that exacerbated their concern about an increased race for fish. First, the price for whiting continues to increase to unprecedented levels. Ex-vessel prices increased from $77 per ton in 2004 to $137 per ton in 2006—nearly doubling since 2004 and increasing by more than 22 percent in 2006 from the 2005 price. Industry projections for 2007 are that prices will continue to increase to more than $176 per ton. Second, the U.S. Optimum Yield (OY) for whiting in 2007 is 10 percent lower than the OY in 2006. Third, because of higher than projected rockfish bycatch rates, the Council took action in March 2007 that placed new and more severe constraints on non-whiting groundfish fishing. This reduces the fishing opportunities for

these non-whiting sectors. Fourth, the OY for Alaska pollock is reduced for 2007.

All of these recent and unanticipated changes in conditions increase the likelihood of an accelerated race for fish: The first by making entry more potentially lucrative for additional vessels; the second by constraining supply of whiting for harvest and leading to more pressure among vessels to quickly capture the limited whiting quota; and the third and fourth by increasing the relative attractiveness of whiting compared to other fishing opportunities. Faced with this new information, the Council adopted and submitted its new request that NMFS promulgate an emergency rule that would prohibit any vessel from operating in the mothership, catcher-processor, or shoreside delivery sector of the whiting fishery in 2007 if it did not have a history of sector-specific participation prior to January 1, 2007. The Council also committed to completing an amendment to its Groundfish FMP to resolve issues associated with AFA vessels for the long term, consistent with the Magnuson-Stevens Act, the AFA, and other applicable law. This could lead to an additional program under consideration of an individual fishermen's quota system as early as 2010.

NMFS agrees that if this rule is not implemented, an accelerated ''race for fish'' is likely to cause serious conservation and management problems, including excessive bycatch of overfished rockfish, excessive catch of endangered and threatened salmon, and severe disruption of other groundfish fishery sectors. This rule will help maintain stability in the whiting fishery and other groundfish fishing sectors in 2007 while the Council completes its FMP amendment to resolve groundfish and whiting fishing fleet capacity issues for the long term. This rule also provides that parties who invested in 2006 and early 2007 by purchasing groundfish trawl limited entry permits for aggregation and use on a single vessel in the whiting fishery in 2007 are exempted from the prohibition against subsequently disaggregating such permits. This will mitigate financial harm to such parties who invested in good faith without knowing that this emergency rule could be implemented. The rule also contains provisions to allow a person who transferred a permit to a ''prohibited'' vessel (a vessel not eligible to participate in the fishery) can reverse that action and return the permit to the previous vessel or transfer it to a vessel that is eligible. Normally, a permit can only be transferred once a year. This person was not aware of the prospect of an emergency rule when he transferred the permit. Fairness justifies this exception to the regulation.

For purposes of implementing the Council request, which is for control of entry on a sector-by-sector basis, NMFS is using 1997 as the base year. That is the first year in which the three sectors began being considered for separate sub-quotas and management controls. State landings data, observer records, and NORPAC industry reports will be the sole evidence to demonstrate eligibility based on historic sector-specific participation.

Public Comments and Issues

At the Council meeting, the Council took comment on the issue prior to taking action. There were numerous expressions of support for the action as well as some comments opposed to the action. In addition, the Northwest Region and the Council have received written comments since the Council action was taken. At the meeting, fishers who commented were divided; some opposed the action while most testifying before the Council supported it. While most of those testifying stated their belief that allowing new entrants would cause a conservation problem, there was some testimony that a problem would not occur. Some argued that leaving the fishery open to new entry could result in a high probability of intensive fishing early in the season leading to conservation problems (especially with respect to bycatch), while others argued that the catch limit on whiting provided assurance that there would not be any threat to whiting, and that the limits on bycatch provided protection to overfished rockfish. There was agreement that there is an allocation issue that the Council needs to resolve. Some urged the Council to address this for the longer term through Amendment 15 without an emergency rule, while others supported an emergency rule to allow the fishery to proceed as it has in recent years (i.e., in a stable manner) without new entry while the Council develops Amendment 15. A spokesperson for the recreational sector supported the emergency rule as it could reduce the risk of excessive bycatch of salmon and rockfish, which in turn would reduce the risk of further constraints on recreational fishing for groundfish. A West Coast processing industry member also spoke in favor of the emergency rule.

The West Coast state officials voting at the meeting all supported the emergency rule. The California state official made the motion for the emergency rule, expressing concern about the increased risk of excessive bycatch and noting restrictive actions the Council has taken toward other groundfish fishery sectors to prevent bycatch problems. NMFS believes it is likely that increased capacity in the whiting fishery could exacerbate such problems. It was noted that the whiting limit for 2007 is lower than in 2006, and thus there is a greater risk that new participation would lead to more intensive competition and problems. California also pointed out the risk of management problems if the whiting fishery were to close earlier than normal and whiting fishers were to place more pressure on other groundfish fishery sectors, thereby exacerbating problems in those sectors as well as coastal communities. Oregon's representative on the Council was strongly in favor of the emergency rule as the state was concerned that additional entry would result in intensive early fishing, with high risk of excessive rockfish and salmon bycatch. Further, an early closure of the fishery would have severe adverse impacts on coastal processors in Oregon and elsewhere. It is notable that Washington's representative had opposed the proposed emergency in September 2006 but was now convinced that 2007 presented different and unforeseen conditions. Washington noted that the Council's proposal would not force out any person who had participated in 2006. Washington supported action as reducing the risk of adverse impacts on rockfish (especially noting concern about canary rockfish) and salmon. The Washington representative also noted that this would be a one-year action; it will be incumbent on the Council to address the capacity issue for the long-term in a timely manner.

The Pacific Whiting Conservation Cooperative (Cooperative) recommended that the Council request the emergency rule. The Cooperative subsequently submitted written comments (see below).

A processor who has recently invested in shoreside facilities has written NMFS in favor of keeping the fishery open, which in this context means to not freeze new entry to the shoreside processing sector.

A company that invested in 2006 by purchasing limited entry permits and combining them on a single vessel with the intent of entering the fishery in 2007 objected to the emergency rule proposal. In this company's view, there is no ''emergency'' pursuant to NMFS' guidelines for the use of emergency authority, especially for the entry of additional processing capacity or a

catcher/processor vessel. They noted that NMFS disapproved the Council's September 2006 proposal, and the reasons for that disapproval would apply in this instance as well. They noted that the Council could have used its normal decision processes to establish additional measures to manage the whiting fishery and had chosen not to do so; in their view, nothing has changed so significantly as to warrant emergency regulations. They also noted that the permits acquired to allow their vessel to qualify under the limited entry program were from active vessels, so their prospective new entry would only replace existing capacity rather than add to the capacity of the fleet. Their letter identifies the specific analyses that they maintain would be needed to satisfy Magnuson-Stevens Act requirement for management regulations and asserts that such analyses would show that the ''best scientific information available'' does not support an emergency rule.

Subsequent Public Comments on the Emergency Rule Proposal

At the Council meeting, following the vote on the proposed emergency action, the NMFS representative invited written public comment on the prospective action while the Council prepared the actual submission for NMFS consideration, requesting that they be submitted within two weeks. NMFS wanted to be sure it had as complete an understanding as possible on the range of issues and concerns that various parties would have on this matter. During this period, the following comments were received:

The Pacific Whiting Conservation Cooperative wrote reiterating its support for emergency action. It noted that the voluntary industry arrangement that results in the slow pace of fishing early in the season and that includes collaboration and communication to avoid bycatch would likely end if there were new entry to the fishery. It indicated that there would be a ''race for fish'' leading to all the problems discussed by the Council when it agreed to request emergency action.

The State of Oregon submitted supplemental comments, reiterating its concerns about the risk of excessive bycatch of rockfish as well as the economic disruption to the West Coast whiting fishing fleet and to West Coast processors and their employees if there were early closure of the whiting fishery for any reason.

One party suggested that the emergency rule request be approved only with respect to the entry of new harvesting vessels. This would mean that additional mothership operations could enter the fishery in 2007. This party suggested that it would be beneficial to other whiting fishers to increase the number of potential buyers of fish.

Two sets of comments were received from representatives of the mothership sector. They favored the proposed action, with special emphasis on ensuring that eligibility for participation is on a sector-specific basis, and that eligibility in 2007 be based on sector-specific participation beginning in 1997.

Responses to Comments

Because the conservation concerns raised by the Council in 2006 still exist and because, unlike their 2006 request, the Council's proposed remedy fully addresses those concerns by encompassing all vessels that could potentially enter the whiting fishery absent this rule, NMFS believes that the available information demonstrates that emergency action is warranted. This conclusion is further supported by the new information received in late 2006 and early 2007. These conditions may pose an unacceptably high risk that there would be serious conservation and management problems if no action is taken. The Council has been responsive to NMFS' objections to the prior request for emergency action and has taken the broader action required to address the problem in the short term, and has committed to action to resolve the whiting fishery capacity issue in the long-term through an amendment to the Groundfish FMP. NMFS notes that the emergency rule would be in effect for at most one year, and that the rule contains provisions intended to minimize financial harm to those who may have invested to participate in the fishery in 2007 not knowing they would be precluded from utilizing the investment in the fishery. NMFS notes further the critical need to ensure that bycatch limits on overfished rockfish not be exceeded so that the stocks can rebuild in accordance with the approved rebuilding plans.

NMFS agrees with the Council that the risks of serious economic disruptions in the event of excessive catch of rockfish are very high if there were no control to stop entry into the whiting fishery at least for 2007. NMFS also agrees that the risk of loss of industry cooperation in the fishing year would pose serious risks of loss of control over bycatch. With respect to the potential to allow new mothership operations, NMFS concludes that this would not fully address the risks of an accelerated ''race for fish,'' with consequent risk of early fishing and in turn excessive bycatch. Again, the cooperation of industry is vital to ensuring a stable fishery with minimal bycatch. NMFS determined that applying the prohibition on new entry only to the catcher sectors would not address the problem; the entry of additional at-sea processors could also lead to an accelerated race for fish as more parties compete for the available sector allocation, with a higher likelihood of a breakdown in communication and cooperation leading to excessive risk of heavy early season fishing with high bycatch and fishery disruptions. NMFS agrees that the Council intended that eligibility be determined on a sector-specific basis, and has determined that 1997 should be used as the initial year for qualification of participation in the fishery on a sector-specific basis. This was the first year in which management of the domestic whiting fishery was managed on a sector-specific basis.

Evaluation of Emergency Rule Request Against Agency Guidelines

NMFS has considered the Council's request and the information on which the request is based. NMFS considered also the information in the Council's final environmental impact statement (FEIS) for its biennial harvest limits and conservation and management measures. This includes extensive information on the status of stocks and the economic status of the fisheries and the dependency of communities which are dependent on those fisheries. NMFS has evaluated the proposal against its guidelines for the use of emergency rules, published at 62 FR 44421 (August 21, 1997), which sets forth criteria that must be met to warrant emergency rules. Each of the criteria is discussed below.

1. The Situation Results From Recent, Unforeseen Events or Recently Discovered Circumstances

Two years ago, it could not have been foreseen that Pacific whiting would be a much more important component of the West Coast groundfish fisheries as well as a potential target of Alaska fishers. As noted earlier, in 2005 and 2006, ex-vessel prices for whiting increased dramatically, and the industry projection is that prices will continue to rise in 2007. The U.S. OY for whiting in 2007 is down 10 percent from the 2006 level, so the supply of whiting for the U.S. industry will lead to increased competition even without new entry. The Council acted in March 2007 to further restrict non-whiting fishing due to higher than anticipated rockfish bycatch rates; this puts new pressure on those other sectors and makes whiting relatively more attractive, and could

promote shifting of effort to whiting if no action were taken to prevent it. Finally, while the OY for Alaska pollock is reduced and rationalization of the Alaska pollock fishery allows many vessels that normally fish in Alaska to set their own schedules for catching a share of the harvest. The pollock fishery would be available later in the year, if desired; these vessels (many of which have or could obtain West Coast trawl limited entry permits) could choose to fish for Pacific whiting early in the year and, when the whiting quota is reached, shift operations to Alaska to fish for pollock. These vessels have the capability (i.e., equipment and gear) to fish for whiting with little or no added cost. Taken together, these new and unforeseen conditions support a high likelihood of new entry to the whiting fishery in 2007 if no action were taken. This would result in unacceptably high risk of conservation and management problems.

2. The Situation Presents Serious Conservation or Management Problems in the Fishery

As noted, the whiting stock is thoroughly monitored and assessed annually, and the results are generally accepted as presenting an accurate assessment of the stock. The U.S. and Canada have agreed to a Treaty for joint management of the stock and for sharing the harvestable surplus. Given the Council's relatively conservative harvest strategy for whiting, there is little reason for serious conservation concern about the current and future condition of the Pacific whiting stock.

However, it is also generally true that the more participants in a fishery managed under quotas, the greater the likelihood that conservation will become a concern, and especially in the case where the fishery is still subject to new entry. Quite simply, new entry encourages more intensive fishing as soon as a fishery is open as participants fear they will not catch a fair share of the available fish if they do not fish early. In turn there is greater pressure to fish hard with possibly less regard for minimizing waste or bycatch. This is especially true in the whiting fishery, in which industry cooperation has been a vital element in controlling the pace of the fishery and in sharing information so that participants would avoid areas of high bycatch and thus help each other extend the season as long as possible. As noted above, this cooperation would be less likely to continue if new entrants were allowed into the fishery without limit. A breakdown in cooperation and communication would be likely to result in an accelerated race for fish and the consequent unacceptably high risk of excessive bycatch and fishery disruptions. If fishing is conducted more intensely, there is likely to be less care to avoid bycatch and more likelihood of ''disaster'' tows with extremely high bycatch levels. This would be especially true if the new entrants were high capacity vessels with a need to fill up fast to cover costs, or if the vessel were captained by a person not familiar with the fishery and unable to adjust to high bycatch rates. This could lead to early closure of the whiting fishery if bycatch limits are reached; it is important to note that if a bycatch limit is reached, even if only by one sector, fishing by all sectors of the whiting fishery must cease. For perspective, in early June 2004 a vessel in the mothership sector had a single tow of fish estimated to contain 3.9 mt of canary, which is equal to 83 percent of the 2007 whiting fishery bycatch limit for non-tribal whiting fisheries. An accelerated race for fish could well result in closure of the whiting fishery before the annual quota of whiting is reached, resulting in serious loss of income and employment both to fishers and to processing facilities. Accelerated fishing for Pacific whiting in the spring is also likely to result in incidental catches of salmon in excess of the incidental take allowances under biological opinions issued under the ESA. Also, as pointed out above, the yield per fish is greater later in the season than earlier, so pressure to fish early is likely to result in less usable and less valuable product.

In summary, allowing new entry to the whiting fishery in 2007 is likely to result in serious conservation and management problems.

The situation can be addressed through emergency regulations for which the immediate benefits outweigh the value of advance notice, public comment and deliberative consideration of the impacts on participants to the same extent as would be expected under the normal rulemaking process.

The benefit of immediate action is that it provides for greater stability in the 2007 Pacific whiting fishery while the Council completes action on the amendment to manage the fishery over the long term, possibly including conservation and management measures to deal with AFA impacts as well as the impacts of otherwise unlimited entry into the whiting fishery. The Council can use its established planning process and the Secretary can use notice and comment rulemaking procedures for implementing the long-term strategy and measures. There is little cost as only new entry would be prohibited; any vessels that participated prior between January 1, 1997, and December 31, 2006, inclusive, would be eligible to participate in 2007. It can be argued that the fishery is already overcapitalized, but at least there would not be further overcapacity due to additional new entry to the fishery for short-term gain at the expense of those with a long-standing interest in the fishery.

It is known that at least one party invested in 2006 by buying limited entry permits and aggregating them for application of a single permit on a single vessel intended to participate in the whiting fishery in 2007. There may be other such situations. The regulations for the limited entry permit program currently do not allow a permit established through aggregation of multiple permits to be subsequently disaggregated. However, to alleviate financial harm to any who in good faith made investments as described, the emergency rule provides for an exception from the prohibition against disaggregation of permits. The investor(s) may then be able to recapture at least a portion of the investment that might otherwise be lost. In addition, one party is known to have tried to register a permit for use on a ''prohibited'' vessel; the rule includes a provision allowing such parties to register their permits for alternate, eligible vessels in such cases.

As noted above, NMFS has established that 1997 is the initial year for which sector participation will be considered in determining eligibility for a particular sector of the whiting fishery in 2007. State landings data, Pacific Fishery Information Network (PacFIN) data, observer data, and NORPAC industry reports as appropriate to the sector, will be the sole evidence to demonstrate the sector-specific eligibility of vessels.

Classification

The Assistant Administrator finds good cause under 5 U.S.C. 553(b)(B) to waive the requirement for prior notice and opportunity for public comment, as such procedures are impracticable and contrary to the public interest.

The season for the primary West Coast Pacific whiting fishery opened April 15 south of 42° N. latitude (lat.) and opens May 15 south of 42° N. lat. The normal seasonal pattern of the fishery (and the pattern that the Council believes is necessary to prevent adverse impacts on fish stocks as well as on established fisheries) is to have relatively little fishing early in the season with expanded fishing later in the year, and with the fishery extending through the summer. This has been achieved in

recent years, at least in part, because of voluntary action by an industry group that has worked hard to ensure that the season will last well into the summer or fall as long as the whiting quota allows it. This allows less fishing when there are high bycatch rates for rockfish and salmon, and more fishing when bycatch rates are lower.

As noted above, there were several new pieces of information supporting the expectation of additional entry to the fleet in 2007. First, the price for whiting continues to increase to unprecedented levels, ex-vessel prices have increased from $77 per ton in 2004 to $137 per ton in 2006—nearly doubling since 2004, and increasing by over 22% compared to 2005. Industry projections for 2007 are that prices will continue to increase to over $176 per ton. Second, the U.S. Optimum Yield of whiting was reduced by 10% for the 2007 season compared to 2006. Third, because of higher than projected rockfish bycatch rates, the Council took action in March that placed more severe constraints on non-whiting groundfish fishing. Fourth, the quota for Alaskan pollock was reduced this year. All of these recent changes increase the chance of an accelerated race for fish: The first by making entry more lucrative for additional vessels, the second by constraining supply of whiting and leading to more pressure among vessels to quickly capture the more limited supply of whiting, and the third and fourth by increasing the relative attractiveness of entering the whiting fishery this year.

Without this emergency rule, new entry is likely early in the season; if this happens, the voluntary limitation of early season fishing will likely cease to be effective, resulting in more intensive early season fishing and higher bycatch levels. It also would likely result in early achievement either of a bycatch limit (causing early closure of the whiting fishery) or of the whiting catch quota (also causing early closure of the whiting fishery). Fishers from Alaska could return to Alaska; West Coast-based vessels would not have that alternative and would either be idled or would add to pressure in the severely constrained other sectors of the groundfish fishery. In the worst case, the whiting fishery would catch so much in excess of its rockfish bycatch limits that the Council would be forced to impose even more limits on the other groundfish fishery sectors to keep total bycatch within the total limits. The emergency rule maintains the status quo in the fishery at least through 2007, while the Council develops a long-term management program to achieve stability for the future. Providing opportunity for prior notice and public comments on the Council's requested action for 2007 would delay the rule to the extent that the benefits of the rule would be nullified and the protection of the resources intended by the rule would not be provided.

The proposed action will have beneficial effects on current participants in the Pacific whiting fishery and on participants in other groundfish fisheries. Without this action, it is fairly certain that there would be additional entry into the fishery, meaning greater competition for the available harvest (the U.S. whiting OY is reduced by 10% from the 2006 harvest level) and a greater likelihood of an ''accelerated race for fish.'' This would be expected to result in early closure of the directed whiting fishery, which in turn could lead to idle capacity (for those who do not have the ability to shift to other fisheries or other groundfish sectors) or excess capacity shifting to other groundfish fisheries. Such a shift would exacerbate the economic difficulty being experienced in those non-whiting sectors due to severe constraints on fishing levels and areas available for fishing. In one possible scenario, the no action alternative would result in rockfish bycatch limits for the groundfish fisheries being exceeded in the whiting fishery at levels that would require additional reductions in other groundfish fishing sectors targeting healthy groundfish stocks.

Therefore, NMFS has concluded it is impracticable and contrary to the public interest to provide an opportunity for prior notice and public comment under 5 U.S.C. 553(b)(B). For the same reasons as discussed above, the Assistant Administrator also finds that good cause exists under 5 U.S.C. 553(d)(3) to waive the 30-day delay in effectiveness of this rule. As previously discussed, this rule is necessary to prevent the conservation and management problems that would arise from additional entry to the Pacific whiting fishery in 2007. Without this rule, there will be new entry, and current stability in the fishery, with low bycatch of rockfish and salmon, will likely dissolve. This would pose an unacceptable risk of excessive bycatch of overfished rockfish and of salmon as well as an unacceptable risk of severe management problems in the economically stressed groundfish fishery.

This temporary rule is exempt from the procedures of the Regulatory Flexibility Act because the rule is issued without opportunity for prior notice and opportunity for public comment.

An environmental assessment was prepared for this action under the National Environmental Policy Act and a Finding of No Significant Impact was signed on May 4, 2007.

This temporary rule has been determined to be not significant for purposes of Executive Order 12866.

List of Subjects in 50 CFR Part 660

Fisheries, Fishing.

Dated: May 11, 2007.

William T. Hogarth,

Assistant Administrator for Fisheries, National Marine Fisheries Service.

■ For the reasons set out in the preamble, 50 CFR part 660 is amended as follows:

PART 660—FISHERIES OFF WEST COAST STATES

■ 1. The authority citation for part 660 continues to read as follows:

Authority: 16 U.S.C. 1801 *et seq.*

■ 2. In § 660.306, paragraph(f)(6) is added to read as follows:

§ 660.306 Prohibitions.

* * * * *

(f) * * *

(6) Fish for or land whiting, or process whiting at sea, while participating in a specific sector (as defined at § 660.373(a)), from May 14, 2007 and through November 13, 2007 with a vessel that has no history of participation within that specific sector of the whiting fishery in the period after December 31, 1996, and prior to January 1, 2007, as specified in § 660.373(j).

■ 3. In § 660.333, paragraph (f) is added to read as follows:

§ 660.333 Limited entry fishery—eligibility and registration.

* * * * *

(f) *Limited entry permits indivisible.* Nothwithstanding paragraph (d), a trawl-endorsed limited entry permit that was created between December 31, 2006, and May 14, 2007 by aggregating multiple limited entry permits under § 660.335(b) may be disaggregated back into the initially combined component permits.

■ 4. In § 660.335, paragraph (f)(3) is added to read as follows:

§ 660.335 Limited entry permits—renewal, combination, stacking, change of permit ownership, and transfer.

* * * * *

(f) * * *

(3) Any transfer of a trawl-endorsed limited entry permit that occurred between December 31, 2006, and May 14, 2007 may be rescinded by the permit

owner without counting against that permit owner's once per calendar year restriction on frequency of permit transfers for the 2007 calendar year.

* * * * *

■ 5. In § 660.373, paragraph (j) is added to read as follows:

§ 660.373 Pacific whiting (whiting) fishery management.

* * * * *

(j) *2007 Pacific whiting fishery.* (1) In general, a person may fish for or land whiting or process whiting at sea in a sector of the whiting fishery (as defined at § 660.373(a)) between May 17, 2007 and November 13, 2007 only with a vessel that has history of participation in that sector of the whiting fishery in the period after December 31, 1996, and prior to January 1, 2007. Specifically:

(i) To harvest whiting in the shore-based sector between May 17, 2007 and November 13, 2007, a vessel must have harvested for delivery to a shore-based processor at least 4000 lbs (1.81 mt) of whiting in a single trip during the primary season (as defined at § 660.373(b)) in the period after December 31, 1996, and prior to January 1, 2007. State fish ticket data collected by the states and maintained by Pacific States Marine Fisheries Commission's Pacific Fishery Information System is the sole evidence to demonstrate participation in this sector.

(ii) To harvest whiting in the mothership sector between May 17, 2007 and November 13, 2007, a vessel must have harvested whiting for delivery to motherships in the period after December 31, 1996, and prior to January 1, 2007. Observer data collected by the Northwest Fisheries Science Center and by North Pacific Groundfish Observer Program as organized under the Alaska Fisheries Science Center's NORPAC database is the sole evidence to demonstrate participation in this sector.

(iii) To process whiting in the mothership sector between May 17, 2007 and November 13, 2007, a vessel must have processed at sea, but not harvested, whiting in the period after December 31, 1996, and prior to January 1, 2007. Observer data collected by the Northwest Fisheries Science Center and by North Pacific Groundfish Observer Program as organized under the Alaska Fisheries Science Center's NORPAC database is the sole evidence to demonstrate participation in this sector.

(iv) to harvest and process whiting in the catcher-processor sector between May 17, 2007 and November 13, 2007, a vessel must have harvested and processed whiting in the period after December 31, 1996, and prior to January 1, 2007. Observer data collected by Northwest Fisheries Science Center and by North Pacific Groundfish Observer Program as organized under the Alaska Fisheries Science Center's NORPAC database is the sole evidence to demonstrate participation in this sector.

(2) [Reserved]

[FR Doc. 07–2417 Filed 5–14–07; 8:58 am]

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NMFS REPORT ON VESSEL OWNERSHIP INTEREST IN THE LIMITED ENTRY FLEET FOR VESSELS REGISTERED TO PERMITS WITH SABLEFISH ENDORSEMENTS

At its April 2007 meeting, the Council decided to review under this June agenda item a request from Mr. Robert Alverson of Fishing Vessel Owner's Association (FVOA) that the Council consider revising the FMP and/or Federal regulations such that: if a person has 20 percent or less ownership interest in a vessel participating in the limited entry primary sablefish fishery, that person should not be considered to have responsibility for or control of the permits attached to that vessel. Mr. Alverson explained that the purpose of this request was to allow vessel owners with multiple vessels to have ownership interest in and/or hold sablefish-endorsed permits on those multiple vessels. Mr. Alverson also explained on the Council floor that this request stemmed from how FVOA members divide their vessel ownership interest in multiple vessels under regulations developed by the North Pacific Fishery Management Council and implemented by NMFS's Alaska Region governing halibut/sablefish individual fishing quota use off Alaska.

During its April 2007 discussions of this request, Council members asked that NMFS provide a report to the June 2007 meeting on whether vessel owners were being constrained from having ownership interest in and control over more than three permits by FMP language, Federal regulations, or both. This report provides: background on the current ownership status of vessels registered to sablefish-endorsed permits; the history of FMP language and West Coast Federal regulations that define the relationship between vessel owners and their limited entry permits; the revisions to Federal regulations that would be needed to implement this proposal; and information on where the 20-percent vessel ownership interest issue is addressed in Federal regulations for waters off Alaska.

VESSEL OWNERSHIP INTEREST: NMFS reviewed its limited entry permits database on May 2, 2007 to determine the number of vessels registered to sablefish-endorsed permits that were owned by more than one person and found the following ownership arrangements:

A total of 76 unique vessels are registered to one or more of the 164 sablefish endorsed permits.

Vessels registered to sablefish-endorsed permits where…	# of vessels
1 person is listed as vessel owner	31
2 people are listed as vessel owners	19
1 corporation is listed as vessel owner, where **1** person is behind the corporation	9
1 corporation is listed as vessel owner, where **2** people are behind the corporation	8
1 corporation is listed as vessel owner, where **3** people are behind the corporation	2
1 corporation is listed as vessel owner, where **4** people are behind the corporation	2
1 corporation is listed as vessel owner, where **5** people are behind the corporation	1
1 corporation plus **1** person are listed as vessel owners, where **1** person is behind the corporation, for a total of **2** people having ownership interest in the vessel	1
3 corporations plus **2** people are listed as vessel owners, with a total of **7** people having ownership interest in the vessel	1
2 corporations plus **1** person are listed as vessel owners, with a total of **7** people having ownership interest in the vessel	1

VESSEL OWNERSHIP INTEREST IN THE FMP AND REGULATIONS: The Groundfish FMP and West Coast groundfish implementing regulations require a relationship of responsibility, whereby vessel owners are responsible for their vessel's activities, including a vessel's participation in the limited entry fishery when registered to a limited entry permit. **Amendment 6 to the FMP**, implemented in 1992, set the limited entry program in place. Among other program provisions, Amendment 6 declared vessel owners to be responsible for holding limited entry permits if they were using their vessels to participate in the limited entry fishery. Sections 11.2.8(1) and (5) of the FMP read:

> "(1) The vessel owner is responsible for acquiring and holding an LE [limited entry] permit with the necessary gear endorsement(s) for each vessel that is required to have an LE permit to catch Council-managed groundfish under the limited entry system (vessels fishing limited entry gear under the limited access quota and regulations)."
>
> And, "(5) A vessel owner may not use a vessel, or allow a vessel to be used, to catch any Council-managed groundfish with limited entry gear under the limited access quota and regulations unless the vessel owner holds an LE permit with gear endorsement(s) which explicitly allows such catch and the LE permit has been registered with NMFS for use with that vessel."

In implementing Amendment 6, Federal regulations also required that relationship of responsibility for limited entry fishery participants. 50 CFR 660.333(a) reads:

> "*General*. In order for a vessel to participate in the limited entry fishery, the vessel owner must hold (by ownership or lease) a limited entry permit and, through SFD, must register that permit for use with his/her vessel. When participating in the limited entry fishery, a vessel is authorized to fish with the gear type endorsed on the limited entry permit registered for use with that vessel. There are three types of gear endorsements: trawl, longline, and pot (or trap). A sablefish endorsement is also required for a vessel to participate in the primary season for the limited entry fixed gear sablefish fishery, north of 36° N. lat. A limited entry permit confers a privilege of participating in the Pacific Coast limited entry groundfish fishery in accordance with Federal regulations in 50 CFR part 660."

Amendment 9 to the FMP, implemented in 1997, added the sablefish endorsement program, which essentially created a license limitation program within the limited entry fixed gear fleet, reserving 85% of the limited entry fixed gear sablefish allocation for vessels participating in the primary sablefish fishery. Amendment 9 reinforced the notion of a vessel owner being responsible for holding a limited entry permit to participate in the limited entry fishery, and being responsible for vessel activities while the permit is associated with the vessel. Amendment 9 revised the FMP to add, among other items, Sections 11.2.8(2) and (6) to read:

> "(2) The vessel owner is responsible for acquiring and holding an LE permit with the longline or fishpot endorsement(s), and fixed gear sablefish endorsement(s), for each vessel that is required to have such endorsements to catch Council-managed sablefish under the limited entry system (vessels fishing longline and fishpot gear against the LE fixed gear sablefish allocation and under LE fixed gear sablefish regulations during fishing periods specified in the regulations and north of 36°N latitude)."
>
> And, "(6) A vessel owner may not use a vessel, or allow a vessel to be used, to catch any Council-managed sablefish with longline or fishpot gear against the LE fixed gear sablefish allocation as part of the primary fixed gear sablefish fishery specified in the regulations and north of 36°N latitude, unless the vessel owner holds an LE permit with a longline or fishpot gear endorsement and a fixed gear sablefish endorsement, and the LE permit has been registered with NMFS for use with that vessel. Sablefish endorsements are not required to harvest under fixed gear limited entry daily-trip-limit or other regulations intended to allow low level or incidental harvest."

The **three-tier program,** was implemented in 1998, revising the sablefish endorsement program to separate sablefish-endorsed permits into three tiers with different associated annual limits. **Amendment 14 to the FMP**, implemented in 2001, allowed up to three permits to be stacked on a single vessel, and restricted the number of permits that could be owned or held by a person, partnership, or corporation. Provision 3 of the Amendment 14 FMP and regulatory analysis document provided limits on permit stacking and ownership. The ownership limit options and sub-options adopted by the Council were:

> The number of fixed gear sablefish permits owned by an individual will be restricted to the following options:
>
> - Three permits. Exceptions would be made for individuals then currently holding permits in excess of the limit. These individuals would not be allowed to accumulate more permits.
> - An individual's ownership would be calculated by summing the total permits for which an individual holds some ownership interest, regardless of how small.

At the Council's June 2001 meeting (agenda item C.7.,) which was held during the comment period on the Amendment 14 proposed rule (66 FR 30869, June 8, 2001,) NMFS asked the Council for clarification on whether and how Provision 3 should be interpreted for vessel owners who lease permits – persons who hold those permits and fish against quotas associated with those permits, but do not own the permits. As explained in the final rule to implement Amendment 14 (66 FR 41152, August 7, 2001, at page 4155):

> "The Council confirmed that it had not intended Amendment 14 to allow a person to own three permits and then lease any number of additional permits. Nor had the Council intended to provide exemptions to the three-permit limit for persons who held more than three permits, but who did not own more than three permits as of November 1, 2000.

> Rather, the Council's intent had been to allow a person to hold no more than three permits, regardless of whether those permits are owned or leased."

As a result of this guidance, NMFS implemented regulations at §660.334(d)(4)(ii) that read:

> "No individual person, partnership, or corporation in combination may have ownership interest in or hold more than 3 permits with sablefish endorsements either simultaneously or cumulatively over the primary season, except for an individual person, or partnerships or corporations that had ownership interest in more than 3 permits with sablefish endorsements as of November 1, 2000…"

REVISIONS TO REGULATIONS NEEDED TO IMPLEMENT PROPOSAL: Restrictions on ownership interest were implemented in Federal regulations based on the Council's Amendment 14 suite of recommended revisions to the FMP and Federal regulations. To implement the proposed revisions to regulations, the Council would need to consider recommendations to revise the implementing regulations for Amendment 14 to determine whether the Council wishes to allow vessel owners with 20 percent or less interest in a vessel to own and/or hold more than 3 sablefish-endorsed limited entry permits. Because the initial regulations were developed based on an extensive public record, the Council would be required to consider the prior record and rationale for the existing rule, and would need to address in its new record why it is recommending a change to the regulations, and the effect of that change.

ALASKA SABLEFISH/HALIBUT REGULATIONS RELATIVE TO THE 20 PERCENT OWNERSHIP PROVISION: Federal fisheries regulations for fishing activities off the coast of Alaska are found at 50 CFR 679, with the Alaska halibut/sablefish individual fishing quota (IFQ) regulations at 50 CFR 679.42. The references to 20-percent ownership interest in a vessel in these regulations simply exempt any person or corporation that was initially issued halibut or sablefish quota share and that owns at least 20-percent interest in that vessel: from being subject to owner-on-board regulations, and from having to be present at the time that individual fishing quota (IFQ) landings occur. If the proposal discussed above were implemented for West Coast regulations, persons with exactly 20-percent ownership interest in a vessel would be considered to both:

- have a great enough ownership interest to be considered a primary vessel owner and therefore exempt from owner-on-board provisions off Alaska,
- have too little ownership interest to be subject to West Coast restrictions on the number of sablefish-permits that may be owned or held by a vessel owner.

PROPOSED PROCESS AND SCHEDULE FOR DEVELOPING BIENNIAL (2009-2010) HARVEST SPECIFICATIONS AND MANAGEMENT MEASURES

Amendment 17 to the Groundfish Fishery Management Plan (FMP) established the process to set biennial groundfish harvest specifications and management measures which was first used to set 2005-2006 harvest specifications and management measures and again used for the same purpose for the 2007-2008 management cycle. The process accommodated several important sequential decision-making steps, including scientific peer review of data and analyses used for management decision-making; an environmental assessment compliant with the National Environmental Policy Act (NEPA) to analyze alternative harvest specifications and management measures; constituent meetings sponsored by state agencies to solicit public input on a preferred management alternative; and formal rulemaking to implement new biennial regulations. All of these steps were timed to implement new rules by January 1 in 2005 and 2007.

Experience from these initial processes has led to various improvements to avoid some of the problems associated with setting harvest specifications and management measures. For instance, new at-sea observer data came late into the process for setting 2005-2006 management measures which delayed some of the critical NEPA analyses. This, coupled with delayed resolution of new stock assessments, ultimately delayed the expected process significantly. The National Marine Fisheries Service (NMFS) had to waive the Administrative Procedure Act required 30-day cooling-off period in order to implement new regulations under an emergency rule by January 1. The Council and NMFS made improvements by agreeing to provide new observer data annually in November when the Council decision-making process begins and scheduling extra Stock Assessment Review Panels to resolve stock assessment problems that emerge late in the process. However, despite these improvements, the 2007-2008 decision-making process was problematic in that some critical analyses were delivered late, the yelloweye rockfish assessment was not resolved until early 2006, and there were process complications that arose due to the litigation response need to reconsider all rebuilding plans under FMP Amendment 16-4.

A draft schedule and process for developing the 2009-2010 groundfish harvest specifications and management measures is provided as Agenda Item E.2.a, Attachment 1. This process and schedule is modeled after the process used to develop 2007-2008 specifications and management measures. The primary responsibility for developing the document used to satisfy Magnuson-Stevens Fishery Conservation and Management Act (MSA) and NEPA requirements is shown in the draft schedule and process as "Council staff or NWR staff" to reflect the FY08 budget uncertainty for Council operations.

It is currently uncertain what form the primary analytical document will take, although the effect on the Council's 2007-2008 meeting schedule would not change under the various alternatives. Given the Council's busy workload in the next two years (see Agenda Item E.2.a, Attachment 2) and the likelihood of workload conflicts, an Environmental Assessment (EA) would be preferred for developing 2009-2010 specifications and management measures, as there would be a significant savings in time and process by NMFS following the Council's June 2008 meeting to decide a preferred suite of new management measures. An easier process in the second half of 2008 will make it more likely that other important Council initiatives can be developed and implemented in a more timely fashion. An Environmental Impact Statement (EIS) may be

needed given the possibility of a new, pessimistic stock assessment being adopted this year or any new development compelling the Council to consider significant impacts to the groundfish fishery. An EIS puts significant time pressures on the process following final Council action (see page 2 of the draft schedule and process). Lastly, a new replacement analytical document may be required in 2008 to comply with §304(i) of the revised MSA. Currently, an Environmental Impact Assessment has been proposed by the Regional Fishery Management Councils to streamline and synchronize NEPA requirements with the MSA. It would be more similar to an EA in terms of its post-final-Council-action time pressures to implement management measures by January 1, 2009.

The Council should consider the advice of its advisory bodies and the public before adopting a detailed schedule and process for the development of 2009-2010 groundfish harvest specifications and management measures.

Council Action:

Adopt a process and schedule for developing 2009-2010 groundfish harvest specifications and management measures.

Reference Materials:

1. Agenda Item E.2.a, Attachment 1: Pacific Fishery Management Council and National Marine Fisheries Service Schedule and Process for Developing 2009-2010 Groundfish Harvest Specifications and Management Measures.
2. Agenda Item E.2.a, Attachment 2: Work Planning Schematic for Upcoming Groundfish FMP Amendments and Biennial Specifications.

Agenda Order:

a. Agenda Item Overview — John DeVore
b. Agency and Tribal Comments
c. Reports and Comments of Advisory Bodies
d. Public Comment
e. **Council Action:** Adopt a Process and Schedule

PFMC
05/24/07

PACIFIC FISHERY MANAGEMENT COUNCIL AND NATIONAL MARINE FISHERIES SERVICE SCHEDULE AND PROCESS FOR DEVELOPING 2009-2010 GROUNDFISH HARVEST SPECIFICATIONS AND MANAGEMENT MEASURES

June 9-15, 2007	The Council and advisory bodies meet to adopt: 1. New stock assessments. 2. A schedule, process, and work plan for developing 2009-2010 groundfish harvest specifications and management measures.
September 10-14, 2007	The Council and advisory bodies meet to adopt new stock assessments.
September 21, 2007	Council staff files Notice of Intent (NOI) in the *Federal Register* to prepare either an Environmental Assessment (EA) or Environmental Impact Statement (EIS).
October 1-5, 2007	The SSC Groundfish Subcommittee and members of the GMT and GAP meet to review any stock assessments recommended for further review by a 2007 STAR panel and/or the SSC as well as rebuilding analyses prepared for overfished species.
October 9-12, 2007	The GMT, Council staff, and NWR staff meet in Seattle, Washington to review new stock assessments and rebuilding analyses and draft a recommended range of 2009-2010 groundfish harvest specifications (acceptable biological catches [ABCs] and optimum yields [OYs]) and preliminary management measures.
November 5-9, 2007	The Council and advisory bodies meet in San Diego, California to adopt: 1. Remaining stock assessments and rebuilding analyses. 2. Updated observer data and proposed methodologies to model bycatch in trawl and fixed gear fisheries. 3. A range of preliminary 2009-2010 harvest specifications (ABCs and OYs) and, if possible, preferred OYs for some stocks and complexes. 4. Adopt, or give guidance on, a preliminary range of management measures, including initial allocations.
November 13, 2007-March 19, 2008	The GMT, Council staff, NWR staff, and agency staff develop: 1. Impact analyses of proposed management measure alternatives. 2. An outline of the preliminary draft NEPA document. 3. Assignments and a schedule for preparing the NEPA document.

November 13, 2007-April 5, 2008	Opportunity for state and tribal agencies to hold constituent meetings to obtain input on final ABCs and OYs and refinement of the range of management measures.
March 19, 2008	Council staff or NWR staff provides alternatives analysis (and other key components of a preliminary NEPA document) for the April briefing book.
April 6-11, 2008	Council and advisory bodies meet to: 1. Adopt final 2009-2010 harvest specifications (ABCs and OYs). 2. Adopt a range of refined management measures and, if possible, a tentative preferred alternative of management measures.
April 12, 2008- June 7, 2008	Opportunity for state and tribal agencies to hold constituent meetings to obtain input on a final preferred alternative of management measures.
May 21, 2008	Council staff or NWR staff delivers the preliminary NEPA document with a final range of alternatives (not necessarily including the preferred alternative) for the June briefing book and distributes a pre-submission review copy to NMFS Headquarters (HQ).
June 8-13, 2008	Council and advisory bodies meet to take final action on the 2009-2010 groundfish management measures.

The regulatory process after the final Council decision depends on the category of NEPA regulatory document (EA, EIS, or EIA [Environmental Impact Assessment]) and the degree of completeness of the draft NEPA document in the June briefing book. The regulatory process also depends on whether the Council adopts an FMP amendment as part of its 2009-2010 recommendations. The following schedule presumes an EIS document, a highly refined analysis at the June briefing book stage that also contains a preferred alternative, and no substantial deviation from that preferred alternative at the June Council meeting. Absent these conditions, an EIS schedule would be delayed one to two months and result in the regulations not being in place until about March 1. The following schedule also presumes an FMP amendment would be needed to update at overfished species rebuilding parameters for at least one overfished species.

June 27, 2008	DEIS proof and edit begins.
July 18, 2008	DEIS sent by Council staff or NWR staff to NMFS HQ.
July 21, 2008	DEIS received by NMFS HQ.
July 25, 2008	DEIS submitted to Environmental Protection Agency (EPA).
July 28, 2008	EPA publishes NOA, 45-day public comment period on DEIS begins.
August 10, 2008	PFMC transmits Amendment 16-5. NWR transmits proposed rule to HQ.

August 17, 2008	Notice of Availability (NOA) for Amendment 16-5 publishes – 60 day comment period.
September 14, 2008	Proposed rule is published; public comment period to end on same day as NOA comment period end date – 10/16/08.
September 12, 2008	45-day public comment period on DEIS ends.
September 30, 2008	FEIS sent to HQ.
October 2, 2008	FEIS received by NMFS HQ. NWR meets with regional GC to plan response to comments on proposed rule.
October 6, 2008	FEIS submitted to EPA.
October 13, 2008	EPA publishes NOA; 30-day cooling off period begins.
October 16, 2008	Proposed rule and NOA commend period ends.
November 12, 2008	NWR transmits final rule package to HQ.
November 12, 2008	30-day cooling off period on FEIS ends.
November 13, 2008	ROD signed and Amendment 16-5 approved no earlier than this date.
November 29, 2008	Final rule published; 30-day APA cooling off period begins.
December 29, 2008	APA cooling off period ends.
January 1, 2009	Groundfish fishery begins under adopted specifications and management measures.

PFMC
05/24/07

Work Planning Schematic for Upcoming Groundfish FMP Amendments and Biennial Specifications

Council Meeting	Amendment 20 IQ Alternatives EIS	Amendment 21 Intersector Allocation EIS	2009-10 Biennial Specifications
March, 2007	Refine Alternatives		
April, 2007			
June, 2007	Refine Alternatives	Adopt EIS Alternatives	Adopt Selected Stock Assessments
September, 2007			Adopt Selected Stock Assessments
November, 2007	Adopt EIS Alternatives	Prelim. DEIS; Adopt Preferred Alternative	Adopt Remaining Stock Assessments, Prelim ABC/OYs, and Mgmt Measures
March, 2008			
April, 2008		Final Council Action	Adopt ABC/OYs and Refined Mgmt. Measures
June, 2008	Prelim. DEIS; Adopt Preferred Alternative		Adopt Final ABC/OYs & Mgmt Measures
September, 2008			
November, 2008	Final Council Action		

GROUNDFISH MANAGEMENT TEAM REPORT ON THE PROPOSED PROCESS AND SCHEDULE FOR DEVELOPING BIENNIAL (2009-2010) HARVEST SPECIFICATIONS AND MANAGEMENT MEASURES

The Groundfish Management Team (GMT) discussed the new proposal for delivery of West Coast Groundfish Observer Program (WCGOP) data (Supplemental Information Report 4, June 2007) with regard to the 2009/2010 harvest specifications and management measures. The new proposed schedule provides up-to-date information delivered more frequently and has the potential to better inform management decisions in a dynamic fishery. The GMT considered the effects of the updated process on the schedule for biennial specifications and management measures as well as inseason management. Problems arise with data delivery in June, as it coincides with adoption of biennial specifications and management measures in even years. In addition, if bycatch models are not updated until after the November Council meeting, mitigating inseason action cannot be taken until March of the following year. The GMT acknowledges the fact that the new proposed schedule will require additional staff resources at the NWFSC. The GMT will further consider this issue and provide feedback to the Council in September, prior to Council final action.

Recommendations:

The GMT will continue to discuss timing and release of WCGOP data and will provide a more detailed discussion and recommendations to the Council in September 2007.

PFMC
06/11/07

SHORE-BASED PACIFIC WHITING MONITORING PROGRAM

The shore-based whiting fishery needs a maximized retention and monitoring program in place that will: account for Chinook salmon catch as specified in the Endangered Species Act Section 7 Biological Opinion for Chinook salmon catch in the Pacific groundfish fishery; meet standardized bycatch reporting requirements specified by the Magnuson-Stevens Fishery Conservation and Management Act; collect biological data on catch that would otherwise not be available; and create the regulatory structure necessary to efficiently manage the Pacific whiting fishery. Each year since 1992, exempted fishing permits (EFPs) have been issued to vessels in the shore-based whiting fishery to allow unsorted catch to be retained and landed at shore-based processing facilities. Since the EFP process is only a temporary response, action under this agenda item would recommend a permanent monitoring program through Federal rulemaking to replace use of EFPs.

The rulemaking is intended to be implemented in the 2008 fishery. The 2007 fishery again operates through issuance of EFPs to vessels. NMFS also has issued a proposed rule to establish catch accounting requirements for shore-based whiting processors (Agenda Item E.3.b, Attachment 1, and the associated draft Environmental Assessment, Agenda Item E.3.b, Attachment 2) to be implemented in 2007 in conjunction with the EFPs. Specifically, this rule would require persons who receive, buy, or accept Pacific whiting deliveries of 4,000 pounds or more to use a NMFS-approved electronic fish ticket program and to send daily catch reports to the Pacific States Marine Fisheries Commission. This rule for shore-based processors is intended to assist in transitioning the fishery from use of EFPs to management under a maximized retention and monitoring program.

In September 2006, the Council provided initial guidance on development of draft alternatives for the maximized retention and monitoring program. In November 2006, the Council reviewed two draft action alternatives and accompanying draft regulations, which were based on the Council's initial guidance and input garnered from a Federal/state/industry meeting in late September. Interested in considering an alternative that blended parts of the "maximized retention with observers" alternative and the "maximized retention with electronic monitoring system (EMS) and catch monitors" alternative, the Council formed an ad hoc workgroup and directed it to develop the specifics of a "hybrid" alternative. The workgroup finalized its hybrid alternative and forwarded it to NMFS in January 2007. The workgroup's report (Agenda Item E.3.d, SWAG Report) details the elements of the hybrid alternative. This alternative has been added to the set analyzed and presented in the draft Environmental Assessment (Agenda Item E.3.b, Attachment 3).

Council Action:

Adopt an alternative as final action to develop a maximized retention and monitoring program for the shore-based Pacific whiting fishery.

Reference Materials:

1. Agenda Item E.3.b, Attachment 1: *Federal Register* Notice that NMFS issues a proposed rule to establish catch accounting requirements for persons who receive, buy, or accept Pacific Whiting deliveries of 4,000 pounds or more (April 9, 2007).
2. Agenda Item E.3.b, Attachment 2: Draft Environmental Assessment for Catch Accounting requirements for Processors/First Receivers participating in the Pacific Whiting Shoreside Fishery.
3. Agenda Item E.3.b, Attachment 3: Draft Environmental Assessment: A maximized retention and monitoring program for the Pacific whiting shoreside fishery, implementing Amendment 10 to the Pacific Coast Groundfish Fishery Management Plan.
4. Agenda Item E.3.d, SWAG Report: Report of the Shoreside Whiting Alternative Ad Hoc Workgroup to the Pacific Fishery Management Council.

Agenda Order:

a. Agenda Item Overview — John DeVore
b. NMFS Report — Yvonne de Reynier/Becky Renko
c. Agency and Tribal Comments
d. Reports and Comments of Advisory Bodies
e. Public Comment
f. **Council Action:** Adopt Final Preferred Monitoring Program

PFMC
05/25/07

Appendix A—Insurers of Motor Vehicle Insurance Policies Subject to the Reporting Requirements in Each State in Which They Do Business

Allstate Insurance Group
American Family Insurance Group
American International Group
Auto-Owners Insurance Group
CNA Insurance Companies
Erie Insurance Group
Berkshire Hathaway/GEICO Corporation Group
Hartford Insurance Group
Liberty Mutual Insurance Companies
Metropolitan Life Auto & Home Group
Mercury General Group
Nationwide Group
Progressive Group
Safeco Insurance Companies
State Farm Group
St Paul Travelers Companies [1]
USAA Group
Farmers Insurance Group

4. Appendix B to Part 544 is revised to read as follows:

Appendix B—Issuers of Motor Vehicle Insurance Policies Subject to the Reporting Requirements Only in Designated States

Alfa Insurance Group (Alabama)
Auto Club (Michigan)
Commerce Group, Inc. (Massachusetts)
Farm Bureau of Idaho Group (Idaho) [1]
Kentucky Farm Bureau Group (Kentucky)
New Jersey Manufacturers Group (New Jersey)
Safety Group (Massachusetts)
Southern Farm Bureau Group (Arkansas, Mississippi)
Tennessee Farmers Companies (Tennessee)

5. Appendix C to Part 544 is revised to read as follows:

Appendix C—Motor Vehicle Rental and Leasing Companies (Including Licensees and Franchisees) Subject to the Reporting Requirements of Part 544

Cendant Car Rental
Dollar Thrifty Automotive Group
EmKay, Inc. 1
Enterprise Rent-A-Car
Enterprise Fleet Services
Hertz Rent-A-Car Division (subsidiary of The Hertz Corporation)
U-Haul International, Inc. (Subsidiary of AMERCO)
Vanguard Car Rental USA

Issued on: March 30, 2007.

Stephen R. Kratzke,

Associate Administrator for Rulemaking.

[FR Doc. E7–6519 Filed 4–6–07; 8:45 am]

BILLING CODE 4910–59–P

[1] Indicates a newly listed company, which must file a report beginning with the report due October 25, 2007.

[1] Indicates a newly listed company, which must file a report beginning with the report due October 25, 2007.

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Part 660

[Docket No. 070323069–7069–01;I.D. 031907A]

RIN 0648–AV46

Pacific Coast Groundfish Fishery

AGENCY: National Marine Fisheries Service (NMFS), National Oceanic and Atmospheric Administration (NOAA), Commerce.

ACTION: Proposed rule; request for comments.

SUMMARY: NMFS issues a proposed rule to establish catch accounting requirements for persons who receive, buy, or accept Pacific whiting (whiting) deliveries of 4,000 pounds (lb) (1.18 mt) or more from vessels using mid-water trawl gear during the primary whiting season. This action would improve NMFS's ability to effectively monitor the whiting fishery such that catch of whiting and incidentally caught species, including overfished groundfish species, do not result in a species' optimum yield (OY), harvest guideline, allocations, or bycatch limits being exceeded. This action would also provide for timely reporting of Chinook salmon take as specified in the Endangered Species Act (ESA) Section 7 Biological Opinion for Chinook salmon catch in the Pacific groundfish fishery. This action is consistent with the conservation goals and objectives of the Pacific Coast Groundfish Fishery Management Plan (FMP).

DATES: Comments must be received by April 24, 2007.

ADDRESSES: You may submit comments, identified by I.D. 031907A by any of the following methods:

- E-mail: *HakeProcessors.nwr@noaa.gov*: Include I.D 031907A in the subject line of the message.
- Federal eRulemaking Portal: *http://www.regulations.gov*. Follow the instructions for submitting comments.
- Fax: 206–526–6736, Attn: Becky Renko
- Mail: D. Robert Lohn, Administrator, Northwest Region, NMFS, 7600 Sand Point Way NE, Seattle, WA 98115–0070, Attn: Becky Renko

Copies of the Environmental Assessment/Regulatory Impact Review/Initial Regulatory Flexibility Analysis (EA/RIR/IRFA) prepared for this action may be obtained from the Northwest Region, NMFS, 7600 Sand Point Way N.E., BIN C15700, Bldg. 1, Seattle, WA 98115–0070. Written comments regarding the burden-hour estimates or other aspects of the collection-of-information requirements contained in this proposed rule may be submitted to the Northwest Region (see Addresses) and by e-mail to *David__Rostker@omb.eop.gov*, or fax to (202) 395–7285 Send comments on collection-of-information requirements to the NMFS address above and to the Office of Information and Regulatory Affairs (OIRA), Office of Management and Budget (OMB), Washington DC 20503 (Attn: NOAA Desk Officer).

FOR FURTHER INFORMATION CONTACT: Becky Renko, phone: 206–526–6110, fax: 206–526–6736, or e-mail: *becky.renko@noaa.gov*.

Electronic Access: This proposed rule is accessible via the Internet at the Office of the **Federal Register**'s Web site at *http://www.access.gpo.gov/su__docs/aces/aces140.html*. Background information and documents are available at the NMFS Northwest Region Web site at *http://www.nwr.noaa.gov/Groundfish-Halibut/Groundfish-Fishery-Management/index.cfmand* at the Council's Web site at *http://www.pcouncil.org*.

SUPPLEMENTARY INFORMATION: The proposed action is to provide for electronic catch accounting and other monitoring improvements for the shore-based sector of the whiting fishery. The proposed action defines requirements for recordkeeping, reporting, catch sorting, and scale use for persons who receive, buy, or accept unsorted deliveries (generally processors or transporters) of 4,000 lb (1.8 mt) or more of whiting from vessels using midwater trawl gear during the primary season for the shore-based sector. This action is intended to address difficulties that occurred during the 2006 whiting season that could compromise the ability to account for the catch of target, incidental and prohibited species, and which could compromise the ability to manage groundfish species OYs, trip limits, bycatch limits, and Chinook salmon take in relation to Biological Opinion specifications.

The shore-based whiting fishery needs to have a catch reporting system in place that: provides timely reporting of catch data so that whiting, overfished species and Chinook salmon can be adequately monitored and accounted for inseason; and, specifies catch sorting and weight requirements necessary to maintain the integrity of fish ticket values used to manage groundfish species OYs, trip limits, and bycatch

limits. This proposed rule is part of an ongoing process to develop a maximized retention program for the shoreside whiting sector. The rule is intended to address shoreside monitoring that will be implemented in 2007 in conjunction with the issuance of exempted fishing permits (EFPs) to vessels. At its April 2007 meeting, the Council will consider recommending a rulemaking for 2008 and beyond for a related action titled ''A Maximized Retention and Monitoring Program for the Whiting Shoreside Fishery.''

Each year since 1992, EFPs have been issued to vessels in the whiting shoreside fishery to allow unsorted catch to be retained and landed at shoreside processing facilities. The EFPs have specified the terms and conditions that participating vessels must follow to be included in the EFP program. The EFPs have routinely required vessels to deliver EFP catch to state-designated processors. Designated processors were identified by each of the states and were processors that had signed written agreements that specified the standards and procedures they agreed to follow when receiving EFP catch.

The whiting fishery is managed under a ''primary'' season structure where vessels harvest whiting until the sector allocation is reached and the fishery is closed. This is different from most West Coast groundfish fisheries, which are managed under a ''trip limit'' structure, where catch limits are specified by gear type and species (or species group) and vessels can land catch up to the specified limits. Incidental catch of groundfish in the whiting fishery, however, is managed under a trip limit structure. Vessels fishing under the whiting EFPs are allowed to land unsorted catch at shoreside processing facilities, including species in excess of the trip limits and species such as salmon that would otherwise be illegal to have on board the vessel. Without an EFP, groundfish regulations at 50 CFR 660.306(a)(2) and (a)(6) require vessels to sort their catch at sea and discard as soon as practicable all prohibited species (including salmon and halibut), protected species, and groundfish species in excess of cumulative limits at sea.

Overall management of the salmon and groundfish fisheries has significantly changed since the early 1990's, when EFPs were first used in the whiting fishery. Since the beginning of the shore-based whiting fishery in 1992, new salmon Evolutionarily Significant Unit (ESUs) have been listed under the ESA, and several groundfish species that are incidentally taken in the whiting fishery have been declared overfished. In addition, ''bycatch limit'' management of overfished species has been used to allow the whiting fishery full access to the whiting OY. With the bycatch limit management approach, a bycatch limit amount is specified for an overfished species and the whiting fishery is allowed incidental catch of that species up to that amount. If a bycatch limit for any one of the species limits is reached before the whiting allocations are attained, all non-tribal commercial sectors of the whiting fishery must be closed.

The Shoreside Whiting Observation Program (SHOP), a coordinated monitoring effort by the States of Oregon, Washington, and California, was established to provide catch data from vessels fishing under the EFPs. Although the program's structure and priorities have changed over the years, the SHOP has had the primary responsibility of monitoring the shore-based whiting fishery and providing catch data to NMFS for management of the fishery. In 2006, SHOP experienced ongoing difficulties in obtaining timely catch reports from some designated processors. Delays in catch reports can compromise the ability to adequately monitor the catch of whiting, bycatch limits, and in particular the bycatch limits for the overfished species that are most frequently encountered in the whiting fishery. Having the ability to closely monitor bycatch limits and close the whiting fishery if a limit is reached prevents the whiting fishery from affecting the other groundfish fisheries and reduces the risk of exceeding overfished species OYs.

In 2007, the shore-based whiting fishery will be managed under an EFP, similar to what was in place in 2006. Therefore, NMFS believes that it is necessary to implement this rule to prevent catch accounting difficulties experienced in 2006. During 2007, NMFS and the Council will continue to develop the Maximized Retention and Monitoring Program for the whiting Shoreside Fishery, which is intended to be implemented by regulation before the 2008 fishery.

This proposed rule would require persons called ''first receivers'' who receive, buy, or accept whiting deliveries of 4,000 lb (1.8 mt) or more from vessels using mid-water trawl gear during the primary whiting season (generally, these are whiting shoreside processing facilities, but also include entities that truck whiting to other facilities) to have and use a NMFS-approved electronic fish ticket program and to send daily catch reports to the Pacific States Marine Fish Commission (PSMFC). The electronic fish tickets are used to collect information similar to the information currently required in state fish receiving tickets or landing receipts (state fish tickets). The daily reports would be used to track catch allocations, bycatch limits and prohibited species catch. First receivers would provide the computer hardware, software (Microsoft Office with Access 2003 or later,) and internet access necessary to support the electronic fish ticket program and daily e-mail transmissions. Electronic fish tickets must be submitted within 24 hours from the date the catch is received upon landing. Because 2007 will be the first year that the electronic fish ticket program will be used, the proposed action includes waiver provisions and defines alternative means for submitting fish tickets to meet the daily reporting needs of the fishery, should there be performance issues with software or other system failures beyond a receiver's control.

Federal regulations would not replace any state recordkeeping or reporting requirements. Regulations at 50 CFR 660.303 would continue to require vessels to make and/or file, retain, or make available any and all reports (i.e., logbooks, fish tickets, etc.) of groundfish harvests and landings as required by the applicable state law. At this time, only the State of Oregon allows printed and signed copies of the electronic fish tickets to be submitted as the official state fish ticket. The States of Washington and California could continue to require the submission of paper forms as issued by the state.

In addition to the sorting requirements specified at §§ 660.306(a)(7) and 660.370(h)(6)(i), sorting requirements would be specified for whiting catch received by first receivers, since these deliveries may contain groundfish in excess of trip limits, unmarketable groundfish, prohibited species, and protected species that are not addressed by current groundfish regulations. In addition, Federal groundfish regulations would be revised to require that deliveries from vessels participating in the whiting shoreside fishery must be adequately sorted by species or species group and the catch weighed following offloading from the vessel and prior to transporting the catch. If sorting and weighing requirements specified in Federal regulation are more specific than state fish ticket requirements, the first receivers would be required to record the species that are sorted and weighed on all electronic fish ticket submissions.

First receivers would be required to report, on electronic fish tickets, actual

and accurate weights derived from scales. Though there are considerable differences in the requirements between states, each state has requirements for scale performance and testing established by state agencies for weights and measures. How these requirements apply to seafood processors varies between states.

Classification

NMFS has determined that the proposed rule is consistent with the FMP and has preliminarily determined that the rule is consistent with the Magnuson-Stevens Fishery Conservation and Management Act and other applicable laws.

This proposed rule has been determined to be not significant for purposes of Executive Order 12866.

An initial regulatory flexibility analysis (IRFA) was prepared, as required by section 603 of the RFA (RFA). The IRFA describes the economic impact this proposed rule, if adopted, would have on small entities. A description of the action, why it is being considered, and the legal basis for this action are contained at the beginning of this section in the preamble and in the SUMMARY section of the preamble. A copy of the IRFA is available from NMFS (see ADDRESSES). A summary of the analysis follows:

The whiting shoreside fishery has been managed under an EFPs since 1992. However, an EFP is supposed to be a short-term, temporary and exploratory response to issues that potentially should be addressed by permanent regulations. The proposed action (Alternative 2) would be the first step towards replacing the EFP with permanent regulations as it would put in place new Federal catch accounting requirements. Although EFPs will continue to be issued in 2007, the proposed regulations are intended to supplement EFP activities with regulations that mainly affect the processors or other first receivers of whiting EFP catch. The proposed regulations will require the submission of electronic fish tickets within 24 hours of landing, the sorting of catch at time of offload and prior to transporting catch from the port of fish landing, the use of state approved scales with appropriate accuracy ranges for the amount of fish being weighed, and that all weights reported on the electronic fish tickets be from such scales. The proposed Federal regulations mirror or enhance existing state regulations and associated paper-based fish ticket systems or put into Federal regulation provisions associated with current EFP management. This action is expected to provide more timely reporting and improved estimates of the catch of whiting, ESA listed salmon species, and overfished groundfish species. The whiting shoreside fishery needs to have a catch reporting system in place to: adequately track the incidental take of Chinook salmon as required in the ESA Section 7 Biological Opinion for Chinook salmon catch in the whiting fishery; and to track the catch of target and overfished groundfish species such that the fishing industry is not unnecessarily constrained and that the sector allocation and bycatch limits are not exceeded. This action is intended to address catch accounting concerns that occurred during the 2006 season that compromised the ability to account for the catch of target, incidental and prohibited species.

In 2006 there were 23 processors that purchased whiting from fishermen with ten of these processors purchasing from 4 lb (2 kg) to 8,000 lb (3,629 kg) of whiting. The other thirteen processors all processed at least 1 million lb (454 mt) of whiting each. During 2006 these thirteen processors purchased 280 million lb (127,007 mt) of whiting worth $17.4 million ex-vessel, and 110 million lb (49,896 mt) of other fish and shellfish worth $78.5 million. Over the 2000–2006 period there were seventeen different facilities that processed at least 1 million lb (454 mt) in any one year. These processors can be classified into ''Main'' and ''Other'' plants. Over this period there were eight ''Main'' processors that processed 1 million lb (454 mt) in at least seven of the eight years during this period. Because of entry and exit of the processors, the composition of the ''Other'' processor group changes significantly in most years. In 2005, there were no ''Other'' processors while in 2006, five new processors entered, only one of which had operated before. Over the 2000–2006 period, the ''Main'' processors typically harvest 90 to 100 percent of the whiting.

The Small Business Administration (SBA) has established size criteria for all major industry sectors in the U.S. including fish harvesting entities, for-hire entities, fish processing businesses, and fish dealers. A business involved in fish harvesting is a small business if it is independently owned and operated and not dominant in the field of operation (including its affiliates) and if it has combined annual receipts not in excess of $3.5 million for all its affiliated operations worldwide. For-hire vessels are considered small entities, if they have annual receipts not in excess of $6 million. A seafood processor is a small business if it is independently owned and operated, not dominant in its field of operation, and employs 500 or fewer persons on a full-time, part-time, temporary, or other basis, at all its affiliated operations world wide. Finally, a wholesale business servicing the fishing industry (fish dealer) is a small business if it employs 100 or few persons on a full time, part-time, temporary, or other basis, at all its affiliated operations worldwide.

The SBA has established ''principles of affiliation'' to determine whether a business concern is ''independently owned and operated.'' In general, business concerns are affiliates of each other when one concern controls or has the power to control the other, or a third party controls or has the power to control both. The SBA considers factors such as ownership, management, previous relationships with or ties to another concern, and contractual relationships, in determining whether affiliation exists. Individuals or firms that have identical or substantially identical business or economic interests, such as family members, persons with common investments, or firms that are economically dependent through contractual or other relationships, are treated as one party with such interests aggregated when measuring the size of the concern in question. The SBA counts the receipts or employees of the concern whose size is at issue and those of all its domestic and foreign affiliates, regardless of whether the affiliates are organized for profit, in determining the concern's size.

Based on the SBA criteria and a review of West Coast processor company websites, state employment websites, newspaper articles, personal communications, and the ''Research Group'' publications (2006), it appears that the thirteen major whiting processors can be grouped into nine businesses under the SBA criteria based on analysis of affiliates. Three of the nine businesses generated at least $500 million in sales in 2003. One of these businesses reported employing 4,000 people, and it is presumed that the other two companies have employment levels much higher than 500 employees. Four of the nine businesses have employment estimates that range from 100–250 employees, while the remainder appear to be in the 50–100 range (because of missing data, one of these relatively small businesses may have less than 50 employees). In terms of the SBA size standard of 500 employees, there are six ''small'' businesses that participated in the shorebased whiting processing sector in 2006. Annual sales information for these ''small'' businesses is

unavailable. Total ex-vessel revenues (the value of the fish purchased from fisherman) is available. In 2006, these six businesses purchased approximately $40 million in whiting and other fish and shellfish from West Coast fishermen. This compares to the $60 million in whiting and other fish and shellfish purchased by the three large businesses.

In sizing up all the potential impacts, implementation of these rules will require firms to bear minimal costs in reporting data electronically that they already are required to report on paper. In terms of equipment purchases, it is expected that there will be few if any instances where processors have to purchase computers or software because this is equipment that most business already have. It is also not expected that processors will need to purchase scale equipment as the presumption about this rule is that it enhances existing state regulations that already require processors to use scales in conducting their businesses but may not specifically require the use of scale weights in reporting fisheries data to state agencies. There may be some interest by a few small processors to weigh and count fish at locations other than the point of first landing, but these instances appear to be few.

In light of the recent economic improvement going on in the whiting fisheries, the proposed regulations are reasonable and affordable and do not appear to place small businesses at a competitive disadvantage to large businesses. The major benefits of this program from a conservation and management context is an allowance for more liberal management to obtain better and quicker data for use in quota monitoring and a potential reduction in costs of monitoring, and to move management measures for monitoring whiting from a temporary ''EFP'' to formal regulations. In the short term, from an industry and fishing community perspective, better management of the whiting shoreside fishery minimizes the risk that sector quotas and bycatch limits are not exceeded in ways that may lead to closure of other fisheries thus affecting other small businesses. In the medium term, the proposed rule will aid development of an Individual Fishing Quota (IQ) catch accounting system. IQs are expected to increase profitability in the fishing industry and improve the sustainability of fishing communities. In the long term, the entire fishing industry and its communities including associated small businesses will benefit by reducing the risk of overfishing and increasing the potential that the rebuilding schedules for the overfished species are maintained, thus increasing the chances that current levels of groundfish ex-vessel revenues of $70 million can be restored to levels above $100 million which were consistently seen in the early to mid 1990's. There were no other alternatives to the proposed action that would have accomplish the stated objectives. Under Status Quo, general catch sorting requirements and prohibited actions would continue to be specified for limited entry trawl vessel; each state would continue to specify requirements for landing reports.

This proposed rule contains collection-of-information requirements approved under OMB control number 0648–0203, as well as a new collection-of-information requirement subject to review and approval under the Paperwork Reduction Act (PRA). This requirement has been submitted to OMB for approval. Public reporting burden for preparing and submitting electronic fish tickets is estimated to average ten minutes per individual response for whiting shoreside processors/first receivers in the states of California and Washington, and two minutes per individual response for whiting shoreside processors/first receivers in the State of Oregon, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection information. Public comment is sought regarding: whether this proposed collection of information is necessary for the proper performance of the functions of the agency, including whether the information shall have practical utility; the accuracy of the burden estimate; ways to enhance the quality, utility, and clarity of the information to be collected; and ways to minimize the burden of the collection of information, including through the use of automated collection techniques or other forms of information technology. Send comments on these or any other aspects of the collection of information to the Northwest Region at the **ADDRESSES** above, and by e-mail to *David__Rostker@omb.eop.gov* or fax to (202) 395–7285.

Notwithstanding any other provision of the law, no person is required to respond to, and no person shall be subject to penalty for failure to comply with, a collection of information subject to the requirements of the PRA, unless that collection of information displays a currently valid OMB control number. There are no Federal rules that duplicate, overlap, or conflict with this proposed rule.

NMFS issued Biological Opinions under the ESA on August 10, 1990, November 26, 1991, August 28, 1992, September 27, 1993, May 14, 1996, and December 15, 1999 pertaining to the effects of the Pacific Coast groundfish FMP fisheries on Chinook salmon (Puget Sound, Snake River spring/summer, Snake River fall, upper Columbia River spring, lower Columbia River, upper Willamette River, Sacramento River winter, Central Valley spring, California coastal), coho salmon (Central California coastal, southern Oregon/northern California coastal), chum salmon (Hood Canal summer, Columbia River), sockeye salmon (Snake River, Ozette Lake), and steelhead (upper, middle and lower Columbia River, Snake River Basin, upper Willamette River, central California coast, California Central Valley, south/central California, northern California, southern California). These biological opinions have concluded that implementation of the FMP for the Pacific Coast groundfish fishery was not expected to jeopardize the continued existence of any endangered or threatened species under the jurisdiction of NMFS, or result in the destruction or adverse modification of critical habitat.

NMFS reinitiated a formal section 7 consultation under the ESA in 2005 for both the whiting midwater trawl fishery and the groundfish bottom trawl fishery. The December 19, 1999 Biological Opinion had defined an 11,000 Chinook incidental take threshold for the whiting fishery. During the 2005 whiting season, the 11,000 fish Chinook incidental take threshold was exceeded, triggering reinitiation. Also in 2005, new data from the West Coast Groundfish Observer Program became available, allowing NMFS to complete an analysis of salmon take in the bottom trawl fishery.

NMFS prepared a Supplemental Biological Opinion dated March 11, 2006, which addressed salmon take in both the whiting midwater trawl and groundfish bottom trawl fisheries. In its 2006 Supplemental Biological Opinion, NMFS concluded that catch rates of salmon in the 2005 whiting fishery were consistent with expectations considered during prior consultations. Chinook bycatch has averaged about 7,300 over the last 15 years and has only occasionally exceeded the reinitiation trigger of 11,000. Since 1999, annual Chinook bycatch has averaged about 8,450. The Chinook ESUs most likely affected by the whiting fishery have generally improved in status since the 1999 section 7 consultation. Although these species remain at risk, as

indicated by their ESA listing, NMFS concluded that the higher observed bycatch in 2005 does not require a revision of its prior ''no jeopardy'' conclusion with respect to the fishery. For the groundfish bottom trawl fishery, NMFS concluded that incidental take in the groundfish fisheries is within the overall limits articulated in the Incidental Take Statement of the 1999 Biological Opinion. The groundfish bottom trawl limit from that opinion was 9,000 fish annually. NMFS will continue to monitor and collect data to analyze take levels. NMFS also reaffirmed its prior determination that implementation of the Groundfish FMP, including this current action, is not likely to jeopardize the continued existence of any of the affected ESUs.

Lower Columbia River coho (70 FR 37160, June 28, 2005) and the Southern Distinct Population Segment (DPS) of green sturgeon (71 FR 17757, April 7, 2006) were recently listed as threatened under the ESA. As a consequence, NMFS has reinitiated its Section 7 consultation on the PFMC's Groundfish FMP. After reviewing the available information, NMFS concluded that, in keeping with Section 7(a)(2) of the ESA, the proposed action would not result in any irreversible or irretrievable commitment of resources that would have the effect of foreclosing the formulation or implementation of any reasonable and prudent alternative measures.

Pursuant to Executive Order 13175, this proposed rule was developed after meaningful consultation and collaboration with tribal officials from the area covered by the FMP. At the Council=s September and November 2006 meetings, NMFS informed the Council, which includes a tribal representative, of the intent to evaluate and implement catch accounting requirements for whiting shoreside processors. This action does not alter the treaty allocation of whiting, nor does it affect the prosecution of the tribal fishery.

List of Subjects in 50 CFR Part 660

Fisheries, Fishing, Indian fisheries.

Dated: April 3, 2007.

William T. Hogarth,

Assistant Administrator for Fisheries, National Marine Fisheries Service.

For the reasons set out in the preamble, 50 CFR part 660 is proposed to be amended as follows:

PART 660—FISHERIES OFF WEST COAST STATES

1. The authority citation for part 660 continues to read as follows:

Authority: 16 U.S.C. 1801 *et seq.*

2. In § 660.302, the definitions for ''Electronic Monitoring System,'' ''Pacific whiting shoreside or shore-based fishery,'' ''Pacific whiting shoreside first receiver,'' and ''Pacific whiting shoreside vessel'' are added to read as follows:

§ 660.302 Definitions.

* * * * *

Electronic Monitoring System (EMS) means a data collection tool that uses a software operating system connected to an assortment of electronic components, including video recorders, to create a collection of data on vessel activities.

* * * * *

Pacific whiting shoreside first receivers means persons who receive, purchase, take custody, control, or possession of Pacific whiting onshore directly from a Pacific whiting shoreside vessel.

Pacific whiting shoreside or shore-based fishery means Pacific whiting shoreside vessels and Pacific whiting shoreside first receivers.

Pacific whiting shoreside vessel means any vessel that fishes using midwater trawl gear to take, retain, possess and land 4,000 lb (1,814 kg) or more of Pacific whiting per fishing trip from the Pacific whiting shore-based sector allocation for delivery to a Pacific whiting shoreside first receiver during the primary season.

* * * * *

3. In § 660.303, paragraph (a) is revised and paragraph (e) is added to read as follows:

§ 660.303 Reporting and recordkeeping.

(a) This subpart recognizes that catch and effort datanecessary for implementing the PCGFMP are collected by the States of Washington, Oregon, and California under existing state data collection requirements.

* * * * *

(e) *Participants in the Pacific whiting shoreside fishery.* Reporting requirements defined in the following section are in addition to reporting requirements under applicable state law and requirements described at § 660.303(b).

(1) *Reporting requirements for any Pacific whiting shoreside first receiver*—(i) *Responsibility for compliance.* The Pacific whiting shoreside first receiver is responsible for compliance with all reporting requirements described in this paragraph.

(ii) *General requirements.* All records or reports required by this paragraph must: be maintained in English, be accurate, be legible, be based on local time, and be submitted in a timely manner as required in paragraph (e)(1)(iv) of this section.

(iii) *Required information.* All Pacific whiting shoreside first receivers must provide the following types of information: date of landing, delivery vessel, gear type used, first receiver, round weights of species landed listed by species or species group including species catch with no value, number of salmon by species, number of Pacific halibut, and any other information deemed necessary by the Regional Administrator as specified on the appropriate electronic fish ticket form.

(iv) *Electronic fish ticket submissions.* The Pacific whiting shoreside first receiver must:

(A) Sort catch, prior to first weighing, by species or

species groups as specified at § 660.370 (h)(6)(iii).

(B) Include as part of each electronic fish ticket submission, the actual scale weight for each groundfish species as specified by requirements at § 660.373 (j)(2)(i) and the catcher vessel identification number.

(C) Use for the purpose of submitting electronic fish tickets, and maintain in good working order, computer equipment as specified at § 660.373 (j)(2)(ii)(A);

(D) Install, use, and update as necessary, any NMFS-approved software described at § 660.373 (j)(2)(ii)(B);

(E) Submit a completed electronic fish ticket for every landing that includes 4,000 lb (1,814 kg) or more of Pacific whiting (round weight equivalent) no later than 24 hours after the date the fish are received, unless a waiver of this requirement has been granted under provisions specified at paragraph (e)(1)(vii) of this section.

(v) *Revising a submitted electronic fish ticket submission.* In the event that a data error is found, electronic fish ticket submissions may be revised by resubmitting the revised form. Electronic fish tickets are to be used for the submission of final catch data. Preliminary data, including estimates of catch weights or species in the catch, shall not be submitted on electronic fish tickets.

(vi) *Retention of records.* [Reserved]

(vii) *Waivers for submission of electronic fish tickets.* On a case-by-case basis, a temporary waiver of the requirement to submit electronic fish tickets may be granted by the Assistant Regional Administrator or designee if he/she determines that circumstances beyond the control of a Pacific whiting shoreside first receiver would result in inadequate data submissions using the electronic fish ticket system. The

duration of the waiver will be determined on a case-by-case basis.

(viii) *Reporting requirements when a temporary waiver has been granted.* Pacific whiting shoreside first receivers that have been granted a temporary waiver from the requirement to submit electronic fish tickets must submit on paper the same data as is required on electronic fish tickets within 24 hours of the date received during the period that the waiver is in effect. Paper fish tickets must be sent by facsimile to NMFS, Northwest Region, Sustainable Fisheries Division, 206–526–6736 or by delivering it in person to 7600 Sand Point Way NE, Seattle, WA 98115. The requirements for submissions of paper tickets in this paragraph are separate from, and in addition to existing state requirements for landing receipts or fish receiving tickets.

(2) [Reserved]

4. In § 660.306, paragraphs (b)(4) and (f)(6) are added to read as follows:

§ 660.306 Prohibitions.

* * * * *

(b) * * *

(4) Fail to comply with all requirements at § 660.303 (d); or to fail to submit, submit inaccurate information, or intentionally submit false information on any report required at § 660.303 (d) when participating in the Pacific whiting shoreside fishery.

* * * * *

(f) * * *

(6) *Pacific whiting shoreside first receivers.* (i) Receive for transport or processing catch from a Pacific whiting shoreside vessel that does not have a properly functioning EMS system as required by Federal regulation or by an EFP, unless a waiver for EMS coverage was granted by NMFS for that trip.

(ii) Fail to sort catch from a Pacific whiting shoreside vessel prior to first weighing after offloading as specified at § 660.370 (h)(6)(iii) for the Pacific whiting fishery.

(iii) Process, sell, or discard groundfish catch that has not been weighed on a scale that is in compliance with requirements at § 660.373 (j)(1)(i) and accounted for on an electronic fish ticket with the identification number for the catcher vessel that delivered the catch.

(iv) Fail to weigh catch landed from a Pacific whiting shoreside vessel prior to transporting any fish from that landing away from the point of landing.

* * * * *

5. In § 660.370, paragraph (h)(6)(iii) is added to read as follows:

§ 660.370 Specifications and management measures.

* * * * *

(h) * * *

(6) * * *

(iii) *Sorting requirements for the Pacific whiting shoreside fishery.* Catch delivered to Pacific whiting shoreside first receivers (including shoreside processing facilities and buying stations that intend to transport catch for processing elsewhere) must be sorted, prior to first weighing after offloading from the vessel and prior to transport away from the point of landing, to the species groups specified in paragraph (h)(6)(i)(A) of this section for vessels with limited entry permits. Prohibited species must be sorted according to the following species groups: Dungeness crab, Pacific halibut, Chinook salmon, Other salmon. Non-groundfish species must be sorted as required by the state of landing.

* * * * *

6. In § 660.373, paragraph (j) is added to read as follows:

§ 660.373 Pacific whiting (whiting) fishery management.

* * * * *

(j) *Additional requirements for participants in the Pacific Whiting Shoreside fishery*—(1) *Pacific whiting shoreside first receiver responsibilities*—(i) *Weights and measures.* All groundfish weights reported on fish tickets must be recorded from scales with appropriate weighing capacity that ensures accuracy for the amount of fish being weighed. For example: amounts of fish less than 1,000 lb (454 kg) should not be weighed on scales that have an accuracy range of 1,000 lb–7,000 lb (454 - 3,175 kg) and are therefore not capable of accurately weighing amounts less than 1,000 lb (454 kg).

(ii) *Electronic fish tickets*—(A) *Hardware and software requirements.* First receivers using the electronic fish ticket software provided by Pacific States Marine Fish Commission are required to meet the hardware and software requirements below. Those whiting first receivers who have NMFS-approved software compatible with the standards specified by Pacific States Marine Fish Commission for electronic fish tickets are not subject to any specific hardware or software requirements.

(*1*) A personal computer with Pentium 75–MHz or higher. Random Access Memory (RAM) must have sufficient megabyte (MB) space to run the operating system, plus an additional 8 MB for the software application and available hard disk space of 217 MB or greater. A CD-ROM drive with a Video Graphics Adapter(VGA) or higher resolution monitor (super VGA is recommended).

(*2*) Microsoft Windows 2000 (64 MB or greater RAM required), Windows XP (128 MB or greater RAM required) or later operating system.

(*3*) Microsoft Access 2003 or newer for.

(B) *NMFS Approved Software Standards and Internet Access.* The Pacific whiting shoreside first receiver is responsible for obtaining, installing and updating electronic fish tickets software either provided by Pacific States Marine Fish Commission, or compatible with the standards specified by Pacific States Marine Fish Commission and for maintaining internet access sufficient to transmit data files via email.

(C) *Maintenance.* The Pacific whiting shoreside first receiver is responsible for ensuring that all hardware and software required under this subsection are fully operational and functional whenever the Pacific whiting primary season deliveries are accepted.

(2) Pacific whiting shoreside first receivers and processors that receive groundfish species other than Pacific whiting in excess of trip limits from Pacific whiting shoreside vessels fishing under an EFP issued by the Assistant Regional Administrator are authorized to possess the catch.

(3) Vessel owners and operators, or shoreside processor owners, or managers may contact NMFS in writing to request assistance in improving data quality and resolving monitoring issues. Requests may be submitted to: Attn: Frank Lockhart,National Marine Fisheries Service, Northwest Region Sustainable Fisheries Division, 7600 Sand Point Way NE, Seattle, WA 98115, or via email to *frank.lockhart@noaa.gov*.

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CATCH ACCOUNTING REQUIREMENTS FOR PACIFIC WHITING SHORESIDE PROCESSORS PARTICIPATING IN THE SHORE-BASED FISHERY

THE PACIFIC COAST GROUNDFISH FISHERY MANAGEMENT PLAN

DRAFT ENVIRONMENTAL ASSESSMENT

Lead Agency	National Oceanic and Atmospheric Administration National Marine Fisheries Service Northwest Regional Office Seattle, Washington
Responsible Official	D. Robert Lohn Regional Administrator Northwest Regional Office
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Abstract: This Environmental Assessment (EA) analyzes the effects of establishing recordkeeping, reporting, catch sorting, and weighing requirements for persons who receive, buy, or accept Pacific whiting from vessels participating in the primary season for the shore-based sector. The Pacific whiting shoreside fishery has been managed under Exempted Fisheries Permit (EFPs) since 1992. However, EFPs are intended to be a temporary and an exploratory response to issues that potentially could be addressed by permanent regulations. The alternative action analyzed in this EA would be the first step towards replacing the EFP with permanent regulations. Although the Pacific whiting shoreside vessels will continue to operate under EFPs in 2007, the alternative action considered in this EA would supplement EFP activities with requirements that mainly affect the processors or other first receivers of EFP catch. The requirements analyzed under the alternative action mirror or enhance existing state regulations and associated paper-based fish ticket systems or provisions associated with current EFP management. The alternative action is expected to provide more timely reporting and improved estimates of the catch of Pacific whiting, ESA listed salmon species, and overfished groundfish species.

April 2007

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1.0 PURPOSE OF AND NEED FOR ACTION

1.1 Introduction

The groundfish fishery in the Exclusive Economic Zone (EEZ), offshore waters between 3 and 200 nautical miles (nm), off the coasts of Washington, Oregon, and California (WOC) is managed under the Pacific Coast Groundfish Fishery Management Plan (FMP), while the nearshore areas are managed by the states and tribes. The Pacific Coast Groundfish FMP was prepared by the Pacific Fishery Management Council (Council) under the authority of the Magnuson Fishery Conservation and Management Act (subsequently amended and renamed the Magnuson-Stevens Fishery Conservation and Management Act). The FMP has been in effect since 1982.

Actions taken to amend FMPs or to implement regulations to govern the groundfish fishery must meet the requirements of several Federal laws, regulations, and executive orders. In addition to the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act), these Federal laws, regulations, and executive orders include: National Environmental Policy Act (NEPA), Regulatory Flexibility Act (RFA), Endangered Species Act (ESA), Marine Mammal Protection Act (MMPA), Coastal Zone Management Act (CZMA), Paperwork Reduction Act (PRA), Executive Orders (E.O.) 12866, 12898, 13132, and 13175, and the Migratory Bird Treaty Act.

NEPA regulations require that NEPA analysis documents be combined with other agency documents to reduce duplication and paperwork (40 CFR§§1506.4). Therefore, this EA will ultimately become a combined regulatory document to be used for compliance with not only NEPA, but also E.O. 12866, RFA, and other applicable laws. NEPA, E.O. 12866, and the RFA require a description of the purpose and need for the proposed action as well as a description of alternative actions that may address the problem.

- Chapter One describes the purpose and need of the proposed action.
- Chapter Two describes a reasonable range of alternative management actions that may be taken to meet the proposed need.
- Chapter Three contains a description of the socioeconomic, biological, and physical characteristics of the affected environment.
- Chapter Four examines changes in the socioeconomic, biological, and physical environments resulting from the alternative management actions.
- Chapter Five addresses consistency with the FMP and other applicable laws.
- Chapter Six is the regulatory impact review and regulatory flexibility analysis.
- Chapter Seven is a list of individuals who help prepare this document.
- Chapter Eight provides a list of references for this document.

1.2 Summary of the Proposed Action

The proposed action is to create Federal regulations that provide for catch accounting in the Pacific whiting shoreside fishery such that the fishery resource management objectives defined by NMFS and the Council can be achieved. The proposed action defines requirements for recordkeeping, reporting, catch sorting, and weighting that apply to persons who receive, buy, or accept Pacific whiting from vessels using midwater trawl gear during the primary season for the shore-based sector (hereafter these individuals are referred to as Pacific whiting first receivers).

At its April 2007 meeting, the Council will consider a related EA titled "A Maximized Retention and Monitoring Program for the Pacific Whiting Shoreside Fishery." This related action will consider adopting, into permanent Federal regulations, a management structure for the Pacific whiting shoreside fishery that is similar to that being used to manage the fishery under Exempted Fishing Permits (EFPs). If approved, the related action could be implemented by the start of the 2008 season. The related action is to consider implementation of permanent regulations for a long-term program that would replace EFPs, this action addresses the immediate management needs that are not addressed by the EFPs. If federal regulations to replace EFPs are not recommended by the Council, long-term management of the Pacific whiting fishery may need further Council and NMFS consideration.

1.3 Purpose and Need for the Proposed Action

The Pacific whiting shoreside fishery needs to have an improved catch reporting system in place to: more adequately track the incidental take of Chinook salmon as required in the ESA Section 7 Biological Opinion for Chinook salmon catch in the Pacific whiting fishery; and to track the catch of target and overfished groundfish species such that the fishing industry is not unnecessarily constrained and that the sector allocation and bycatch limits are not exceeded. This Federal action is intended to address difficulties that occurred during the 2006 season that affected the ability to account for the catch of target, incidental and prohibited species. Catch accounting difficulties encountered in the 2006 fishery included: delayed reporting, substantial revisions in bycatch data, catch not sorted to species defined in federal regulation, and the transporting of partially sorted catch. Without federal regulations, NMFS does not have authority to require first receivers to submit records that are consistent with Federal fishery management needs.

The purpose of the proposed action is to:

- Establish Federal catch accounting requirements for real time reporting of catch data necessary for tracking the Pacific whiting allocation, overfished species bycatch limits, and Chinook salmon take in the Pacific whiting shoreside fishery.
- Establish Federal catch sorting and weighing requirements necessary to maintain the integrity of catch weights used to monitor attainment of allocations and bycatch limits.

1.4 Management of the Pacific Whiting Shoreside Fishery

The Pacific whiting fishery is managed under a "primary" season structure where, after the season start date, vessels harvest Pacific whiting until the sector allocation is reached and the fishery is closed. This is different from most West Coast groundfish fisheries, which are managed under a "trip limit" structure, where catch limits are specified by gear type and species (or species group) and vessels can land catch up to the specified limits. Incidental catch of other groundfish species in the Pacific whiting fishery, however, is managed under the trip limits structure.

To allow the Pacific whiting industry to have the opportunity to harvest the full Pacific whiting OY, the non-tribal commercial fishery is managed with bycatch limits for certain overfished species. To date, bycatch limits have been established for darkblotched, canary and widow rockfish. With bycatch limits, the industry has the opportunity to harvest a larger amount of Pacific whiting, if they can do so while keeping the total catch of specific overfished species within adopted bycatch limits. Regulations provide for the automatic closure of the commercial (non-tribal) portion of the Pacific whiting fishery upon attainment of a bycatch limit. This is different from the bottom trawl fishery where harvest availability of target species is often constrained by the projected catch of overfished species.

In 1992, when significant landings were expected to be harvested by the Pacific whiting shoreside fishery, an observer program was established through the use of EFPs. EFPs allow vessels to engage in activities that are otherwise illegal for the purpose of collecting information that may lead to a management decision or to address specific environmental concerns (50 CFR 600.10 and 600.745.) Each year since 1992, EFPs have been issued to vessels in the Pacific whiting shoreside fishery to allow unsorted catch to be landed. Without an EFP, groundfish regulations at 50 CFR 660.306 (a)(2) ans (a)(6) require vessels to sort their catch at sea. Sorting would cause a loss of product quality and increase vessel operating costs. The vessels fishing under the EFPs are required to deliver catch to designated processors. Each designated processor has a written agreement with the state where they are located that specifies the term of participation. The designated processor agreements require processors to follow more rigorous catch accounting and reporting requirements than those required by existing state law.

50 CFR 660.370 (Groundfish) Specifications and management measures * * *

(e) *Prohibited species.* Groundfish species or species groups under the PCG FMP for which quotas have been achieved and/or the fishery closed are prohibited species. In addition, the following are prohibited species:

(1) Any species of salmonid.
(2) Pacific halibut.
(3) Dungeness crab caught seaward of Washington or Oregon.

Because vessels fishing under the Pacific whiting EFPs are allowed to land unsorted catch, the landings included species in excess of the trip limits, non-groundfish species, protected species, and prohibited species such as salmon that would otherwise be illegal to have on board the vessel. Vessels fishing for Pacific whiting without EFPs must discard as soon as practicable all prohibited species (including salmon and halibut), protected species, non-groundfish species, and groundfish species in excess of cumulative limits.

Unlike the at-sea sectors (catcher/processor and mothership sectors-see section 3.3.1) of the Pacific whiting fishery, where catch is sorted and processed shortly after it has been taken, vessels in the shoreside fishery must hold primary season Pacific whiting on the vessel for several hours or days until it can be offloaded at a shoreside processor. Pacific whiting deteriorates rapidly, so it must be handled quickly and immediately chilled to maintain product quality. This is particularly true if the Pacific whiting is to be used to make surimi (a fish paste product). The quality or grade of surimi is highly dependent on the freshness of the Pacific whiting, which demands careful handling and immediate cooling or processing for the fishery to be economically feasible. Because rapid cooling can retard flesh deterioration, most vessels prefer to dump their unsorted catch directly below deck into the refrigerated salt water tanks. However, dumping the unsorted catch into the refrigerated salt water tanks precludes the immediate sorting or sampling of the catch. As a primary season fishery, fishers prefer to quickly and efficiently handle the catch so they can return to port for offloading.

The Shoreside Whiting Observation Program (SHOP), is a coordinated monitoring effort by the States of Oregon, Washington, and California. The SHOP was initially established in 1992 to provide oversight to the EFP activities including: coordination of observer sampling, the collection other necessary catch data, and the transmission of summarized catch data to NMFS. Although the program's structure and priorities have changed over the years and observers are no longer used, the SHOP has maintained the primary responsibility of monitoring EFP activities and for providing catch data collected at the processing facilities to NMFS for management of the fishery.

Management of the salmon and groundfish fisheries has also changed substantially since the early 1990's. Since 1992, new salmon evolutionarily significant units (ESUs) have been listed under the ESA, and several groundfish species that are incidentally taken in the Pacific whiting fishery have been declared overfished. These changes have affected management of the Pacific whiting fishery and summarized below.

1.4.1 Salmon ESA Opinions and Thresholds for the Pacific Whiting Fishery

NMFS has issued Biological Opinions under the ESA pertaining to the effects of the Pacific Coast groundfish FMP fisheries on Chinook salmon on August 10, 1990, November 26, 1991, August 28, 1992, September 27, 1993, May 14, 1996, and December 15, 1999. The August 1992, Biological Opinion included an analysis of the effects of the Pacific whiting fishery on listed Chinook salmon. The Biological Opinions have concluded that Chinook is the salmon species most likely to be affected, while other salmon species are rarely encountered in the Pacific whiting and other groundfish fisheries. The analysis determined that there was a spatial/temporal overlap between the Pacific whiting fishery and the distribution of ESA listed Chinook salmon such that it could result in incidental take of listed salmon. The 1992 Biological Opinion included an incidental take statement that authorized the incidental take of 0.05 salmon per metric ton of Pacific whiting. The Biological Opinion identified the need for continued monitoring of the fishery to evaluate impacts on salmon, and specifically emphasized the need to monitor the emerging shoreside fishery because fishing patterns and bycatch rates were likely to differ from those observed on the at-sea processors.

NMFS reinitiated a formal Section 7 consultation under the ESA in 2005 for both the Pacific whiting midwater trawl fishery and the groundfish bottom trawl fishery. The December 19, 1999 Biological Opinion had defined an 11,000 Chinook incidental take threshold for the Pacific whiting fishery. During the 2005 Pacific whiting season, more than 11,000 Chinook were taken, triggering reinitiation. NMFS prepared a Supplemental Biological Opinion dated March 11, 2006, which addressed salmon take in both the Pacific whiting midwater trawl and groundfish bottom trawl fisheries. In that Supplemental Biological Opinion, NMFS concluded that catch rates of salmon in the 2005 Pacific whiting fishery were consistent with expectations considered during prior consultations. Chinook bycatch has averaged about 7,300 fish over the last 15 years and has only occasionally exceeded the reinitiation trigger of 11,000. Since 1999, annual Chinook bycatch has averaged about 8,450 fish. The Chinook ESUs most likely affected by the Pacific whiting fishery have generally improved in status since the 1999 Section 7 consultation. Although these species remain at risk, as indicated by their ESA listing, NMFS concluded that the higher observed bycatch in 2005 does not require a reconsideration of its prior "no jeopardy" conclusion with respect to the fishery. For the groundfish bottom trawl fishery, NMFS concluded that incidental take in the groundfish fisheries is within the overall limits articulated in the Incidental Take Statement of the 1999 Biological Opinion. The groundfish bottom trawl limit from that opinion was 9,000 fish annually. NMFS will continue to monitor and collect data to analyze take levels. NMFS also reaffirmed its prior determination that implementation of the Groundfish FMP is not likely to jeopardize the continued existence of any of the affected ESUs.

1.4.2 Overfished Groundfish Species, Amendment 10 and Subsequent FMP Developments

In 1996, to address the treatment and disposition of salmon in the shore-based sector of the Pacific whiting fishery, an EA was prepared to analyze amendments to both the groundfish FMP (FMP Amendment 10) and salmon FMP (FMP Amendment 12). The 1996 EA analyzed two management alternatives regarding the retention of salmon taken with groundfish trawl gear. The first alternative was to maintain the then current salmon and groundfish FMPs, under which retention of salmon in the groundfish trawl fisheries would not have been permitted and the practice of retaining salmon in the Pacific whiting shoreside fishery was only authorized under an EFP. The second and preferred alternative was to maintain salmon as a prohibited species in the groundfish FMP and add trawl gear to the list of gears that may retain salmon if allowed under other pertinent regulations such as salmon fishing regulations at 50 CFR Part 660, Subpart H. The preferred alterative also included a provision for the salmon FMP to be amended to allow retention of salmonids in the trawl fishery when a Council approved monitoring program, one that meets certain minimum guidelines, was established in the Pacific whiting shoreside fishery (PFMC 1996). At their October 21 - 25, 1996, meeting the Council recommended the preferred alternative, including the temporary use of EFPs to monitor the incidental take of salmon until a permanent monitoring program could be implemented. Both the salmon and groundfish FMPs were amended to include the provisions of the preferred alternative, however implementing regulations for the Pacific whiting shoreside fishery were never adopted.

In 1996, the Sustainable Fisheries Act (SFA) amended the Magnuson Fishery Conservation and Management Act (renamed Magnuson-Stevens Fishery Conservation and Management Act). The SFA required that FMPs establish a standardized reporting methodology to assess the amounts

and types of bycatch in a fishery, and required that FMPs identify and rebuild overfished stocks. The Council set a standard, added to the FMP via Amendment 16-1, that groundfish stocks with depletion levels that fall below 25 percent of estimated unfished biomass level are to be considered overfished. At this time, seven stocks continue to managed via overfished species rebuilding plans: bocaccio, canary rockfish, cowcod, darkblotched rockfish, Pacific Ocean Perch (POP), widow rockfish, and yelloweye rockfish.

Amendment 16-1 set a framework for overfished species rebuilding parameters and requirements into the FMP, and set an initial requirement that NMFS implement an observer program in the groundfish fishery through a Council-approved Federal regulatory framework. Amendments 16-2 and 16-3 revised the FMP to include rebuilding plans for the seven overfished species identified above, plus lingcod. Lingcod was most recently assessed in 2005 and declared rebuilt at that time, the coastwide stock having exceeded the FMP's rebuilding goal of a stock size of at least 40 percent of estimated unfished biomass level. Amendment 16-4, approved December 2006, revised the rebuilding parameters for the seven species currently managed via rebuilding plans.

Amendment 18 to the FMP, approved September 2006, revised the FMP to include the Council's bycatch minimization policies, programs, and requirements. Among other requirements, the FMP as revised by Amendment 18 now includes a detailed discussion of the groundfish fishery's standardized total catch reporting and compliance monitoring program (Section 6.4). At the same time that the Council was developing Amendment 18, it was also taking a look back at Amendment 10 to determine how to move the Pacific whiting shoreside fishery out of EFP management. Amendment 18 includes provisions that facilitate that move to a long-term Federal regulatory structure: parameters for electronic monitoring programs in Section 6.4.1.1, and parameters for full retention programs in 6.5.3.1.

1.5 Environmental Review Process and Public Scoping

The purpose of the environmental review process is to determine the range of issues that the NEPA document (in this case the EA) needs to address. The environmental review process is intended to ensure that: problems are identified early and properly reviewed; issues of little significance do not consume time and effort; and that the draft NEPA document is thorough and balanced. The environmental review process should: identify the public and agency concerns; clearly define the environmental issues and alternatives to be examined in the NEPA document; eliminate non-significant issues; identify related issues; and identify state and local agency requirements that must be addressed.

A related action titled " A Maximized Retention and Monitoring Program for the Pacific Whiting Shoreside Fishery," will be considered by the Council at its March 2007 meeting and is intended to transition the Pacific whiting shoreside fishery from annual EFPs to management via long-term Federal regulations beginning in 2008. During the public review and scoping for the development the related action, difficulties that could affect the ability to account for the catch of target, incidental and prohibited species while managing the fishery under EFPs were identified.

In July 2006, NMFS Northwest Region staff meet with staff from WCGOP, WDFW, ODFW, and CDFG to discuss technical issues associated with implementing a monitoring program in the Pacific whiting shoreside fishery. The purpose of the monitoring program was reaffirmed during the meeting. Discussions focused on: the data reporting needs and the current reporting structures in each states; the need to reduce under reporting and delayed fish ticket submissions; the different state approaches to sampling catch at shoreside processing facilities; and the use of bycatch limits to reduce impacts on overfished species. In August 2006, NMFS Northwest Region staff and representatives from, WCGOP, WDFW, ODFW, and CDFG discussed the outcome of the technical meeting and held further discussions on the implementation of a Pacific whiting shoreside fishery monitoring program.

At the Council's September 2006, meeting in Foster City, California, NMFS presented a summary of the discussions it had held with the states, and suggested a process and schedule for implementing Federal regulations for a maximized retention and monitoring program for the Pacific whiting shoreside fishery. At this same meeting, NMFS informed the Council of the intent to take action in 2007 to address data accounting concerns in the Pacific whiting fishery and until the maximized retention and monitoring program was in effect. At the Council's November 2006 meeting, NMFS reaffirmed the need for rulemaking to address data accounting concerns at the shoreside processing facilities.

1.6 Decision to be Made

From the information in this EA, NMFS must decide whether or not to establish catch accounting requirements pertaining to recordkeeping, reporting, catch sorting, and weighting for individuals who receive, buy, or accept Pacific whiting from a vessel using midwater trawl gear during the primary season for the shore-based sector (Pacific whiting shoreside first receivers).

It must also be determined if the proposed action and/or preferred alternative would or would not be a major Federal action, significantly affecting the quality of the human environment. If NMFS determines that the proposed action would not significantly affect the quality of the human environment, then a Finding of No Significant Impact (FONSI) may be prepared and the catch accounting requirements implemented. If the NMFS determines that the action would significantly affect the Pacific Coast groundfish fishery, then preparation of an Environmental Impact Statement will be required.

1.7 Applicable Federal Permits, Licences, or Authorizations Needed in Conjunction with Implementing this Proposal

The Magnuson-Stevens Act provisions at 50 CFR 600.745 allow the issuance of EFPs to authorize fishing activities that would otherwise be prohibited. NMFS received an application requesting renewal of the Pacific Whiting Shoreside Fishery EFP from the States of Washington, Oregon, and California at the November 2006 Council meeting in Del Mar, CA. The Council recommended that NMFS issue the EFPs, as requested by the States. A Federal Register notice will be published to announce the receipt of the EFP application and the intent to issue the EFPs.

Issuance of EFPs to Pacific whiting vessels will continue the ongoing monitoring program through 2007. The EFPs allow vessels to delay the sorting of groundfish catch until offloading and allow the vessels to retain catch in excess of cumulative trip limits and prohibited species. Each EFP contains the terms and condition that the participating vessels are required to follow. The alternative being considered does not change the EFPs for vessels, but rather applies to the first receivers.

2.0 ALTERNATIVES

2.1 Introduction

This chapter describes the alternative management actions that could be taken to establish catch accounting requirements for Pacific whiting shoreside first receivers. The alternatives described in this section address the following areas related to the monitoring of Pacific whiting EFP catch:

- Timely reporting of groundfish and prohibited species catch
- Adequate sorting of catch prior to weighing
- Accuracy of reported catch weights

The following alternatives which are further defined below and analyzed in this EA include:

- Alternative 1: (Status Quo)-Federal reporting requirements not specified. Catch sorting requirements and prohibited actions currently specified for limited entry trawl at 660.370(h)(6) and 660.306(a)(7). Each state specifies requirements for landing reports. States have varying requirements for scale performance and testing for seafood processors establish by their agencies for weights and measures.

- Alternative 2: Define real time Federal reporting requirements for Pacific whiting shoreside processors based on the use of electronic fish tickets. Revise reporting requirements to apply to all individuals who receive, buy, or accept Pacific whiting from a vessel using midwater trawl gear during the primary season for the shore-based sector (Pacific whiting shoreside processors). Establish federal requirements for sorting Pacific whiting deliveries. Specify that the weight for species or species groups reported on electronic fish tickets must be derived from a scale appropriate to the amount being weighed and must be accurate.

2.2 Alternatives

Table 2.2.1. Comparison of the Alternative Management Actions

Issues	Alternative 1 (Status Quo)	Alternative 2 (NMFS preferred)
Timely reporting of catch	• Federal reporting requirements not specified. • Paper reports required by state of landing.	• Electronic fish tickets required • Submission of electronic fish tickets within 24 hours of the date of landing. • Paper reports required by state of landing.
Adequate sorting of catch	• 660.306(a)(7) it is unlawful for any person to fail to sort catch, prior to the first weighing after offloading. • 660.370(h)(6) requires groundfish catch to be sorted to species or species groups with trip limit, size limit, quota, harvest guideline, or OY.	In addition to requirements under status quo: • Prohibit processors from receiving unsorted Pacific whiting primary catch from EFP vessels without EMS, unless the vessel has a waiver. • Revise sorting requirements at 660.370(h)(6) to address unsorted Pacific whiting landings. • Revise sorting requirements to include requirement to sort catch at offload and prior to transporting catch from the port of first landing.
Accurate catch weights	• There are no Federal requirements. • Oregon requires weights to be from certified scales. All processors have one or more scales licenced by the state. Scales must be tested and meet specific standards. • Washington does not require weights to be from scales. All processors have scales that meet state standards. The current practice is to actually weigh catch. • California requires accurate weights, but does not specify that weights be from scales.	• Require weights on electronic fish tickets to be from scales that are in compliance with state standards. • Require the use of scales with appropriate accuracy range for the amount being weighed. • Require accurate weights. • Prohibit catch from being processed, sold or discarded before being weighed on a scale.

2.2 Alternatives

2.2.1 Alternative 1 (Status Quo)

Timely reporting of catch: Under this alternative, Federal regulations at 50 CFR 660.303 would continue to require vessels to make and/or file, retain, or make available any and all reports (i.e., logbooks, fish tickets, etc.) of groundfish harvests and landings as required by the applicable state law.

Accurate sorting of catch: There are no Federal regulations or EFP provisions that specifying how unsorted deliveries, which may include prohibited species, protected species, groundfish in excess of trip limits, or other non-groundfish species, must be sorted. The current groundfish regulations are based on the assumption that most catch is sorted prior to landing. For limited entry vessels with trawl endorsements, Federal regulations at 660.306 (a)(7) and 660.370 (a)(6)(i) specify the groundfish species groups that catch must be sorted to prior to first weighing. In general, the

catch must be sorted to any groundfish species or species group for which there is a trip limit, size limit, quota, harvest guideline, or OY. Sorting requirements do not speak to the sorting of non-ground species.

Under the existing Federal groundfish regulations, individuals who receive unsorted catch on land and transport that catch to another location, sometimes out of state, are not required to sort the catch or weigh it prior to transport. Federal law requires fish that are transported between states to be marked with an accurate packing list, bill of lading, or other similar document that lists species and number by species or other appropriate measure of the quantity such as weight (50 CFR Subpart K, 300.160-161).

Accurate catch weights: Each state has different requirements regarding the weights on landing reports and the performance or testing requirements for scales used to weigh groundfish catch. Performance and testing requirements for commercial scales have been established by the each state's weights and measures agency.

Processors in the State of Oregon are currently required to report actual scale weights on fish receiving tickets and all weights are required to be derived from certified scales. The State of Washington does not require marine fish receiving ticket weights to be actual scale weights. However, requirements for commercial scales are specified in state regulation and scales are generally used by the Pacific whiting processors to derive fish ticket weights (Pers. Comm. Mike Cenci, WDFW). In the State of California accurate weights are required on landing receipts, but they are not required to be actual scale weights.

Actual Weights

Actual weights are those derived from a suitable scale that meets state standards for type, testing, and accuracy.

Common methods used to estimate the weight of fish (**not** an actual weight) include:

- Volumetric estimation = volume taken up by the catch * an estimated density value
- Average weight estimation = number of fish times an average weight
- Conversions to weights using a conversion factor

2.2.2 Alternative 2 (NMFS preferred)

Timely reporting of catch: Under this alternative, Federal regulations would require Pacific whiting shoreside first receivers to have and use a NMFS approved electronic fish ticket program to send timely catch reports. Electronic fish tickets would need to be submitted within 24 hours from the date the catch was landed. The electronic fish tickets are based on information currently required in state fish receiving tickets or landing receipts (hereafter referred to as state fish tickets). The reports would be used to track catch allocations, bycatch limits and prohibited species catch. First receivers would provide the computer hardware and software (Access 2003 or later) necessary to support the electronic fish ticket program. This alternative would recognize that 2007 is the initial year in which an electronic fish ticket program will be used and therefore includes provisions to accommodate the daily reporting needs of the fishery, should there be performance issues with software or other system failures beyond the processor's control. Federal regulations would not replace any state requirements. Regulations at 50 CFR 660.303 would continue to require vessels to make and/or file, retain, or make available any and all reports

(i.e., logbooks, fish tickets, etc.) of groundfish harvests and landings as required by the applicable state law.

At this time, only the State of Oregon allows printed and signed copies of the electronic fish tickets for submission as the official state record. The states of Washington and California would continue to require the submission of paper forms as issued by the state. Under this alternative, first receivers in the states of Washington and California would need to complete and submit paper fish ticket forms as provided by the states in addition to Federal reporting requirements.

Accurate sorting of catch: If sorting and weighing requirements specified in Federal regulation are more specific than state fish tickets requirements, the processor would be required to meet the Federal sorting and weighing requirements for all electronic fish ticket submissions.
In addition to the sorting requirements specified for limited entry vessels with trawl endorsements at 660.306(a)(7) and 660.370(h)(6) (i), sorting requirements would be specified for unsorted Pacific whiting catch received by first receivers since these deliveries may contain groundfish in excess of trip limits, unmarketable groundfish, prohibited species, and protected species that are not addressed by current groundfish regulations. In addition, Federal groundfish regulations would be revised to specify that unsorted deliveries from vessels participating in the Pacific whiting shoreside fishery must be adequately sorted and the catch weighed following offloading from the vessel and prior to transporting the catch.

Accurate catch weights: Under this alternative, first receivers would be required to report on electronic fish tickets, actual weights derived from scales. The federal regulations would be in accordance with existing state requirements for scales. Though there are considerable differences in the requirements between states, each state has requirements for scale performance and testing established by their agencies for weights and measures. How these requirements apply to seafood processors varies between states.

2.3 Alternatives Considered but Eliminated from the Detailed Analysis

There were no approaches that were considered but not analyzed in this document.

3.0 AFFECTED ENVIRONMENT

This chapter describes the Pacific Coast groundfish fishery and the resources that would be affected by the alternative action. Physical resources are discussed in Chapter 3.1, biological resources are described in Chapter 3.2, and socio-economic resources are described in Chapter 3.3.

3.1 Physical Characteristics of the Affected Environment

The coastal ocean off Washington, Oregon, and California is a biogeographic region that is collectively termed the Coastal Upwelling Domain (Ware and McFarlane 1989). The dominant fish species within this domain include northern anchovy, Pacific sardine, Pacific whiting (also called Pacific hake), Pacific mackerel, jack mackerel, Pacific herring, sablefish, and coho and Chinook salmon. Within this domain, are several smaller physical zones, including: a nearshore zone; a zone that includes the upper 10-20 m (5-11 fm) of the water column across the continental shelf and slope; and, a benthic zone with demersal habitats on the continental shelf, at the shelf break, and beyond the shelf break to depths of 1,500 m (820 fm). Each of these physical zones

has unique circulation patterns that affect spawning and larval transport, and each is subject to different physical forces that leads to species-specific variations in growth, survival, and recruitment.

The Coastal Upwelling Domain is part of the California Current system. The California Current is a broad, slow, meandering current that moves toward the equator. The California current occurs from the shore to several hundred miles from land, and extends from the northern tip of Vancouver Island (50 north latitude) to the southern tip of Baja California (25 north latitude). In deep waters offshore of the continental shelf, the currents flow southward all year round; however, over the continental shelf, southward flows occur only in spring, summer, and fall. During winter months, the flow over the shelf reverses, and the water moves northward as the Davidson Current. The transitions between northward and southward flows on the shelf occur seasonally, in March/April and October/November thus are termed the "spring transition and fall transition. "Another important feature of circulation within the Coastal Upwelling Domain is the deep, year-round, poleward-flowing undercurrent found at depths of 100 to 300 m (55 to164 fm) over the outer shelf. This current seems to be continuous at least from Southern California (33º north latitude) to the British Columbia coast (50º north latitude).

Coastal upwelling is the dominant physical force affecting production in the Coastal Upwelling Domain. Upwelling off Washington and Oregon occurs primarily in continental shelf waters during the months of April to September, whereas upwelling can occur year-round off northern and central California. Upwelling also occurs in offshore waters through the action of Ekman pumping and through surface divergence in the centers of cyclonic eddies. The result of upwelling is high production of phytoplankton from April through September fueled by the nearly continuous supply of nutrients, and a high biomass of copepods, euphausiids and other zooplankton during summer.

Pacific whiting undertake an extended spawning migration during which the adults swim south to spawn in the southern California Bight in autumn and winter. Pacific whiting migrate from as far north as Vancouver Island to southern California, a distance of several thousand kilometers. The Pacific whiting fishery has historically occurred during the northern migration of adults. The northern migrating adults and the northward drift of larvae and juveniles takes place at depths where fish take advantage of the poleward undercurrent.

3.1.1 Essential Fish Habitat

The MSA, as amended by the 1996 SFA, requires NMFS and the Council to describe Essential Fish Habitat (EFH) and enumerate potential threats to EFH from both fishing and nonfishing activities for the managed species. EFH for Pacific Coast groundfish is defined as the aquatic habitat necessary to allow groundfish production to support long-term sustainable fisheries for groundfish and for groundfish contributions to a healthy ecosystem. In December 2005, NMFS completed a final EIS on EFH. This final EIS supports action taken under Amendment 19 titled: The Pacific Coast Groundfish Fishery Management Plan, EFH Designation and Minimization of Adverse Impacts, contains detailed further information on the physical environment. Readers who are interested in detailed information on the West Coast marine habitat and physical oceanography are referred to Section 3.2 of the final EFH EIS. A copy of the EFH EIS can be obtained by contacting the Sustainable Fisheries Division, Northwest Region, NMFS, 7600 Sand Point Way, NE, Seattle, WA 98115–0070; or viewing the internet posting at www.nwr.noaa.gov/Groundfish-Halibut/Groundfish-Fishery-Management/NEPA-Documents/index.cfm.

3.2 Biological Characteristics of the Affected Environment

There are over 90 species of groundfish managed under the groundfish FMP. These species include over 60 species of rockfish in the family Scorpaenidae, 7 roundfish species, 12 flatfish species, assorted sharks, skates, and a few miscellaneous bottom-dwelling marine fish species. The groundfish species occur throughout the EEZ and occupy diverse habitats at all stages in their life history. Information on the interactions between the various groundfish species and between groundfish and non-groundfish species varies in completeness. While a few species have been intensely studied, there is relatively little information on most.

The Allowable Biological Catch (ABC) is an estimate of the amount of stock that may be harvested each year without jeopardizing the continual sustainability of the resource. The Council and NMFS use the results of quantatative stock assessment to develop annual ABCs for major groundfish stocks. For groundfish species where there is little or no detailed biological data available to develop ABCs, rudimentary stock assessments are prepared, or the ABC levels are based of historical landings. Species and species groups with ABCs in 2006 included: lingcod, Pacific cod, Pacific whiting, sablefish, cabezon, POP, shortbelly rockfish, widow rockfish, canary rockfish, chilipepper rockfish, bocaccio, splitnose rockfish, yellowtail rockfish, shortspine thornyhead, longspine thornyhead, cowcod, darkblotched rockfish, yelloweye rockfish, Black rockfish, Dover sole, English sole, petrale sole, Arrowtooth flounder, other flatfish, and the minor rockfish complexes.

The Magnuson-Stevens Act requires an FMP to prevent overfishing. Overfishing is defined in the National Standards Guidelines (63 FR 24212, May 1, 1998) as exceeding the fishing mortality rate needed to produce maximum sustainable yield. The term "overfished" describes a stock whose abundance is below its overfished/rebuilding threshold. Overfished/rebuilding thresholds are generally linked to the same productivity assumptions that determine the ABC levels. The default value of this threshold for the groundfish FMP is 25 percent of the estimated unfished biomass level. In 2007, seven groundfish species continue to be designated as overfished: bocaccio (south of Monterey), canary rockfish, cowcod (south of Point Conception), darkblotched rockfish, Pacific ocean perch, widow rockfish, and yelloweye rockfish.

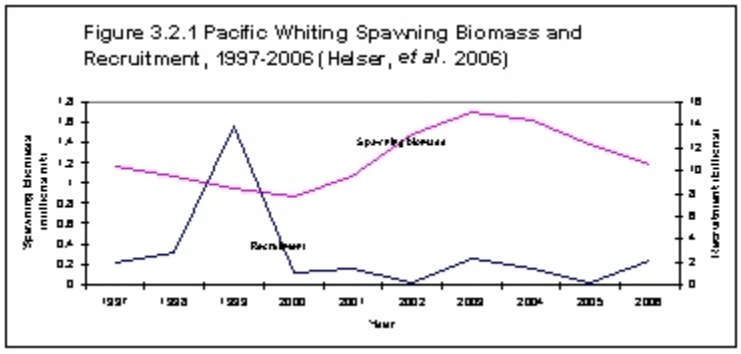
The following section presents a brief summary of the biological characteristics of Pacific whiting, the most common species encountered in the Pacific whiting fishery, and overfished groundfish species encountered in the fishery. Readers who are interested in further biological information including information on the status of the groundfish resources, are referred to Section 4.0 of the EIS, prepared for the Proposed Acceptable Biological Catch and Optimum Yield Specifications and Management Measures for the 2007-2008 Pacific Coast Groundfish Fishery. Copies of the EIS can be obtained from the Pacific Fishery Management Council, by writing to 7700 NE Ambassador Place, Suite 200, Portland, OR 97220-1384; or calling 503-820-2280; or viewing the internet posting at http://www.pcouncil.org. Appendix B2 to the final EFH EIS titled: The Pacific Coast Groundfish Fishery Management Plan, EFH Designation and Minimization of Adverse Impacts, contains detailed information on the life histories of the groundfish species. A copy of the EFH EIS can be obtained by contacting the Sustainable Fisheries Division, Northwest Region, NMFS, 7600 Sand Point Way, NE, Seattle, WA 98115–0070; or viewing the internet posting at www.nwr.noaa.gov/Groundfish-Halibut/Groundfish-Fishery-Management/NEPA-Documents/index.cfm.

Pacific Whiting (*Merluccius productus*): Pacific whiting range from Sanak Island in the western Gulf of Alaska to Magdalena Bay, Baja California Sur. They are most abundant in the California Current System (Bailey 1982; Hart 1973; Love 1991; NOAA 1990). Smaller populations of Pacific whiting occur in several of the larger semi-enclosed inlets of the northeast Pacific Ocean, including the Strait of Georgia, Puget Sound, and the Gulf of California (Bailey et al.1982; Stauffer 1985). The highest densities of Pacific hake are usually found between 50 and 500 m, but adults occur as deep as 920 m (503 fm) and as far offshore as 400 km (Bailey 1982; Bailey et al.1982; Dark and Wilkins 1994; Dorn 1995; Hart 1973; NOAA 1990; Stauffer 1985). Hake school at depth during the day, then move to the surface and disband at night for feeding (McFarlane and Beamish 1986; Sumida and Moser 1984; Tanasich et al.1991).

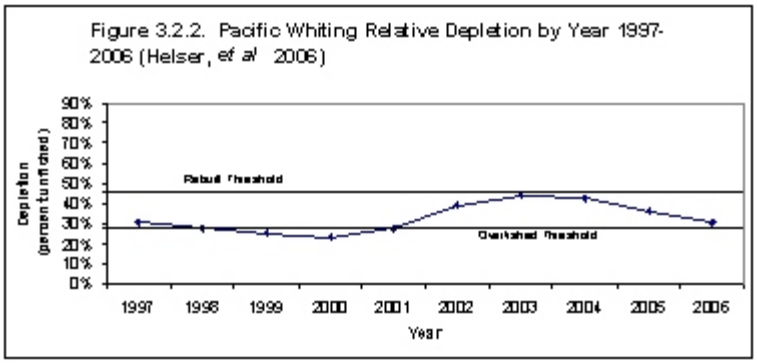
Coastal stocks spawn off Baja California in the winter. After spawning the mature adults begin moving northward and inshore, following the food supply and Davidson currents (NOAA 1990). Hake reach as far north as southern British Columbia by fall. Older (age 5+), larger, and predominantly female Pacific whiting migrate into Canadian waters. During El Niño years, a larger proportion of the stock migrates into Canadian waters, this believed to be due to intensified northward currents during the period of inactive migration (Dorn 1995). In the fall, Pacific whiting begin the southern migration to spawning grounds and further offshore (Bailey et al.1982; Dorn 1995; Smith 1995; Stauffer 1985).

Spawning occurs from December through March, peaking in late January (Smith 1995). Pacific hake are oviparous with external fertilization. Eggs of the Pacific hake are neritic and float to neutral buoyancy (Bailey et al.1982; NOAA 1990). Hatching occurs in 5 - 6 days and within 3-4 months juveniles are typically 35 mm (Hollowed 1992). Juveniles move to deeper water as they get older (NOAA 1990). Females often mature at 3 - 4 years (34 - 40 cm,) and nearly all males are mature by 3 years (28 cm). Females grow more rapidly than males after four years; growth ceases for both sexes at 10 - 13 years (Bailey et al.1982).

Smith (1995) recognizes three habitats used by coastal Pacific whiting: a narrow 30,000 km_2 feeding habitat near the shelf break of British Columbia, Washington, Oregon and California populated 6-8 months per year; a broad 300,000 km_2 open-sea area of California and Baja California populated by spawning adults in the winter and embryos and larvae for 4-6 months; and a continental shelf area of unknown size off California and Baja California where juveniles brood (Bailey et al.1982, NOAA 1990). Adult Pacific whiting have been found to be cannibalistic. Pacific whiting and their associated prey varies by life stage with adults primarily feeding on amphipods, clupeids, crabs, rockfish, squid; juveniles feeding on euphausiids; and, larvae feeding on copepod eggs, copepod nauplii, and copepods.



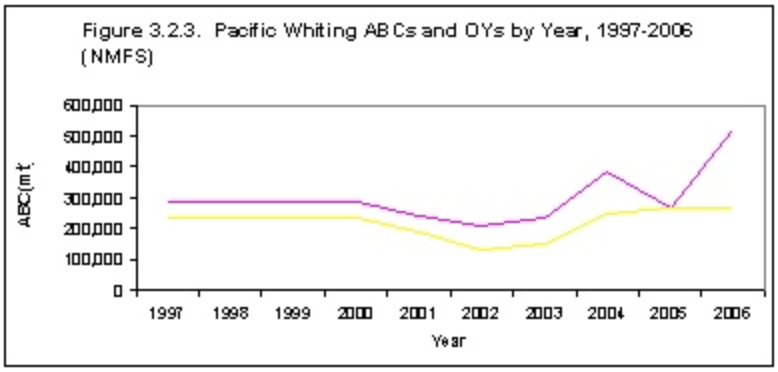
In general, Pacific whiting is a very productive species with highly variable recruitment patterns (recruitment-the biomass of fish that mature and enter the fishery each year) and a relatively short life span when compared to most other groundfish species. In 1987, the Pacific whiting biomass was at a historical high level due to an exceptionally large number of fish that spawned in 1980 and 1984 (fished spawned during a particular year are referred to as year classes). As these large year classes passed through the population and were replaced by moderate sized year classes, the Pacific whiting stock declined. The Pacific whiting stock stabilized between 1995 and 1997, but then declined to its lowest level in 2001 (Figure 3.2.1.) The female spawning biomass of Pacific whiting in 2001 was estimated to be less than 20 percent of the unfished biomass. As a result, the Pacific whiting stock was believed to be below the overfished threshold ($B_{25\%}$) and was declared overfished on April 15, 2002 (67 FR 18117). Since 2001, the Pacific whiting stock has increased substantially, because a strong 1999 year class has matured and entered the spawning population. The 1999 year class has been the single most dominant cohort in the biomass since the late 1980s.

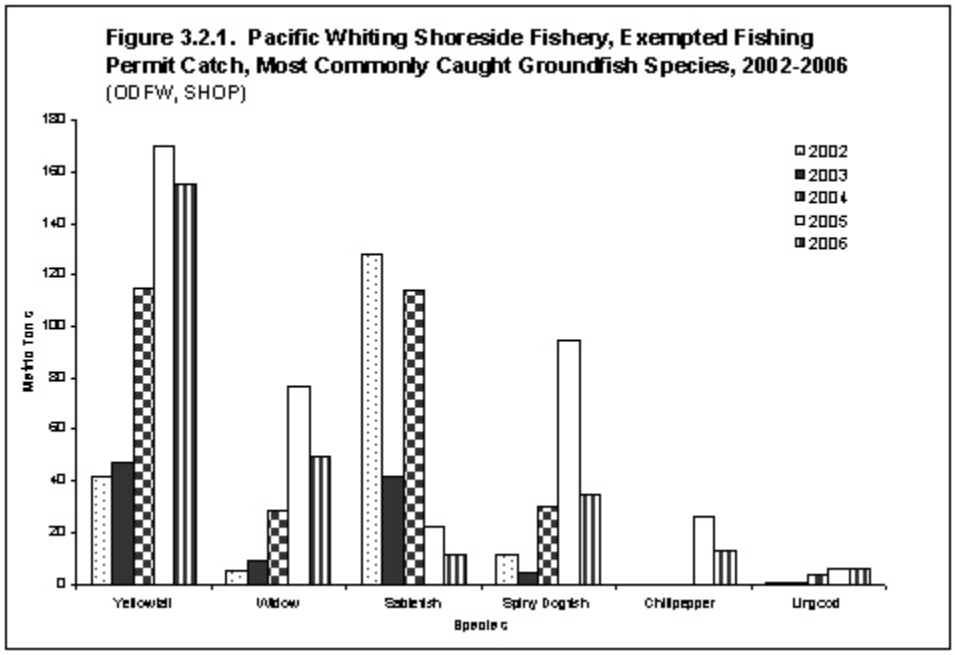


Pacific whiting stock assessment prepared in 2004 found that the abundance had increased substantially since 2000. However, the pattern of stock growth remained similar to what had been estimated in past stock assessments. The 2004 stock assessment estimated the stock to be between 47 percent (2.7 million mt of age 3+ fish) and 51 percent (4.2 million mt of age 3+ fish) of its unfished biomass in 2003. Under both scenarios, the Pacific whiting biomass in 2003 was estimated to be above the target rebuilding biomass (Figure 3.2.2.) Therefore, in 2004, NMFS announced that the Pacific whiting stock was estimated to above the target rebuilding biomass ($B_{40\%}$) in 2003 and was no longer considered to be an overfished stock.

The most recent Pacific whiting stock assessment was prepared in early 2006, and the Pacific whiting biomass was estimated to be between 31 percent and 38 percent of its unfished biomass. In 2006, the U.S. ABC (73.88 percent of the U.S.-Canada coastwide ABC) was 518,294 mt and the U.S. total catch OY with a 40-10 precautionary adjustment was 269,069 mt. Figure 3.2.3 shows the annual Pacific whiting ABCs and OYs for the years between 1997 and 2006.

Pacific whiting undertake a diurnal vertical migration and tend to form extensive midwater aggregations during the day, these dense schools occur between the depths of 100 and 250 meters (Stauffer 1985). Because Pacific whiting disperse throughout the water column at dusk and remain near the surface at night, fishing has traditionally occurred during the daylight hours. The results of fishing on concentrated





midwater schools results in almost pure catches of Pacific whiting, with incidental catch typically amounting to less than three percent of the total catch by weight.

Species that are incidentally taken in the Pacific whiting fishery may be commingled with Pacific whiting or merely in the vicinity of Pacific whiting schools, depending on the relationships between the various species. Major factors affecting bycatch are: area, depth, season, time of day, and environmental conditions. Overall abundance of a particular species is also relevant. Figure 3.2.1 is a summary of EFP catch of the most common groundfish species taken in the Pacific whiting shoreside fishery between 2002 and 2006. The most common groundfish species taken in EFP catches between 2002 and 2006 include: yellowtail rockfish, widow rockfish, sablefish, spiny dogfish (*Squalus acanthias*), chilipepper rockfish and lingcod.

Yellowtail Rockfish (Sebastes flavidus): Yellowtail rockfish range from San Diego, California, to Kodiak Island, Alaska (Fraidenburg 1980; Gotshall 1981; Lorz, *et al.* 1983; Love 1991; Miller and Lea 1972; Norton and MacFarlane 1995). The center of yellowtail rockfish abundance is from Oregon to British Columbia (Fraidenburg 1980). Yellowtail rockfish are a common, demersal species abundant over the middle shelf (Carlson and Haight 1972; Fraidenburg 1980; Tagart 1991; Weinberg 1994). Yellowtail rockfish are most common near the bottom, but not on the bottom (Love 1991; Stanley, *et al.* 1994). Yellowtail rockfish adults are considered semi-pelagic (Stanley, *et al.* 1994; Stein, *et al.* 1992) or pelagic, which allows them to range over wider areas than benthic rockfish (Pearcy 1992). Adult yellowtail rockfish occur along steeply sloping shores or above rocky reefs (Love 1991). They can be found above mud with cobble, boulder and rock ridges, and sand habitats; they are not, however, found on mud, mud with boulder, or flat rock (Love 1991; Stein, *et al.* 1992). Yellowtail rockfish form large (sometimes greater than 1,000 fish) schools and can be found alone or in association with other rockfishes (Love 1991; Pearcy 1992; Rosenthal, *et al.* 1982; Stein, *et al.* 1992; Tagart 1991). These schools may persist at the same location for many years (Pearcy 1992).

The yelloweye rockfish stock in the West Coast fishery is managed as two stocks separated at Cape Mendocino, California. The stock assessment of yellowtail rockfish was most recently updated in 2005. Yellowtail rockfish is considered to be a healthy stock with its biomass estimated to be above 40 percent of its unfished biomass in 2005.

Yellowtail rockfish is the most common groundfish species caught with Pacific whiting. In the past five years, the yellowtail rockfish catch in the Pacific whiting shoreside fishery has ranged from a low of 41 mt in 2002 with a catch rate of 0.0009 mt of yellowtail rockfish per mt of Pacific whiting to a high of 170 mt in 2005 with a catch rate of 0.0017 mt of yellowtail rockfish per mt of Pacific whiting. Yellowtail rockfish catch rates tend to be highest in ports in the north (Wesetport, Illwaco, and Astoria) than in the south. Catch rates for individual trips between 1999 and 2003 show that the highest interception occurs around Astoria Canyon and south of Cape Flattery (Weidoff and Parker 2004).

Widow Rockfish (Sebastes entomelas): Widow rockfish range from Albatross Bank off Kodiak Island to Todos Santos Bay, Baja California, Mexico (Eschmeyer, et al. 1983; Miller and Lea 1972; NOAA 1990). They occur over hard bottoms along the continental shelf (NOAA 1990) and prefer rocky banks, seamounts, ridges near canyons, headlands, and muddy bottoms near rocks. Large widow rockfish concentrations occur off headlands such as Cape Blanco, Cape Mendocino, Point Reyes, and Point Sur. Adults form dense, irregular, midwater and semi-demersal schools deeper than 100 m (55 fm) at night and disperse during the day (Eschmeyer, et al. 1983; NOAA 1990; Wilkins 1986). All life stages are pelagic, but older juveniles and adults are often associated with the bottom (NOAA 1990). Pelagic larvae and juveniles co-occur with yellowtail rockfish, chilipepper, shortbelly rockfish, and bocaccio larvae and juveniles off Central California (Reilly, et al. 1992).

Similar to other rockfish species, the biomass of widow rockfish has decreased steadily since the early 1980s, and recruitment during early 1990s is estimated to have been considerably smaller than before the mid 1970s. The reason for the lower recruitment during the period could be due to lower spawning stock biomass, but it could also be due to environmental conditions. Widow rockfish was declared overfished on January 11, 2001, because the stock was assessed and believed to be below 25 percent of its unfished biomass. A 2005 coastwide stock assessment and rebuilding analysis were completed for widow rockfish. The 2005 stock assessment estimated that the widow rockfish stock was at 31.1 percent of its unfished biomass in 2004. In retrospect, the 2005 stock assessment shows that the widow rockfish biomass may not have declined below the overfished species threshold of 25 percent of its unfished biomass as has been estimated in previous stock assessments.

Widow rockfish is one of the most common groundfish species caught with Pacific whiting. However, because of its overfished status, widow rockfish bycatch limits have been used to constrain the incidental catch. If a bycatch limit is reached, all commercial Pacific whiting fisheries are closed for the remainder of the year regardless of whether or not the Pacific whiting allocations have been reached. In 2006, the widow rockfish bycatch limit was 200 mt at the start of the season but was later revised to 220 mt. In the past five years, the widow rockfish catch in the Pacific whiting shoreside fishery has ranged from a low of 5 mt in 2002 with a catch rate of 0.0001 mt of widow rockfish per mt of Pacific whiting to a high of 76 mt in 2005 with a catch rate of 0.0008 mt of widow rockfish per mt of Pacific whiting (Jesse and Saelens 2007)

Sablefish (Anoplopoma fimbria): Sablefish, or black cod, are distributed in the northeastern Pacific ocean from the southern tip of Baja California, northward to the north-central Bering Sea and in the Northwestern Pacific ocean from Kamchatka, southward to the northeastern coast of Japan. Adults are found as deep as 1,900 m (1,039 fm), but are most abundant between 200 m (109 fm) and 1,000 m (547 fm) (Beamish and McFarlane 1988; Kendall, Jr. and Matarese 1987; Mason, et al. 1983). Adults and large juveniles commonly occur over sand and mud (McFarlane and Beamish 1983b; NOAA 1990) in deep marine waters. They were also reported on hard-packed mud and clay bottoms in the vicinity of submarine canyons (MBC 1987).

Sablefish is a precautionary zone species because the current biomass is below 40 percent but above 25 percent its unfished biomass. A coastwide sablefish stock assessment was prepared in 2005. The coastwide sablefish biomass was estimated to be at 35.2 percent of its unfished biomass in 2005. Projections indicate that the biomass is increasing and will be near 42 percent by 2008.

In the past five years, the sablefish catch in the Pacific whiting shoreside fishery has ranged from a high of 128 mt in 2002 with a catch rate of 0.0028 mt of sablefish per mt of Pacific whiting to a low of 11 mt in 2006 with a catch rate of 0.0001 mt of sablefish per mt of Pacific whiting. The 2000 sablefish stock assessment predicted a strong year class would be entering the fishery in 2001. An analysis of the 2001-2002 sablefish caught if the Pacific whiting shoreside fishery, revealed a large occurance of 1-2 year olds. In 2003, a moderate catch of 3 year old sablefish were seen (Weidoff et al. 2003). As the sablefish age and move to deeper water, they are less available to the mid-water trawl gear used to catch Pacific whiting.

Spiny dogfish (Squalus acanthias): Spiny dogfish occur in temperate and subarctic latitudes in both the northern and southern hemispheres, ranging from the Bering Sea to Baja California (Allen and Smith 1988, Castro 1983, Eschmeyer et al. 1983). Dogfish tend to migrate in large schools, and can travel long distances, feeding avidly on their journeys (Bannister 1989). The schools, numbering in the hundreds, exhibit north-south coastal movements and onshore-offshore movements (Castro 1983, Ferguson and Cailliet 1990, Lineaweaver and Backus 1984). They also make diel migrations from near bottom during the day to near surface at night (NOAA 1990). Survey data indicate that most dogfish inhabit waters up to 350 m (191 fm).

Spiny dogfish has not been quantatatively assessed. In the past five years, the spiny dogfish catch in the Pacific whiting shoreside fishery has ranged from a low of 4 mt in 2003 with a catch rate of 0.0001 mt of spiny dogfish per mt of Pacific whiting to a high of 95 mt in 2005 with a catch rate of 0.0010 mt of spiny dogfish per mt of Pacific whiting.

Chilipepper Rockfish (Sebastes goodei): Chilipepper rockfish are found from Magdalena Bay, Baja California, Mexico, to as far north as the northwest coast of Vancouver Island, British Columbia (Allen 1982; Hart 1988; Miller and Lea 1972). Chilipepper have been taken as deep as 425 m (232 fm), but nearly all in survey catches were taken between 50 m (27 fm) and 350 m (191 fm) (Allen and Smith 1988). Adults and older juveniles usually occur over the shelf and slope; larvae and small juveniles are generally found near the surface. In California, chilipepper are most commonly found associated with deep, high relief rocky areas and along cliff dropoffs (Love, et al. 1990), as well as on sand and mud bottoms (MBC 1987). They are occasionally found over flat, hard substrates (Love, et al. 1990). Chilipepper may travel as far as 45 m (25 fm) off the bottom during the day to feed (Love 1991).

Chilipepper rockfish were last assessed in 1998 (Ralston, et al. 1998), at which time the stock was estimated to be at 46 to 61 percent of unfished biomass. Because the biomass is estimated to be above 40 percent of the unfished biomass, chilipepper rockfish is considered to be a healthy stock. Chilipepper rockfish catch is greatest in the California ports. In 2005, a high of 26 mt of chilipepper rockfish was taken with a catch rate of 0.0003 mt of chilipepper rockfish per mt of Pacific whiting, and a low of 13 mt in 2006 with a catch rate of 0.0001 mt of chilipepper dogfish per mt of Pacific whiting.

Lingcod (Ophiodon elongatus): Lingcod, a top order predator of the family Hexagrammidae, ranges from Baja California, Mexico, to Kodiak Island in the Gulf of Alaska. Lingcod are demersal at all life stages (Allen and Smith 1988; NOAA 1990; Shaw and Hassler 1989). Adult lingcod prefer two main habitat types: slopes of submerged banks 10 m to 70 m (5 to 38 fm) below the surface with seaweed, kelp, and eelgrass beds and channels with swift currents that flow around rocky reefs (Emmett, et al. 1991; Giorgi and Congleton 1984; NOAA 1990; Shaw and Hassler 1989). Juveniles prefer sandy substrates in estuaries and shallow subtidal zones (Emmett, et al. 1991; Forrester and Thomson 1969; Hart 1988; NOAA 1990). As the juveniles grow they move to deeper waters. Adult lingcod are considered a relatively sedentary species, but there are reports of migrations of greater than 100 km by sexually immature fish (Jagielo 1990; Mathews and LaRiviere 1987; Matthews 1992; Smith, et al. 1990). Mature females live in deeper water than males and move from deep water to shallow water in the winter to spawn (Forrester 1969; Hart 1988; Jagielo 1990; LaRiviere, et al. 1980; Mathews and LaRiviere 1987; Matthews 1992; Smith, et al. 1990). Mature males may live their whole lives associated with a single rock reef, possibly out of fidelity to a prime spawning or feeding area (Allen and Smith 1988; Shaw and Hassler 1989).

A new stock assessment was prepared for lingcod in 2005 and lingcod was determined to be a healthy stock coastwide. However, the stock assessment estimates that the coastwide lingcod stock in 2005 is at 64 percent of its unfished biomass level, with the northern component of the stock (north of Cape Mendocino, CA) at 87 percent of its unfished biomass level and the southern component of the stock at 27 percent of its unfished biomass level. In the past five years, the lingcod catch in the Pacific whiting shoreside fishery has ranged from a low of 0.22 mt in 2002 with a catch rate of 0.000005 mt of lingcod per mt of Pacific whiting to a high of 6 mt in 2005 and 2006 with catch rates of 0.000060 of lingcod per mt of Pacific whiting. The change in incidental catch rates is consistent with the lingcod biomass increase since 2002.

3.2.1 Overfished Groundfish Species Other than Widow Rockfish

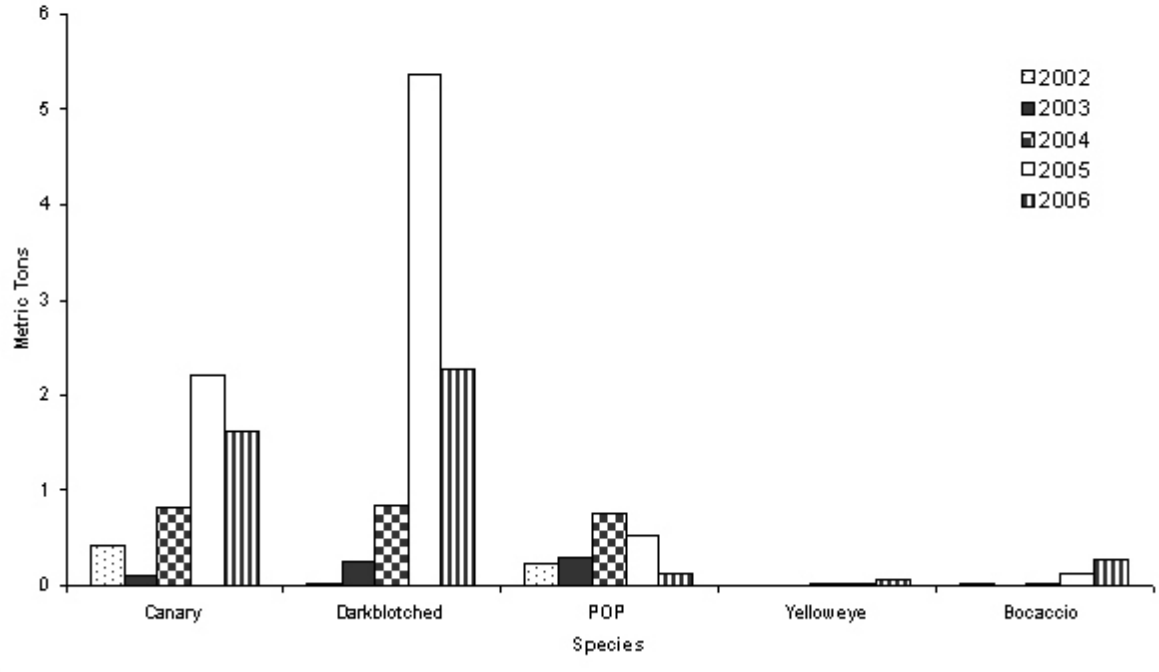
Canary rockfish (Sebastes pinniger): Canary rockfish range from northern Baja California, Mexico, to southeastern Alaska (Boehlert and Kappenman 1980; Hart 1988; Love 1991; Miller and Geibel 1973; Richardson and Laroche 1979). There is a major population concentration of canary rockfish off Oregon (Richardson and Laroche 1979). Canary rockfish primarily inhabit waters that are 91 m (50 fm) to 183 m (100 fm) deep (Boehlert and Kappenman 1980). In general, they inhabit shallow water when they are young, and deep water as adults (Mason 1995). Adult canary rockfish are associated with pinnacles and sharp drop-offs (Love, et al. 1991) and are most abundant above hard bottoms (Boehlert and Kappenman 1980).

Canary rockfish recruitment has shown a steady decline over the last 50 years. Recent recruitments have generally been low, with 1998 producing the largest estimated year-class of recruitment in the last decade. Canary rockfish was declared overfished on January 4, 2000 (65 FR 221). A canary rockfish stock assessment and rebuilding analysis was prepared in 2005. The

results of the stock assessment estimated that the canary rockfish stock was at 9.4 percent of its unfished biomass coastwide in 2005. The 2005 stock assessment estimated that the canary rockfish spawning stock biomass was at its lowest level in 2000, but has been increasing since that time and is projected to continue increasing. Because of its overfished status, canary rockfish bycatch limits have been used to constrain the incidental catch of canary rockfish in the Pacific whiting fishery. As noted with widow rockfish, if a bycatch limit is reached, all commercial Pacific whiting fisheries are closed for the remainder of the year, regardless of whether or not the Pacific whiting allocations have been reached. In 2006, the canary rockfish bycatch limit was initially set at 4.7 mt, but was revised downward to 4.0 mt during the season due to higher than expected canary rockfish research catch. In the past five years, the canary rockfish catch in the Pacific whiting shoreside fishery has ranged from a low of 0.11 mt in 2003 with a catch rate of 0.000002 mt of canary rockfish per mt of Pacific whiting to a high of 2.21 mt in 2005 with a catch rate of 0.000023 mt of canary rockfish per mt of Pacific whiting. Historically, the majority of tows with high canary rockfish catch rates were between Newport and Charleston (Wiedoff and Parker 2004).

Darkblotched Rockfish (Sebastes crameri): Darkblotched rockfish are found from Santa Catalina Island off Southern California to the Bering Sea (Miller and Lea 1972; Richardson and Laroche 1979). They are most abundant from Oregon to British Columbia. Off Oregon, Washington, and British Columbia, darkblotched rockfish occur primarily on the outer shelf and upper slope (Richardson and Laroche 1979). Distinct population groups have been found off the Oregon coast between 44˚30' north latitude and 45˚20' north latitude (Richardson and Laroche 1979).

Figure 3.2.2. Pacific Whiting Shoreside Fishery, Exempted Fishing Permit Catch, Overfished Groundfish Species, 2002-2006 (ODFW, SHOP)



Darkblotched rockfish was declared overfished on January 11, 2001 (66 FR 2338). The coastwide darkblotched rockfish stock was assessed in 2005. The previous stock assessment was conducted in 2000 and estimated the stock to be at 22 percent of its unfished biomass in 2000. The result of the 2005 stock assessment estimated that darkblotched rockfish was at 16 percent of its unfished biomass in 2005, and was notably lower in 2000 (8 percent) than had been estimated in the previous stock assessment. However, the stock assessment indicates that the spawning output has more than doubled since 1999. This growth is resulting in rapid rebuilding of the stock due to the strong numbers of fish spawned in 1999 and 2000 that are maturing and entering the fishery. This strong recruitment combined with low exploitation rates in recent years has resulted in more rapid rebuilding than was projected following the 2000 stock assessment.

Because of its overfished status, darkblotched rockfish bycatch limits have been used to constrain the incidental catch of darkblotched rockfish in Pacific whiting fishery. In 2006, the darkbloched rockfish bycatch limit was 25 mt. In the past five years, the darkblotched rockfish catch in the Pacific whiting shoreside fishery has ranged from a low of 0.01 mt in 2003 to a high of 5.35 mt in 2005 with a catch rate of 0.000055 mt of darkblotched rockfish per mt of Pacific whiting. The change in incidental catch rates coincides with the darkblotched rockfish biomass increase since 2002. The at-sea processing sectors tend to fish in deeper waters where darkblotched rockfish are encountered. The increased catch rates in the 2005 Pacific whiting shoreside fishery may have also resulted from increased fishing effort in deeper water to avoid Chinook salmon catch.

Pacific Ocean Perch (Sebastes alutus): POP are found from La Jolla, California to the western boundary of the Aleutian Archipelago (Eschmeyer, et al. 1983; Gunderson 1971; Ito, et al. 1986; Miller and Lea 1972), but are common from Oregon northward (Eschmeyer, et al percent 1983). They primarily inhabit waters of the upper continental slope (Dark and Wilkins 1994) and are found along the edge of the continental shelf (Archibald, et al. 1983). POP are found in waters as deep as 825 m, but are usually found in depths of 100 m to 450 m (55 to 246 fm) and along submarine canyons and depressions (NOAA 1990). Throughout their range, POP are generally associated with gravel, rocky, or boulder type substrate (Ito 1986). Larvae and juveniles are pelagic; subadults and adults are benthopelagic (living and feeding on the bottom and in the water column). Adults form large schools 30 m wide, to 80 m deep, and as much as 1,300 m long (NOAA 1990). They also form spawning schools (Gunderson 1971). Juvenile POP form ball-shaped schools near the surface or hide in rocks (NOAA 1990).

POP was formally declared overfished in March 3, 1999, but had been managed as a depleted stock prior to being declared overfished. From 1965 to 1998, POP recruitment was relatively stable and showed recruits per spawning output as an increasing trend over time. However, when compared with the 1950s and 1960s, POP recruitment has been rather poor in recent years, although the 1999 and 2000 year classes (2002 and 2003 recruitment years) appear to be the largest since the early 1970s. A new stock assessment was prepared for POP in 2005 that updates the stock assessment from 2003 for the U.S. waters north of 43° north latitude. Like the 2003 stock assessment, the 2005 stock assessment did not show an obvious increasing trend in recruits per spawning output, nor are the recruitments completely stable. The updated stock assessment estimated the stock to be at 23.4 percent of its unfished biomass in 2005. Despite this, the low exploitation rate (1 percent) since 2000, has allowed the stock to rebuild slowly. Since that time, the POP stock has increased from 20.9 percent of the unfished biomass to 23.4 percent.

In the past five years, the POP catch in the Pacific whiting shoreside fishery has ranged from a low of 0.14 mt in 2006 to a high of 0.76 mt in 2004. Like darkblotched rockfish, POP is a shelf

species that is found in deeper waters and is more commonly seen as incidental catch in the at-sea sectors of the Pacific whiting fishery.

Yelloweye Rockfish (Sebastes ruberrimus): Yelloweye rockfish range from the Aleutian Islands, Alaska, to northern Baja California, Mexico, and are common from Central California northward to the Gulf of Alaska (Eschmeyer, et al. 1983; Hart 1988; Love 1991; Miller and Lea 1972; O'Connell and Funk 1986). Yelloweye rockfish occur in water from 25 m (14 fm) to 550 m (301 fm) deep with 95 percent of survey catches occurring in waters between 50 m (27 fm) and 400 m (219 fm) (Allen and Smith 1988). Yelloweye rockfish are bottom dwelling, generally solitary, rocky reef fish, found either on or just over reefs (Eschmeyer, et al. 1983; Love 1991; Miller and Lea 1972; O'Connell and Funk 1986). Boulder areas in waters deeper than180 m(98 fm), are the most densely populated habitat type for adult yelloweye rockfish. Juveniles prefer shallow-zone broken-rock habitat (O'Connell and Carlile 1993). Yelloweye rockfish also occur around steep cliffs and offshore pinnacles (Rosenthal, et al. 1982).

Yelloweye rockfish was declared overfished on January 11, 2002. In March 2006, a new stock assessment was prepared for yelloweye rockfish. The results of the coastwide stock assessment estimated that yelloweye rockfish is at 17.7 percent of its unfished biomass coastwide in 2006 and projected that the stock is lagging behind the original rebuilding schedule.

In the past five years, the Yelloweye rockfish catch in the Pacific whiting shoreside fishery has ranged from a low of 0 mt in 2002 and 2003 to a high of 0.06 mt in 2006. Because yelloweye rockfish is less vulnerable to trawl gear than the fixed gears, it is not commonly seen as incidental catch.

Bocaccio (Sebastes paucispinis): Bocaccio is a common rockfish occurring in coastal waters of the northeastern Pacific from Krozoff and Kodiak Islands in the Gulf of Alaska to central Baja California, Mexico (Hart 1988; Miller and Lea 1972). Historically, bocaccio are most abundant in waters off central and southern California. The population is considered to be two stocks, northern and southern, which are separated by an area of scarcity off northern California and southern Oregon (Macall and He 2002). The northern stock of bocaccio, which is taken in the Pacific whiting fishery, has not been assessed nor has the northern stock been declared overfished like the southern stock. In the past five years, the bocaccio catch in the Pacific whiting shoreside fishery has ranged from a low of 0 mt in 2003 to a high of 0.26 mt in 2006.

The EIS prepared for the 2007-2008 specifications and management measures contains additional information for readers who are interested in further information on the biological characteristics or stock status of groundfish species that are incidentally taken in the Pacific whiting shoreside fishery. A copy of the EIS can be obtained from the Pacific Fishery Management Council, by writing to 7700 NE Ambassador Place, Suite 200, Portland, OR 97220-1384; or calling 503-820-2280; or viewing the internet posting at http://www.pcouncil.org.

3.2.2 Non-Groundfish Resources

Species managed under the Coastal Pelagic Species Fishery Management Plan were incidentally taken in the Pacific whiting shoreside fishery between 2000 and 2006, including jack mackerel (*Trachurus symmetricus*), Pacific mackerel (*Scomber japonicus*), and squid. Like Pacific whiting, these are schooling fish that are not associated with the ocean bottom, and that migrate in coastal waters. In addition, Walleye pollock (*Theragra chalcogramma*) and American shad

(*Alosa sapidissima*) were observed in the 2001 to 2006 fishery. Table 3.2.2.1 shows the catch of the most common non-groundfish species taken in EFP catches between 2001 to 2006.

Table 3.2.2.1. Pacific Whiting Shoreside Fishery EFP Catch of Non-groundfish Species taken incidentally, 2001-2006. (Jesse and Saelens 2007)

	2001	2002	2003	2004	2005	2006
Pacific Whiting	73,326	45,276	51,061	89,251	97,379	97,296
NON-GROUNDFISH						
Coastal Pelagic Species						
Pacific mackerel	403.37	0.11	4.42	0.67	1.23	0.16
Jack mackerel	211.21	7.26	67.92	107.16	78.49	6.18
Pacific herring	a/	0.01	1.11	62.07	7.31	15.09
American shad	a/	4.35	8.48	46.55	148.69	37.51
Walleye pollock	a/	145.88	1.12	7.39	187.91	0.00
Miscellaneous	439.27a/	2.35	1.62	4.47 b/	38.44 b/	8.73

a/ Observer data indicated that approximately 80 percent was jack mackerel.
b/ Other includes squid, sardine, shark, Pacific cod, flatfish other than halibut, skates, octopus, sunfish and jelly fish

Coastal Pelagic Species (CPS): CPS are schooling fish not associated with the ocean bottom and that migrate in coastal waters. These species include: northern anchovy *(Engraulis mordax)*, Pacific sardine *(Sardinops sagax)*, Pacific (chub) mackerel *(Scomber japonicus)*, jack mackerel *(Trachurus symmetricus)* and market squid *(Loligo opalescens)*. These species are managed under the Coastal Pelagic Species Fishery Management Plan. Sardines inhabit coastal subtropical and temperate waters and at times have been the most abundant fish species in the California current. During times of high abundance, Pacific sardine range from the tip of Baja California to southeastern Alaska. When abundance is low, Pacific sardine do not occur in large quantities north of Point Conception, California. Pacific (chub) mackerel range from Banderas Bay, Mexico to southeastern Alaska. They are common from Monterey Bay, California to Cabo San Lucas, Baja California, and most abundant south of Point Conception, California. The central subpopulation of northern anchovy ranges from San Francisco, California to Punta Baja, Mexico. Jack mackerel are a pelagic schooling fish that range widely throughout the northeastern Pacific, however much of their range lies outside the U.S. EEZ. Adult and juvenile market squid are distributed throughout the Alaska and California current systems, but are most abundant between Punta Eugenio, Baja California and Monterey Bay, Central California.

Stock assessments for Pacific sardine and Pacific mackerel from December 1999 and July 1999, respectively, indicate increasing relative abundance for both species. Pacific sardine biomass in U.S. waters was estimated to be 1,581,346 mt in 1999; Pacific mackerel biomass (in U.S. waters) was estimated to be 239,286 mt. During 1999, Pacific sardine landings for the directed fisheries off California and Baja California, Mexico, reached the highest level in recent history, with a combined total landings of 115,051 mt. In 1998, near-record landings of 70,799 mt of Pacific mackerel occurred for the combined directed fisheries off California and Baja California.

Population dynamics for market squid are poorly understood, and annual commercial catch varies from less than 10,000 mt to 90,000 mt. They are thought to have an annual mortality rate

approaching 100 percent, which means the adult population is almost entirely new recruits. Successful spawning is crucial to future years' abundance.

Pacific Herring (Clupea pallasii): The overall distribution of the Pacific herring is from northern Baja California to Toyama Bay, Japan, and westward on the shores of Korea and the Yellow Sea (Svetovidov 1952). Along the North American continent, Pacific herring have been recorded from northern Baja California to Port Clarence, Alaska (Alderdice and Velsen 1971; Hart 1973; Miller and Lea 1972). Pacific herring prefer spawning locations in sheltered bays and estuaries. Along the West Coast, principal spawning areas include: San Francisco Bay, Richardson Bay, Tomales Bay and Humboldt Bay. Pacific herring spawn in variable seasons, but often in the early part of the year on eelgrass or other submerged vegetation in intertidal and sub-tidal environments. The California Department of Fish and Game (CDFG) has traditionally used spawning and hydroacoustic surveys to assess the stock size of Pacific herring in San Francisco Bay. These surveys have demonstrated a steady downward trend in the stock size over the past 25 years. In 2003, CDFG use statistical modeling techniques to further assess the status of the population. The indication was that the San Francisco Bay herring population has been reduced to a level of roughly 20 percent of the unfished biomass level and is presently at or near the lowest abundance observed since the early 1970s (CDFG 2003). While spawning populations of herring are known to occur in the Washington coastal region, only occasional stock assessment are conducted (wdfw.wa.gov/fish/forage/herring.htm).

American Shad (Alosa sapidissima): American shad is compressed silvery fish with a row of dark spots (3-23) along its side. It can be easily distinguished by its sharp saw-like scales or "scutes" along its belly. Average sized shad are 12-25 inches in length and 2.5 to 5 pounds (lbs). The American shad is a highly migratory anadromous species that returns to its freshwater natal (birth) areas to spawn. Shad spawn in estuaries, streams, and rivers in the spring and early summer months. American shad was introduced in the Pacific Northwest in the late 1800's. In 1990, the population of shad entering the Columbia River was over 4 million fish.

Walleye Pollock (Theragra chalogramma): Pollock are found in the waters of the Northeastern Pacific Ocean from the Sea of Japan, north to the Sea of Okhotsk, east in the Bering Sea and Gulf of Alaska, and south along the Canadian and U.S. West Coast to Carmel, California. Adult walleye pollock are generally semi-demersal species on continental shelf and slope. A variety of environmental factors, including hydrographic fronts, temperature, light intensity, prey availability, and depth determine the distribution of juveniles and adults. They are not common off the West Coast, but occasionally sufficiently large enough numbers move south from Canadian waters to be targeted by West Coast commercial fishers. Adults most commonly occur between 100 and 300m.

3.2.3 Prohibited Species

Table 3.2.3.1. Pacific Whiting Shoreside Fishery EFP Catch of Prohibited Species taken incidentally, 2001-2006. (Jesse and Saelens 2007)

	2001	2002	2003	2004	2005	2006
Pacific Whiting	73,326	45,276	51,061	89,251	97,379	97,296
PROHIBITED SPECIES (number of animals)						
Salmon						
Chinook	2,627	1,062	425	4,206	4,018	839
Coho	35	14	0	8	37	18
Chum	32	72	0	43	6	3
Sockeye	0	0	0	0	0	0
Pink	304	0	0	0	37	0
Steelhead	0	0	0	0	0	0
Pacific halibut	23	9	16	52	46	73
Dungeness Crab	43	65	0	2	207	89

<u>*Pacific Salmon*</u>: Sockeye (*Onchorincus nerka*), chum (*Onchorincus keta*), and pink (*Onchorincus gorbuscha*) salmon are rarely encountered in the Pacific whiting shoreside fishery. Coho salmon (*Onchorincus kisutch*) is caught in relatively low numbers and Chinook salmon (*Onchorincus tshawytscha*) is the most common salmon encountered in the Pacific whiting shoreside fishery. Table 3.2.3.1. shows the incidental catch of salmon by species in the Pacific whiting shoreside EFP fishery from 2001 to 2006.

Chinook salmon is the largest of the Pacific salmon. Chinook salmon are found from the Ventura River in California to Point Hope, Alaska in North America, and in northeastern Asia from Hokkaido, Japan to the Anadyr River in Russia (Healey 1991). Additionally, Chinook salmon have been reported in the Mackenzie River area of northern Canada (McPhail and Lindsey 1970).

The generalized life history of Pacific salmon involves incubation, hatching, and emergence in freshwater, migration to the ocean, and subsequent initiation of maturation and return to freshwater for completion of maturation and spawning. Of the Pacific salmon, Chinook salmon exhibit the most diverse and complex life history strategies. Healey (1986) described sixteen age categories for Chinook salmon, seven total ages with three possible freshwater ages. Two generalized freshwater life-history types were initially described by Gilbert (1912): "stream-type" Chinook salmon reside in freshwater for a year or more following emergence, whereas "ocean-type" Chinook salmon migrate to the ocean within their first year. Healey (1983; 1991) has promoted the use of broader definitions for "ocean-type" and "stream-type" to describe two distinct races of Chinook salmon. This racial approach incorporates life history traits, geographic distribution, and genetic differentiation and provides a valuable frame of reference for comparisons of Chinook salmon populations. Additionally, some male Chinook salmon mature in freshwater, thereby foregoing emigration to the ocean. Chinook salmon exhibit a high degree of variability in life-history traits; however, there is considerable debate as to what degree this variability is the result of local adaptation or the general plasticity of the salmonid genome (Ricker 1972; Healey 1991; Taylor 1991).

In 2000, the incidental take of Chinook exceeded 11,000 fish for the entire Pacific whiting fishery and led to a re-evaluation of the biological opinion that sets the allowable Chinook salmon threshold. Discussions with fishers did not reveal any change in fishing behavior that would have accounted for the increased Chinook catch. One possible explanation for the increased catch was that there were simply more Chinook available to the Pacific whiting fishery than in past years (Hutton and Parker 2000).

Readers who are interested in further information on salmon bycatch as it applies to the entire Pacific whiting fishery, are referred to Section 5.1.1 of the EIS, prepared by the Pacific Fishery Management Council staff, for the Proposed Acceptable Biological Catch and Optimum Yield Specifications and Management Measures for the 2007-2008 Pacific Coast Groundfish Fishery. Copies of the EIS can be obtained from the Pacific Fishery Management Council, by writing to 7700 NE Ambassador Place, Suite 200, Portland, OR 97220-1384; or calling 503 820-2280; or viewing the internet posting at http://www.pcouncil.org.

Pacific Halibut (Hippoglossus stenolepis): Pacific halibut is a flatfish from the family Pleuronectidae. Pacific halibut ranges from California to the Bering sea and are considered to be one population. They are demersal and inhabit sand and gravel bottoms, especially banks along the continental shelf. Halibut spawn during the winter in deeper offshore waters, 300 m (163 fm). Eggs and larvae drift great distances with the ocean currents before settling to the bottom in shallow feeding areas. After one or two years the juvenile Pacific halibut tend to migrate to more southern and easterly areas until they reach maturity. Adult Pacific halibut migrate from shallow summer feeding grounds to deeper winter spawning grounds. Most adult fish return to the same feeding grounds each summer.

Dungeness Crab (Cancer magister): Dungeness crab are distributed from the Aleutian Islands, Alaska, to Monterey Bay, California. They live in bays, inlets, around estuaries, and on the continental shelf. Dungeness crab are found to a depth of about 180 m (98 fm). Although Dungeness crab are found on mud and gravel, it is most abundant on sandy bottoms and in eelgrass.

3.2.4 Endangered and Protected Species

Marine species listed as endangered or threatened under the ESA include marine mammals, seabirds, sea turtles, and salmon. Under the ESA, a species is listed as "endangered" if it is in danger of extinction throughout a significant portion of its range and "threatened" if it is likely to become an endangered species within the foreseeable future throughout all, or a significant portion, of its range.

Pacific Salmon: Several species of salmon found along the Pacific Coast have been listed under the ESA. Data indicate that some of these species are incidentally taken in the Pacific whiting fishery. (Table 3.2.3.1.) Because several Chinook salmon runs are listed under the ESA, the incidental catch of Chinook salmon in Pacific whiting fishery is a concern. NMFS has issued Biological Opinions under the ESA pertaining to the effects of the Pacific Coast groundfish FMP fisheries on Chinook salmon on August 10, 1990, November 26, 1991, August 28, 1992, September 27, 1993, May 14, 1996, and December 15, 1999. The August 1992, Biological Opinion included an analysis of the effects of the Pacific whiting fishery on listed Chinook salmon. The Biological Opinions have concluded that Chinook is the salmon species most likely to be affected by the groundfish fishery, while other salmon species are rarely encountered in the Pacific whiting and other groundfish fisheries. The analysis determined that there was a

spatial/temporal overlap between the Pacific whiting fishery and the distribution of ESA listed Chinook salmon such that it could result in incidental take of listed salmon. The 1992 Biological Opinion included an incidental take statement that authorized the incidental take of 0.05 salmon per metric ton of Pacific whiting. The Biological Opinion identified the need for continued monitoring of the Pacific whiting fishery to evaluate impacts on salmon, and specifically emphasized the need to monitor the Pacific whiting shoreside fishery because fishing patterns and bycatch rates were likely to differ from those observed on the at-sea processors.

NMFS reinitiated a formal Section 7 consultation under the ESA in 2005 for both the Pacific whiting midwater trawl fishery and the groundfish bottom trawl fishery. The December 19, 1999 Biological Opinion had defined an 11,000 Chinook incidental take level for the Pacific whiting fishery. During the 2005 Pacific whiting season, more than 11,000 fish Chinook were taken, triggering reinitiation. NMFS prepared a Supplemental Biological Opinion dated March 11, 2006, which addressed salmon take in both the Pacific whiting midwater trawl and groundfish bottom trawl fisheries. In that Supplemental Biological Opinion, NMFS concluded that catch rates of salmon in the 2005 Pacific whiting fishery were consistent with expectations considered during prior consultations. Chinook bycatch has averaged about 7,300 over the last 15 years and has only occasionally exceeded the reinitiation trigger of 11,000. Since 1999, annual Chinook bycatch has averaged about 8,450. The Chinook ESUs most likely affected by the Pacific whiting fishery has generally improved in status since the 1999 Section 7 consultation. Although these species remain at risk, as indicated by their ESA listing, NMFS concluded that the higher observed bycatch in 2005 does not require a reconsideration of its prior "no jeopardy" conclusion with respect to the fishery. For the groundfish bottom trawl fishery, NMFS concluded that incidental take in the groundfish fisheries is within the overall limits articulated in the Incidental Take Statement of the 1999 Biological Opinion. The groundfish bottom trawl limit from that opinion was 9,000 fish annually. NMFS will continue to monitor and collect data to analyze take levels. NMFS also reaffirmed its prior determination that implementation of the Groundfish FMP is not likely to jeopardize the continued existence of any of the affected ESUs.

ESA Listed Salmonids

Endangered

Chinook salmon (*Oncorhynchus tshawytscha)*
Sacramento River Winter; Upper Columbia Spring

Sockeye salmon (*Oncorhynchus nerka)*
Snake River

Steelhead trout (*Oncorhynchus mykiss)*
Southern California; Upper Columbia River

Threatened

Coho salmon (*Oncorhynchus kisutch)*
Central California; Lower Columbia River, Southern Oregon, and Northern California Coasts

Chinook salmon (*Oncorhynchus tshawytscha*)
Snake River Fall, Spring, and Summer; Puget Sound; Lower Columbia; Upper Willamette; Central Valley Spring; California Coastal

Chum salmon (*Oncorhynchus keta)*
Hood Canal Summer; Columbia River

Sockeye salmon (*Oncorhynchus nerka)*
Ozette Lake

Steelhead trout (*Oncorhynchus mykiss)*
South-Central California; Central California Coast; Snake River Basin; Lower Columbia; California Central Valley; Upper Willamette; Middle Columbia River; Northern California

Marine Mammals: The waters off Washington, Oregon, and California support a wide variety of marine mammals. Approximately thirty species, including seals and sea lions, sea otters, and whales, dolphins, and porpoise occur within the EEZ. Many marine mammal species seasonally migrate through Pacific Coast waters, while others are year round residents.

The Marine Mammal Protection Act (MMPA) and the ESA are the Federal legislation that guide marine mammal species protection and conservation policy. Under the MMPA, NMFS is responsible for the management of cetaceans and pinnipeds, while the U.S. Fish and Wildlife Service manages sea otters. Stock assessment reports review new information every year for strategic stocks (those whose human-caused mortality and injury exceeds the potential biological removal (PBR)) and every three years for non-strategic stocks. Marine mammals whose abundance falls below the optimum sustainable population are listed as "depleted" according to the MMPA.

Species Listed as Endangered Under the ESA
- Sperm whale (*Physeter macrocephalus*)
- Humpback whale (*Megaptera novaeangliae*)
- Blue whale (*Balaenoptera musculus*)
- Fin whale (*Balaenoptera physalus*)

Species Listed as Threatened Under the ESA
- Steller sea lion (*Eumetopias jubatus*)Eastern Stock,
- Guadalupe fur seal (*Arctocephalus townsendi*)
- Southern sea otter (*Enhydra lutris*) California Stock

Species Listed as Depleted under the MMPA
- Northern fur seal (*Callorhinus ursinus*) Eastern Pacific Stock
- Killer whale (*Orcinus orca*) Eastern North Pacific, Southern Resident Stock.

Species Listed as Endangered Under the ESA
- Short-tail albatross (*Phoebastria albatrus*)
- California brown pelican (*Pelecanus occidentalis*)
- California least tern (*Sterna antillarum browni*)

Species Listed as Threatened Under the ESA
- Marbled murrelet (*Brachyramphs marmoratus*).

Fisheries that interact with species listed as depleted, threatened, or endangered may be subject to management restrictions under the MMPA and ESA. NMFS publishes an annual list of fisheries in the Federal Register separating commercial fisheries into one of three categories, based on the level of serious injury and mortality of marine mammals occurring incidentally in that fishery. The categorization of a fishery in the list of fisheries determines whether participants in that fishery are subject to certain provisions of the MMPA, such as registration, observer coverage, and take reduction plan requirements. The Pacific Coast groundfish fisheries are in Category III, indicating a remote likelihood of, or no known serious injuries or mortalities, to marine mammals.

Seabirds: The California Current System supports more than two million breeding seabirds and at least twice that number of migrant visitors. Tyler et al. (1993) reviewed seabird distribution and abundance in relation to oceanographic

Seabirds Listed by the USFWS as Birds of Conservation Concern

- Black-footed albatross (*Phoebastria nigripes*)
- Ashy storm-petrel (*Oceanodroma homochroa*)
- Gull-billed tern (*Sterna nilotica*)
- Elegant tern (*Sterna elegans*)
- Arctic Tern (*Sterna paradisaea*)
- Black skimmer (*Rynchops niger*)
- Xantus's murrelet (*Synthliboramphus hypoleucus*)

processes in the California Current System and found that over 100 species have been recorded within the EEZ including: albatross, shearwaters, petrels, storm-petrels, cormorants, pelicans, gulls, terns and alcids (murres, murrelets, guillemots, auklets and puffins). In addition to these "classic" seabird, millions of other birds are seasonally abundant in this oceanic habitat including: waterfowl, waterbirds (loons and grebes), and shorebirds (phalaropes). There is considerable overlap of fishing areas and areas of high bird density in this highly productive upwelling system. The species composition and abundance of birds varies spatially and temporally. The highest seabird biomass is found over the continental shelf and bird density is highest during the spring and fall when local breeding species and migrants predominate.

The U.S. Fish and Wildlife Service is the primary Federal agency responsible for seabird conservation and management. Under the Magnuson-Stevens Act, NMFS is required to ensure fishery management actions comply with the laws designed to protect seabirds.

Species Listed as Endangered Under the ESA

Green turtle (*Chelonia mydas*)
Leatherback turtle (*Dermochelys coriacea*)
Olive ridely turtle (*Lepidochelys olivacea*).

Species Listed as Threatened Under the ESA

Loggerhead turtle (*Caretta caretta*)

Sea Turtles: Sea turtles are highly migratory and four of the six species found in U.S. waters have been sighted off the Pacific Coast. Little is known about the interactions between sea turtles and West Coast commercial fisheries. The directed fishing for sea turtles in WOC groundfish fisheries is prohibited, because of their ESA listings. The management and conservation of sea turtles is shared between NMFS and USFWS. Sea turtles catch has not been documented in the Pacific whiting shoreside fishery.

Green Sturgeon (Acipenser medirostris): The Southern Distinct Population Segment (DPS) of green sturgeon (71 FR 17757, April 7, 2006) were recently listed as threatened under the ESA. green sturgeon are found from Ensenada, Mexico, to Southeast Alaska. Green sturgeon are not abundant in any estuaries along the Pacific coast, although they are caught incidentally in the estuaries by the white sturgeon fishery.

The green sturgeon is a primitive, bottom dwelling fish. It is characterized by its large size and long round body. The sturgeon has no scales, instead it has "scutes" (or plates) located along their bodies. Scutes are actually large modified scales, that serve as a type of armor or protection. The dorsal body color is a dark olive-green, with the ventral surface a lighter whitish green, with the scutes having a lighter coloration than the body. Green sturgeon can reach 7 feet in length and weigh up to 350 lbs.

The green sturgeon is an anadromous fish that spends most of its life in salt water and returns to spawn in fresh water. It is a slow growing and late maturing fish that apparently spawns every 4 to 11 years during the spring and summer months. Feeding on algae and small invertebrates while young, green sturgeon migrate downstream before they are two years old. Juveniles remain in the estuaries for a short time and migrate to the ocean as they grow larger. Adult green sturgeon feed on benthic invertebrates and small fish. The green sturgeon can become highly migratory later in life. They have been documented as traveling over 600 miles between freshwater and estuary environments. (http://www.psmfc.org/habitat/edu_anad_table.html)

3.3 Socio-Economic Characteristics of the Affected Environment

3.3.1 The Pacific Whiting Shoreside Fishery

Section 1.4 of this document describes the management structure of the Pacific Whiting Shoreside Fishery, including the use of EFPs. The purpose of is section is to describe the processing portion of the Pacific whiting shoreside fishery including: allocations, recent harvests, and fishing communities where Pacific whiting are landed and processed.

Pacific Whiting Harvest Levels and Allocations: Harvest levels or OYs are established for each of the species or species groups that the Council proposes to manage. In November 2003, the U.S. and Canada signed an agreement regarding the conservation, research, and catch sharing of Pacific whiting. The Pacific whiting catch sharing arrangement that was agreed upon provides 73.88 percent of the coastwide total catch OY to the U.S. fisheries and 26.12 percent to the Canadian fisheries. The Pacific Whiting Act of 2006, enacted January 12, 2007 (Pub. Law 109-479) provides authority to implement the agreement. Given the small amount of Pacific whiting that is typically landed prior to the start of the primary season on April 1, final adoption of an ABC and OY are delayed until the Council's March meeting each year. This is followed by the publication of a final rule to implement the harvest specifications and management measures for the Pacific whiting fishery. Sector allocations are specified in the Pacific whiting final rule.

In 1994, the United States formally recognized that the four Washington coastal treaty Indian tribes (Makah, Quileute, Hoh, and Quinault) have treaty rights to fish for groundfish in the Pacific Ocean. In general terms, the quantification of those rights is 50 percent of the harvestable surplus of groundfish that pass through the tribes' usual and accustomed ocean fishing areas (described at 50 CFR 660.324). The Pacific Coast Indian treaty fishing rights, described at 50 CFR 660.385, allow for the allocation of fish to the tribes through the specification and management measures process. A tribal allocation is subtracted from the species OY before the commercial allocation is derived.

Since 1999, the tribal allocation of Pacific Whiting has been set according to an abundance-based sliding scale method, proposed by the Makah Tribe in 1998 see 64 FR 27928, 27929 (May 29, 1999); 65 FR 221, 247 (January 4, 2000); 66 FR 2338, 2370 (January 11, 2001). Details on the abundance-based sliding scale allocation method and related litigation are fully discussed in the preamble to the proposed rule (69 FR 56570; September 21, 2004). On December 28, 2004, the Ninth Circuit Court of Appeals upheld the sliding scale approach in Midwater Trawler Cooperative v. Daley, 393 F. 3d 994 (9th Cir. 2004). Under the sliding scale allocation method, the tribal allocation varies with U.S. Pacific whiting OY, ranging from a low of 14 percent (or less) of the U.S. OY when OY levels are above 250,000 mt, to a high of 17.5 percent of the U.S. OY when the OY level is at or below 145,000 mt.

The commercial OY (non-tribal) for Pacific whiting is calculated by deducting the tribal allocation and estimated amounts for research and non-groundfish fishery catch. Regulations at 50 CFR 660.323(a)(4) divide the commercial OY into separate allocations for the non-tribal catcher/processor, mothership, and shore-based sectors of the Pacific whiting fishery. The catcher/processor sector is comprised of vessels that harvest and process Pacific whiting. The mothership sector is comprised of catcher vessels that harvest Pacific whiting for delivery to mothership processors. Motherships are vessels that process, but do not harvest Pacific whiting. The shoreside sector is comprised of vessels that harvest Pacific whiting for delivery to shoreside processors. Each sector receives a portion of the commercial OY, with the catcher/processors

getting 34 percent, motherships getting 24 percent, and the shore-based sector getting 42 percent. This EA concerns the shore-based sector. Table 3.3.1.1. shows the Pacific whiting harvest levels and allocations from 2000-2006.

Table 3.3.1.1. Pacific Whiting Optimum Yield (OY), Tribal, and Sector Allocations, 2000-2006

Year	U.S. OY (mt)	Shore-based		Catcher processor Allocation (mt)	Mothership Allocation (mt)	Tribal Allocation (mt)
		Allocation (mt)	Catch (mt)			
2000	232,000	83,790	85,663	67,830	47,880	32,500
2001	190,400	68,418	73,326	58,786	41,496	17,500
2002	129,600	44,906	45,276	36,353	25,661	22,680
2003	148,200	50,904	51,061	41,288	29,088	25,00
2004	250,000	90,510	89,251	73,270	51,720	32,500
2005	269,069	97,469	97,378	78,903	55,696	35,000
2006	269,069	97,469	97,296	78,903	55,696	35,000

Specified Start Dates for Pacific Whiting Fishing Seasons: The Pacific whiting fishery is managed under a "primary" season structure where vessels harvest Pacific whiting until the sector allocation is reached and the fishery is closed. This is different from most Pacific Coast groundfish fisheries, which are managed under a "trip limit" structure, where catch limits are specified by gear type and species (or species group) and vessels can land catch up to the specified limits. Incidental catch of groundfish in the Pacific whiting fishery, however, is managed under the trip limit structure.

The Pacific whiting primary season start dates for each of the three commercial sectors have remained the same since 1997. The primary seasons for the non-tribal mothership and catcher-processor sectors begins May 15. The Pacific whiting shoreside primary season in most of the Eureka area (between 42°- 40°30' north latitude) begins on April 1, and the fishery south of 40° 30' north latitude begins April 15. The Pacific whiting shoreside fishery north of 42° north latitude begins on June 15.

No more than five percent of the shore-based sector allocation may be taken in the early season fishery off California before the primary season north of 42° north latitude opens on June 15th. Pacific whiting primary season catch cannot be taken and retained, possessed or landed in closed areas. In recent years, Pacific whiting catch landed in California ports has been loaded on trucks and transported to facilities north of 42° north latitude in the State of Washington for processing.

Each sector of the Pacific whiting fishery remains open for fishing until its sector allocation is reached. However, the entire non-tribal commercial fishery could be closed before the sector allocations are attained if one of the overfished species bycatch limits were reached. Table 3.3.1.2. shows the annual shore-based allocation and season dates from 2000 to 2006. During this period the duration of the season has varied from 93 days in 2000 with a moderately high allocation to 30 day in 2003 when the allocation was at one of its lowest points.

Table 3.3.1.2. Pacific Whiting Shoreside Fishery Allocations and Season Dates, 2000-2006

Year	Coastwide Allocation (mt)	Length of Coastwide Season	Early Season Allocation (mt)	Allocation Reached Before 6/15	Reappor-tionment (mt)
2000	83,790	93 days (6/15-9/15)	4,190	Yes (6/8)	No
2001	68,418	68 days (6/15-8/21)	3,421	No	4,200
2002	44,906	33 days (6/15-7/17)	2,245	No	No
2003	50,904	30 days (6/15-7/14)	2,545	No	No
2004	90,510	61 days (6/15-8/14)	4,526	Yes (5/22)	No
2005	79,469	65 days (6/15-8/18)	4,873	No	No
2006	97,469	49 days (6/15-8/2)	4,873	Yes (5/25)	No

Exempted Fishing Permits: Each year since 1992, EFPs have been issued to vessels in the Pacific whiting shoreside fishery to allow unsorted catch to be landed at shoreside processing facilities. The EFPs have specified the terms and conditions that participating vessels must follow to be included. The EFPs have routinely required vessels to deliver EFP catch to state designated processors. Designated processors are identified by each of the states, and are processors that have signed written agreements that specify the standards and procedures they agree to follow when accepting unsorted EFP catch.

Vessels fishing in the shoreside Pacific whiting fishery under the Pacific whiting EFPs are allowed to land unsorted catch, including species in excess of the trip limits, and species such as salmon that would otherwise be illegal to have on board. Without an EFP, groundfish regulations at 50 CFR 660.306(b) require vessels to sort their catch at sea. Vessels fishing for Pacific whiting without EFPs must discard, as soon as practicable, all prohibited species (including salmon and halibut), protected species, non-groundfish species, and groundfish species in excess of cumulative limits at sea.

Unlike the at-sea sectors of the Pacific whiting fishery, where catch is sorted and processed shortly after it has been taken, vessels in the shoreside fishery hold primary season Pacific whiting on the vessel for several hours or days until it can be offloaded at a shoreside processor. Pacific whiting deteriorates rapidly, so it must be handled quickly and immediately chilled to maintain product quality. This is particularly true if the Pacific whiting is to be used to make surimi (a fish paste product). The quality or grade of surimi is highly dependent on the freshness of the Pacific whiting, which demands careful handling and immediate cooling or processing for the fishery to be economically feasible. Because rapid cooling can retard Pacific whiting flesh deterioration, most primary season vessels prefer to dump their unsorted catch directly below deck into the refrigerated salt water tanks. However, dumping the unsorted catch into the refrigerated salt water tanks precludes the immediate sorting or sampling of the catch. As a primary season fishery, fishers prefer to quickly and efficiently handle the catch so they can return to port for offloading. Given the primary season structure of the fishery, quick and efficient trips result in greater catch for each participating vessel.

Table 3.3.1.3. Pacific Whiting Shoreside Fishery EFP participants, 2000-2005.

Year	Coastwide Allocation (mt)	Number of EFP vessels that fished
2000	83,790	35
2001	68,418	29
2002	44,906	29
2003	50,904	35
2004	90,510	26
2005	79,469	28

Pacific Whiting Shoreside Processors and Communities: This section presents information on processors, communities, and states where Pacific whiting is landed. Table 3.3.1.5. show that the highest percentage of Pacific whiting landings occur in Oregon. This is followed by Washington, and then California. Since 2004, the proportion of overall Pacific whiting landings has decrease in Oregon. However, communities receiving landings of Pacific whiting have historically included Westport and Ilwaco, Washington; Astoria, Newport, and Charleston, Oregon; and Eureka, and Crescent City, California.

Table 3.3.1.6. shows the number of Pacific whiting shoreside processors by state and year, and identifies the processing communities based on EFP data. While Table 3.3.1.7 shows the number of processors based on PacFIN data which includes tribal landings with a view of showing the entry and exit of new firms. In 2006, there were 23 processors that purchased Pacific whiting from fishermen with 10 of these processors purchasing from 4 lbs to 8,000 lbs (3.6 mt) of Pacific whiting. The other 13 processors all processed at least 1 million lbs of Pacific whiting each. During 2006 these 13 processors purchased 280 million lbs (127,000 mt) of hake worth $17.4 million ex-vessel, and 110 million lbs (49,896 mt) of other fish and shellfish worth $78.5 million.

Table 3.3.1.5. Pacific Whiting Shoreside Landings by State, 2001-2005

State	Year	Number of Landings	Pacific whiting catch (mt)	Percent of Pacific whiting by weight
Oregon	2000	838	68,701	80%
	2001	773	53,422	73%
	2002	454	32168	71%
	2003	514	36,594	71%
	2004	815	59,006	66%
	2005	826	61,460	63%
California & Washington	2000	266	16,952	20%
	2001	257	19,904	27%
	2002	176	13,147	29%
	2003	186	14,602	29%
	2004	319	30,245	34%
	2005	356	35,918	37%

Table 3.3.1.6. Pacific Whiting Shoreside Processors and Processing Communities, 2000-2005

Year	Processing communities	Number of designated EFP processors
2000-all	Westport WA, Ilwaco WA, Astoria OR, Newport OR, Charleston OR, Crescent City CA, Eureka CA	12
Washington		2
Oregon		7
California		3
2001-all	Westport WA, Ilwaco WA, Astoria OR, Newport OR, Charleston OR, Crescent City CA, Eureka CA	12
Washington		2
Oregon		7
California		3
2002-all	Westport WA, Astoria OR, Newport OR, Charleston OR, Eureka CA	8
Washington		1
Oregon		6
California		1
2003-all	Westport WA, Ilwaco WA, Astoria OR, Newport OR, Charleston OR, Eureka CA	9
Washington		2
Oregon		6
California		1
2004-all	Westport WA, Ilwaco WA, Astoria OR, Newport OR, Charleston OR, Crescent City CA, Eureka CA	9
Washington		2
Oregon		5
California		2
2005-all	Westport WA, Ilwaco WA, Warrenton OR, Newport OR, Charleston OR, Crescent City CA, Eureka CA, Moss Landing CA	10
Washington		2
Oregon		5
California		3

Table 3.3.1.7. Shoreside Trawl Landings of Groundfish and Exvessel Revenue, by State and Year, 2000-2005. (Pacfin, May 2006)

State		2000	2001	2002	2003	2004	2005
California	Non-whiting						
	Landed Weight (mt)	9,764	7,929	8,026	7,330	6,101	5,760
	Exvessel Revenue (1000's $)	11,859	9,546	10,068	8,618	7,090	7,021
	Pacific whiting						
	Landed Weight (mt)	4,986	2,306	2,773	1,695	4,742	3,062
	Exvessel Revenue (1000's $)	765	171	274	166	641	338
Oregon	Non-whiting						
	Landed Weight (mt)	15,952	12,152	8,410	10,499	10,245	10,786
	Exvessel Revenue (1000's $)	17,974	14,687	10,150	12,897	11,833	12,441
	Pacific whiting						
	Landed Weight (mt)	68,702	53,376	32,305	36,581	59,075	61,463
	Exvessel Revenue (1000's $)	6,081	4,132	3,219	3,642	4,641	7,107
Washington	Non-whiting						
	Landed Weight (mt)	5,593	4,896	8,370	4,258	3,481	3,315
	Exvessel Revenue (1000's $)	4,601	4,319	4,189	3,598	3,148	3,191
	Pacific whiting						
	Landed Weight (mt)	12,156	17,730	10,630	12,934	25,838	32,291
	Exvessel Revenue (1000's $)	1,122	1,439	1,061	1,283	1,993	3,848

Based on the Small Business Administration (SBA) criteria and a review of Pacific whiting shoreside processing company websites, state employment websites, newspaper articles, personal communications, and "The Research Group" (2006), it appears that the thirteen major Pacific whiting processors can be grouped into nine SBA businesses based on analysis of affiliates. Within these nine SBA businesses, there are three businesses that each generated at least $500 million in sales in 2003 (Seafood Business, May 2004, "Big Brands Head List of Top Suppliers"). One of these three companies reported employing 4,000 people. It is presumed that the other two companies have employment levels much higher than 500 employees. Four of the nine SBA businesses have employment level estimates that range from 100-250 employees, while the remaining two appear to be in the 50-100 range (due missing data, one of these relatively small businesses may have less than 50 employees). In terms of the SBA size standard of 500 or fewer employees for small businesses, there are six "small" businesses that participated in the shorebased Pacific whiting processing sector in 2006.

Annual sales information for these "small" businesses is unavailable, but total ex-vessel revenues-the values of the fish purchased from fisherman- are available. In 2006, these six businesses purchased approximately $40 million in hake and other fish and shellfish from west coast fishermen. This compares to the $60 million in hake and other fish and shellfish purchased by the three large businesses.

Based on the concept that a primary processor of Pacific whiting typically processes one million lbs. (454 mt) or more, Table 3.3.1.7 shows the entry and exit trends in the Pacific whiting shorebased processing sector on a processor basis. Over the 2000-2006 period there were 17 different processing processors that processed at least one million lbs. (454 mt) in any one year. However there were eight "dominant" processors who processed one million lbs (454 mt) in at least seven of the eight years during this period. Because of entry and exit of processors, the composition of the "other" processor group changes significantly in most years. In 2005, there

were no "other" processors while in 2006, 5 new processors entered the fishery, only one of which had operated before. (Its first year was 2004). The "dominant" processors typically harvest 90 to 100 percent of the Pacific whiting.

The entry and exit of processors can be associated with market trends and the size of the Pacific whiting quotas. Processor consolidation appears to have occurred during the 2002-2004 period. Declines in the Pacific whiting OY in 2002 and 2003 may have caused processors to close their operations, or to consolidate with other operations. However, the increases in OY since 2004 combined with greater market demand, appears to have increased processor interest. During the 2000-2006 period, there has also been a shift in the major products being produced. When looking at estimates of wholesale production by major product form (surimi, fillets, and headed and gutted), U.S. export statistics show an upward trend in the prices and production of headed and gutted (H&G) Pacific whiting and downward trend in the production of Pacific whiting surimi. (Export statistics do not isolate Pacific whiting fillets from other species fillets, so exports of Pacific whiting fillets are unknown). In the early 2000s, the amount of Pacific whiting being processed into surimi for export was far greater than that of H&G products. Simultaneous with the decline in the Pacific whiting OY, one of the three major surimi processors stopped production in 2003 and has yet to return to production. Meanwhile as described below, a new foreign market has spurred the production of H&G products to the extent that in 2006, H&G exports now greatly exceed surimi exports.

The Seafood Trend Newsletter (June 26, 2006) reported the following market trends:

> Is it time to wave the yellowflag in the red-hot Pacific whiting market? While demand remains strong, wholesale prices may be getting out of hand for price-conscious buyers. The West Coast fishery is going gangbusters. Last year, 571.1 million lbs of Pacific whiting was landed, the highest since 1966. Even as landings set a record, value and prices also grew.
>
> And this year looks to continue the upward trend. The OY is the same as last year, the resource remains strong, and landings are good. As of June 19, the catch for the non-tribal fishery was at 185.7 million lbs out of a commercial allocation of 511.7 million lbs . This allocation is divided among three sectors of the fishery: 214.9 million lbs to shorebased, 122.8 million lbs to motherships, and 174.0 million lbs to catcher/processors. In addition 77.2 million lbs go to the tribal fishery.
>
> Pacific whiting (Merluccius productus) stocks remain healthy even as the big 1999 year-class dies off. The 2002 and 2004 year classes may keep the fishery going at its current pace. The main constraint on the fishery is the bycatch of several rockfish species, especially POP, canary rockfish, darkblotched rockfish, and widow rockfish.
>
> Demand for Pacific whiting has blossomed over the last couple of years, especially in the export market. Such countries as Russia and Ukraine have taken to H&G Pacific whiting. Last year exports of Pacific whiting increased a 9 percent in volume, to 95.7 million lbs, but 27 percent in value, to $59.3 million, and gained 17 percent on a per lb basis to $0.62/lb. compared to 2004. So far this year, the overall trend has, if anything, accelerated, with export volume and value growing. Through April, 11.4 million lbs of Pacific whiting were exported through West Coast ports, a 73 percent gain over 2005. Value jumped 119 percent to $7 million.

But the seeds of potential problems may be visible in the comparatively slower growth in per-pound value, which gained only 27 percent going from $.48 a year ago to $0.61/lb though April. Giving pause is word that inventory is beginning to pile up in some European markets. Marketers there are advising their American suppliers to sit on their inventory for the time being.

H&G is the place to be, but newer players could be behind the curve. Pushing too much product too quickly could come back to haunt the fishery this fall. If inventory piles up, prices may have to drop to move it, which could have repercussions throughout the Pacific whiting industry.

That's not to say that this will happen because demand is strong, especially in Russia and the Ukraine. Consumers there are moving up from lower-priced fish such as herring to higher quality and higher-priced fish such as Pacific whiting. And with the rapidly developing processing industry demanding more frozen fish, the U.S. is in a good position to satisfy demand.

Another factor in the success of the U.S. in entering export markets for Pacific whiting has been the relative absence of H&G Pacific whiting from Argentina and Peru over the last year or so. The U.S. has taken advantage of the situation and gained a solid foothold in the market.

The strength of the export market has had an impact on the domestic market for Pacific whiting. While the export market is garnering most of the attention and available product, the U.S. market is scrambling for Pacific whiting. This has resulted in higher prices in the U.S. as well as the drying up any spot market. Retailers are purchasing on contract to ensure their supply. Today, West Coast H&G whiting is wholesaling for $0.57-$0.59/lb., up from a more typical $0.45-$0.48 lb. West Coast fillets are wholesaling for as much as $0.96/lb., up from $0.72/lb. (Seafood Trend Newsletter, June 26, 2006)

Tables 3.3.1.8 -3.3.1.11 show that the Seafood Trend forecast of slower growth did not come to fruition in 2006. Not only did the annual growth rate in exports from West Coast ports (Seattle, Portland, San Francisco, and Los Angeles) in tonnage increase but so did the per-pound value. Through December 2006, 123 million lbs (55,792 mt) and $88 million worth of H&G products was exported through West Coast ports, an increase almost 30 percent in tonnage and 50 percent in value. The export price increased 16 percent to $0.73 per pound compared to the average export price for 2005. These export growth rates appear to have affected ex-vessel prices as well. Exvessel prices increased by 44 percent in 2005 and 19 percent in 2006.

Table 3.3.1.8 Trends in Number of Processing Plants Consistently Processing Over One Million lbs of Hake Per Year

Year	Number of Processors					Percent of total lbs processed by major processors
	Total	Major Processors	Others	Exit	Enter	
2000	12	8	4			75%
2001	10	8	2	2	0	91%
2002	9	8	1	1	0	90%
2003	9	8	1	0	0	90%
2004	9	8	1	1	1	97%
2005	8	8	0	1	1	100%
2006	13	8	5	0	5	92%

Table 3.3.1.9. Key Pacific Whiting Market Indicators , Landings, Ex-vessels Revenues, and Ex-vessel processed

Year	Ex-vessel Revenue (millions $)	Percent Change	Landings mt	Landings millions of lbs	Percent Change	Ex-vessel price ($)	Ex-vessel price percent change
2000	8.0		88,842	195.86		0.041	
2001	5.7	-28%	73,411	161.84	-17%	0.035	-13%
2002	4.6	-21%	45,707	100.77	-38%	0.045	27%
2003	5.5	21%	55,333	121.99	-21%	0.045	0%
2004	7.7	40%	96,364	212.44	74%	0.036	-2-%
2005	12.6	64%	109,395	241.17	14%	0.052	44%
2006	17.4	38%	127,167	280.35	16%	0.062	19%

Table 3.3.1.10. West Coast Exports of Headed and Gutted Pacific Whiting

Year	Export Revenue (millions $)	Percent Change Export Revenue	Landings millions of kg	Landings millions of lbs	Percent Change Landings Weight	Export price ($/lb)	Export price percent change
2000	3.7		4.2	9.24		0.400	
2001	14.4	289%	12.9	28.38	207%	0.507	27%
2002	7.5	-48%	6.6	14.52	-49%	0.517	2%
2003	14.9	99%	12.5	27.50	89%	0.542	5%
2004	44.7	200%	38.0	83.60	204%	0.535	-1%
2005	59.2	32%	43.4	95.48	14%	0.620	16%
2006	88.2	49%	55.9	122.98	29%	0.717	16%

Table 3.3.1.11. West Coast Exports of Pacific Whiting Surimi

Year	Export Revenue (millions $)	Percent Change Export Revenue	Landings millions of kg	Landings millions of lbs	Percent Change Landings Weight	Export price ($/lb)	Export price percent change
2000	18.2		11.4	25.08		0.726	
2001	28.0	54%	17.4	38.28	53%	0.731	1%
2002	16.8	-40%	9.3	20.46	-47%	0.821	12%
2003	10.6	-37%	5.9	12.98	-37%	0.817	-1%
2004	25.6	142%	16.3	35.86	176%	0.714	-13%
2005	28.5	11%	14.5	31.90	-11%	0.893	25%
2006	6.3	78%	3.2	7.04	-78%	0.895	0%

3.3.2. Counties Affected by the Pacific Whiting Shoreside Industry

Counties that are actively involved in the Pacific whiting shoreside industry include Pacific County, Washington; Grays Harbor County, Washington; Clatsop County, Oregon; Lincoln County, Oregon; Coos County, Oregon; Del Norte County, California; and Humbolt County, California. These counties tend to have economies that are based on tourism, natural resources, and government. The largest industries reported by the Bureau of Economic Analysis in counties associated with the Pacific whiting shoreside industry are generally forestry, fishing, and other, manufacturing, government and government enterprise, health care and social assistance, accommodation and food services, and retail trade. Industries falling within the forestry, fishing, and other, and manufacturing sectors are largely made up of timber and fishing industry related business, and timber and seafood processing. Food Services, accommodation, and retail trade are largely made up of businesses reliant on the tourism sector.

Readers who are interested in further information on Counties and communities, are referred to Section 7 of the EIS, prepared by the Pacific Fishery Management Council staff, for the Proposed Acceptable Biological Catch and Optimum Yield Specifications and Management Measures for the 2007-2008 Pacific Coast Groundfish Fishery. Copies of the EIS can be obtained from the Pacific Fishery Management Council, by writing to 7700 NE Ambassador Place, Suite 200, Portland, OR 97220-1384; or calling 503 820-2280; or viewing the internet posting at http://www.pcouncil.org.

3.3.3 Catch Accounting

As in previous years, vessels fishing under EFPs will be required to retain all catch in 2007, with a few exceptions such as very large species (>6 feet in length) and hauls where there is a concern about vessel safety. Since 2004, electronic monitoring systems have been used at sea on the catcher vessels to assure compliance with the maximized retention requirements. Unsorted Pacific whiting catch is delivered to the shoreside processing facility or in a few cases to transport trucks.

Industry and agency observers observe offloads, and collect species composition and biological data (length, weight, sex, and otoliths). These observer send weekly data to SHOP. Agency observers are also responsible for recovering all landed prohibited species from processors for

distribution to charity (including salmon, Pacific halibut, and Dungeness crab), and provide SHOP with a weekly summary of fish ticket data. SHOP provides all observers with necessary sampling instructions, forms, and equipment. SHOP provides one day of training for observers new to the shoreside hake fishery. Following training, participants are periodically evaluated to assure they are capable of performing observer duties. Additional candidates may be evaluated for observer positions if performance is low.

Under the EFP, three sources of data are used by SHOP: state fish tickets which contains landed species weights, reported by fish processors; species composition which contains landed bycatch species weights, reported by either industry or agency observers; and prohibited species data which includes Salmon, Pacific halibut, and Dungeness crab biological data and is reported by agency observers (Nottage and Parker 2006).

Federal groundfish catch sorting requirements are currently specified at 660.370(h)(6) for species or species groups with trip limits, size limits, quotas, harvest guidelines, or OYs. Under Federal regulations at 660.306(a)(7), it is unlawful for any person to fail to sort the catch prior to the first weighing after offloading. The groundfish must be sorted to the appropriate species or species groups for the fishery in which the vessel is participating. The state of landing may have additional sorting requirements, including requirements for non-groundfish species. Sorting requirements for vessels are also specified in the terms and conditions of the EFP.

Because Pacific whiting deliveries are received unsorted, the catch is sorted on shore prior to the first weighing after offloading. Under the existing Federal groundfish regulations, individuals who receive unsorted catch on land and transport that catch to another location, sometimes out of state, are not required to sort the catch or weigh it prior to transport. Federal law at 50 CFR Subpart K, 300.160-161 requires fish that are transported between states to be marked with an accurate packing list, bill of lading, or other similar document that lists species and number by species or specifies other appropriate measure of the quantity such as weight. When unsorted catch is transported to another location, where all or a portion of the sorting occurs, the availability of data on total Pacific whiting and incidental catch is delayed. One to two week delays in obtaining catch data occurred in the 2006 fishery (Brian Culver, WDFW Pers Comm.)

Federal groundfish regulations recognize that each state has recordkeeping and reporting laws or regulations that address the records that need to be kept and/or reports that need to be filed. The Federal groundfish regulations concur with state law by requiring fishery participants to report all data and in the exact manner required by applicable state law or regulation. Each state requires the submission fish tickets that include the actual weight or an estimated weight of each the species or species group of groundfish. Each state has laws and regulations that pertain to the use of scales and scale performance used by businesses for commercial purposes. Each state has an agency (county or state) that oversees weights and measures standards and conducts or oversees scale performance testing for commercial scales. Commercial scale requirements and how those requirements apply to seafood processors and catch reports differs substantially between states. In the State of Oregon, weights reported on fish tickets for the Pacific whiting fishery must have been derived from a certified scale. The states of Washington and California do not specifically require that processors record actual scale weights on fish tickets. Other data such as the date of landing, gear, vessel, dealer, etc. are also included on the fish tickets. The weights reported on fish tickets are used to determine the total catch by species or species group in the Pacific whiting shoreside fishery. Catch in excess of trip limits, unmarketable catch, and non-groundfish catch are included on the fish tickets. Unlike groundfish, prohibited species are managed by number.

In Oregon, all weighing and measuring devices being used commercially in the state must be licensed with the Department of Agriculture prior to being used. Each scale must meet state standards for design, readability, accuracy, and reliability, based on National Institute of Standards and Technology (NIST) Handbook 44. Oregon Measurement Standards approval seals are applied to only those examined devices which meet all appropriate design, installation, and accuracy requirements. However, the state recognizes that correct weighing or measuring results from knowledgeable, concerned personnel operating correct equipment. Oregon requires an approved means of sealing any mechanism used for adjusting a measurement element on a commercial weighing or measuring device. The state also recommends that all devices be placed under appropriate planned maintenance and service programs to avoid unexpected correction expense. The user of the device is responsible for the accuracy of the scale at all times.

In Washington, Pacific whiting deliveries are sorted and though not required by law, the catch is weighed on commercial scales that vary in type and performance. There is current Washington State regulatory code pertaining to the use of weighing and measuring devices installed after July 5, 1997 that are used for commercial purposes (Chapter 16-664 WAC). Like Oregon requirements, commercial scales are required to be traceable to a National Type Evaluation Program (NTEP)[1] Certificate of Conformance[2]. In Washington, the owner or operator of weighing or measuring equipment is responsible for the maintenance and accuracy of weighing or measuring devices at all times. Washington Weights and Measures approval seals are placed on devices which meet all appropriate design, installation and accuracy requirements. The seal indicates that the device passed the inspection during the specified month and year. Weights and Measures officials perform unannounced inspections.

In the State of California, the Division of Measurement Standards is responsible for weights and measures. California requires any scale used commercially to be "type approved" for such use. Commercial use of a non type approved scale is illegal in California. Additionally, each commercial scale must have a registered service agent places it into service, or first inspected by a local weights and measures official. There are a number of requirements such as suitability, position, environmental factors, level, interface with other devices and accessories, etc., which affect proper legal use of the equipment and which require the knowledge of a service agent. County weights and measures inspectors inspect and test various types of weighing and measuring devices. The inspector certifies the devices by affixing a paper seal to them. From time-to-time inspectors conduct inspections for compliance with the requirements set by laws and regulations. At the time this document was being prepared, it was not clear how California laws for scales used for commercial purposes applies to Pacific whiting shoreside processors or what has been in practice in the Pacific whiting fishery. Though weights reported to the state on the landing and receipt of fish are required to be “accurate” there appears to be no specific requirement for the weights to have been derived from a scale.

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[1] A program of cooperation between the National Conference on Weights and Measures, the National Institute of Standards and Technology, the states, and the private sector was created for just this purpose. Through twelve participating laboratories, NTEP evaluates the performance, operating characteristics, features and options of weighing and measuring devices against the applicable standards.

[2] An official National Type Evaluation Program Certificate of Conformance is issued by NCWM following successful completion of the evaluation and testing of a device. This Certificate indicates that the device meets applicable requirements for commercial weighing and measuring equipment in the U.S.

4.0 ANALYSIS OF THE ALTERNATIVES

The terms "effect" and "impact" are used synonymously under NEPA. Impacts includes ecological, aesthetic, historic, cultural, economic, social, or health, whether direct, indirect, or cumulative. Direct effects are caused by the action itself and occur at the same time and place. Indirect effects are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect effects may include growth-inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems. Cumulative impacts are those impacts on the environment that result from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (Federal or non-federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

Sections 4.1 through 4.3 of this document discusses the direct and indirect impacts on the physical, biological, and socio-economic environment that are likely to occur under each of the proposed alternatives, including the status quo alternative. Section 4.4 presents the reasonably foreseeable cumulative effects of the environment from the proposed alternatives.

4.1 Effects on the Physical Environment

Alternative 2 would implement in Federal regulation, catch accounting requirements for Pacific whiting shoreside processors participating in the 2007 fishery. Because the alternative action is not expected to change current fishing behavior, it is not expected to have any effects on the physical environment over Status Quo (Alternative 1.)

4.2. Effects on the Biological Environment

Effects on the biological environment resulting from fishery management actions primarily include changes in species mortality levels resulting from implementation of the alternatives. Because the alternative action is for a catch accounting system and does not change existing fishing practices, no direct biological effects are expected to result from the alternative action. Indirect impacts from fishery management actions include changes in fishing practices that affect the biological environment, but are further away in time or location than those occurring as a direct impact. Indirect biological impacts could result if catch data were inaccurate or delayed such that fishery specifications, including: bycatch limits, species allocations, OYs, and biological opinion thresholds could not be adequately monitored or the fishing actually stopped before one of the specifications were exceeded.

4.2.1 Indirect Biological Effects

Valid and timely data are needed to monitor total catch of Pacific whiting, Chinook salmon take, and incidental catch of non-whiting species, particularly the incidental catch of overfished species. It is reasonable to expect that catch accounting difficulties encountered in the 2006 fishery might also occur in the 2007 fishery under Status Quo. If catch accounting difficulties are encountered in 2007, delays in catch reporting and poor sorting may or may not have an effect on the biological condition of groundfish stocks. The severity of the impact depends on how sensitive the groundfish stock is to changes in catch levels. For precautionary zone and healthy groundfish species or species groups, the risk to the stock is lower than it is for overfished

species. If bycatch limits of the most constraining overfished species were greatly exceeded due to delayed catch reporting, the risk of exceeding rebuilding based OYs is increased. This is particularly a concern for canary rockfish, which is the most constraining species to the Pacific whiting fishery and whose rebuilding trajectory is very sensitive to changes in harvest levels. If the OY is exceeded by 3 mt it would extend the rebuilding time for canary by 11 years (PFMC and NMFS 2006) Although there are many variables that affect the time it takes a stock to rebuild, exceeding the rebuilding based OY could result in an extended rebuilding period for a overfished species. Exceeding Chinook salmon take thresholds could increase the risk to some more vulnerable ESUs.

Similarly, poor sorting of catch and inaccurate catch weights could result in underestimates of a species or species group catch. If actual catch amounts unknowingly exceed the amount that is reported, the risk of exceeding species allocations, OYs, bycatch limits and biological opinion thresholds is increased. Establishing Federal sorting requirements for unsorted Pacific whiting deliveries under Alternative 2, ensures that the reported species and species groups are consistent with the Federal management structure for the fishery. In addition to the sorting requirements specified for limited entry vessels with trawl endorsements at 660.306(a)(7) and 660.370(h)(6)(i), sorting requirements would be specified for unsorted Pacific whiting catch received by processors under Alternative 2. Because these deliveries may contain groundfish in excess of trip limits, unmarketable groundfish, prohibited species, and protected species that are not addressed by current groundfish regulations. In addition, Federal groundfish regulations would be revised to specify that unsorted deliveries from vessels participating in the Pacific whiting shoreside fishery must be adequately sorted and the catch weighed following offloading from the vessel and prior to transporting the catch. Poor data quality data associated with having catch poorly sorted when it's transported, delayed sorting when catch is transported, or catch that is incorrectly sorted or identified as the wrong species or species group increases the risk of indirect impacts on the biological resource. This was also the most frequently encountered discrepancy in analysis of 2004 fishery. Data quality must be considered relative to the management structure for the fishery and the resolution needed for effective management. Again, this is particularly a concern for the most sensitive overfished groundfish species and Chinook salmon.

The requirements for sending in paper tickets varies between states with Washington requiring the paper tickets to be received withing six working days, Oregon requiring the paper tickets to be received within four working days, and California requiring the paper tickets to be received by the first and sixteenth of the month. It is a considerable time after the tickets were originally prepared that the data is entered into a state database, edited, and forwarded to the PacFIN database. To expedite access to fish ticket data, SHOP obtains preliminary copies of paper fish tickets and enters a portion of the data into an inseason database. SHOP also obtains early fish ticket information on the catch by directly contacting the processors. The requirement for daily submissions of electronic fish tickets, under Alternative 2, provides for timely and efficient reporting of catch data such that species allocations, OYs, bycatch limits and biological opinion thresholds can be effectively monitored and the fishery closed if necessary. Daily electronic reporting is expected to expedite the receipt of total catch data. Timely reporting reduces the risk of indirect impacts on the biological resource.

Establishing Federal regulatory requirements for electronic fish ticket weights to be actual scale weights under Alternative 2 reduces the indirect risk to the biological resource by insuring data quality through reduced error in weights used to manage the fishery. For high volume species such as Pacific whiting, the accuracy of weights reported on electronic fish ticket is not as critical to the management of the resources as it is for overfished species such as canary rockfish, which

is managed in smaller units and is more sensitive to changes in catch levels. Similarly, concurrence with existing state laws pertaining to the type and testing of scales used for commercial purposes under Alternative 2, is expected to aid in maintaining data quality with minimal impact on fishery participants.

4.2.2 Non-groundfish species, prohibited species, and protected species

Non-groundfish species interactions: There are no direct impacts on non-groundfish species as a result of the alternative action. The catch accounting requirements under Alternative 2 are expected to improve the quality and timeliness of data used for inseason management of the Pacific whiting fishery. For non-groundfish species other than Chinook salmon, the impacts are expected to be similar to Status Quo (Alternative 1), assuming that processors are currently in compliance with state catch reporting requirements for non-groundfish species taken incidentally and delivered to processors in unsorted Pacific whiting deliveries.

Salmonids: There are no direct impacts on salmon as a result of the alternative action. The potential indirect effects of inaccurate catch accounting on salmon were discussed above in Section 4.2. Data quality improvements proposed under Alternative 2, provide the inseason data necessary for monitoring the take of Chinook salmon.

Marine Mammals: The alternative action is not likely to affect the incidental mortality levels of marine mammals over what has been considered in previous NEPA analyses.

Seabirds: The alternative action is not likely to affect the incidental mortality levels of seabirds over what has been considered in previous NEPA analyses.

Sea Turtles: The alternative action is not likely to affect the incidental mortality levels of sea turtles over what has been considered in previous NEPA analyses.

Endangered Species: The potential effects of inaccurate catch accounting on salmon were discussed above under salmonids and in Section 4.2. The alternative action is not likely to affect the incidental mortality levels of other ESA listed species over what has been considered in previous NEPA analyses.

4.3 Effects on the Socioeconomic Environment

This section of the EA looks at impacts, positive and negative, on the socio-economic environment. Basic information regarding the people and the fisheries that are projected to be affected by the management alternatives was presented in Chapter 3. The following section differs in that it discusses what is projected to happen to the affected people and fisheries as well as what social changes are expected to occur, and, how changes are expected to affect fishing communities.

The primary socioeconomic considerations when establishing temporary requirements for catch accounting requirements for Pacific whiting shoreside processors participating in the 2007 are: changes in the cost of participation for processors, changes in revenue, changes in how the fishery is managed, the changes in cost to the Federal government, and changes in communities.

4.3.1 Changes in the Cost of Participation

Electronic Fish Tickets: Under Status Quo (Alternative 1) processors in the states of Washington and California would continue to complete and submit the required paper fish tickets on forms provided by the state. In the State of Oregon, processors could either complete paper fish ticket forms provided by the state, or computer generated tickets providing they contain data fields specified in state law. State requirements for fish ticket submissions would not be changed by Alternative 2. Under Alternative 2, processors would be required to submit electronic fish tickets on a daily basis, and to submit paper fish tickets to the state of landing as is required by state law.

To support the electronic fish tickets required under Alternative 2, processors would be required to provide a personal computer and software that was adequate to run the electronic fish ticket software developed by Pacific States Marine Fish Commission (PSMFC) and approved by NMFS. The following hardware would be required under Alternative 2: A personal computer with Intel Pentium 233-MHz or higher; RAM with sufficient megabyte (MB) space to run the operating system, plus an additional 8 MB for the software application; available hard disk space of 217 MB or greater; a CD-ROM drive ; and a VGA or higher resolution monitor (super VGA is recommended). The following operating system and software would also be required under Alternative 2: Microsoft Windows 2000 (64 MB or greater RAM required) or Windows XP (128 MB or greater RAM required) or later operating system; and Microsoft Access 2003 or newer.

It is assumed that processors already have personal computers that are adequate to support or can be upgraded to support the NMFS-approved electronic fish ticket program. The electronic fish ticket requirements under Alternative 2, would require that the processor's personal computer be properly operating at all times during the Pacific whiting season when EFP deliveries are being received. Therefore, some processors may choose to have an additional personal computer or laptop computer as a back-up. Table 4.3.1.1. presents the estimated cost to purchase a new personal computer and the software in the event that a processor did not currently have adequate system; choose to purchase a back-up system; or needed to replace and existing system. Although it is assumed that most processors already have an appropriate personal computer, if a processor did not, the cost to purchase a new computer to meet the requirements of Alternative 2 would range between $450 and $1,020, depending on the brand and model that was purchased. For Microsoft Office with Access 2003, the cost to upgrade an existing computer is approximately $239 or to purchase a new software package the cost is approximately $399. The electronic fish ticket software and updates would be provided upon request at no cost to the processor.

Because Alternative 2 would implement the first electronic fish ticket requirements in the Pacific Coast Groundfish fishery, waiver provisions would be added to reduce the potential impacts on processors should there be a system failure. A waiver would be granted by NMFS and would temporarily exempt a processor from the reporting requirements and allow reasonable time to resolve the electronic fish ticket system problem.

The electronic fish ticket requirements proposed under Alternative 2 would be the first step towards replacing the EFP with permanent regulations as it would put in place new federal catch accounting regulations for 2007. Although the EFP approach will continue in 2007, these regulations will supplement EFP activities with regulations that mainly affect the processors or other first receivers of Pacific whiting catch from trawl vessels who fish during the primary

season for the shore-based sector. If the electronic fish ticket is successful, the use of the system may be expanded to other groundfish fisheries.

Table 4.3.1.1. Estimated Cost of a Personal Computer and Software Necessary to Operate the NMFS-approved Electronic Fish Ticket Software Provided by PSMFC.

HARDWARE	
	Brand, Model & Cost a/
Personal computer with Intel Pentium, 233-MHz, processor or higher; RAM with sufficient megabyte (MB) space to run the operating system, plus an additional 8 MB for the software application; Windows 2000 or higher; available hard disk space of 217 MB or greater; a CD-ROM drive; and a VGA or higher resolution monitor (super VGA is recommended)	Hewlett-Packard (HP)/ Compaq HP Pavilion a1620y + 17" LCD monitor = $450 Lenovo (IBM) ThinkCentre A55 + 15" CRT monitor = $597 Gateway/ eMachines GT5222E + 17" LCD monitor = $800 Dell Dimension E520 + 15" LCD monitor = $821 Apple Mac mini + 15" LCD monitor = $848 Sony VGN-FE790 Laptop = $1020
SOFTWARE	
Microsoft Office with Access 2003 b/ (required)	Standard Edition 2003 New user = $399; Upgrade = $239
Anti virus software (optional)	Varies

a/ Additional models are available from each maker. The models selected for price estimates are the low end models that meet the minimum requirements. Most new personal computers from the companies listed above exceed the minimum requirements.

b/ System Requirements for MS Office 2003: Intel Pentium processor . PC Processor Speed **233MHz**. PC Operating System Microsoft Windows 2000 with Service Pack 3 or later, Windows XP . PC System Memory 128MB RAM . PC Hard Drive Space 260MB . PC Video SVGA 800 x 600 resolution . PC Drive Type and Speed CD-ROM . PC Additional Requirements Internet service required to access online features. PC Optional Requirements Additional 250MB hard drive space required for optional installation files cache.

Under Alternative 2, internet access is required to transmit the electronic fish ticket to the PacFIN database. It is assumed that most processors who already have personal computers already have internet access sufficient to transmit daily electronic fish ticket files. Therefore, the cost to most processors for internet access would be the same under either alternative. However, for any processor who currently does not have adequate internet access the cost to obtain access, adequate to email electronic fish tickets ranges from $5 to $22 dollars per month with a one time hook-up fee ranging from $8 to $25. Table 4.3.1.2. shows the different internet costs in the traditional Pacific whiting ports.

Table 4.3.1.2. The Cost of Internet Access in Traditional Shoreside Pacific Whiting Ports

State	Port	Cost of internet access by service provider
Washington	Westport	$10/month unlimited dial up [a/]
	Ilwaco	$5-$22/month unlimited dial up [b/]
Oregon	Warrenton	$20/month unlimited dial up [c/]
	Newport	$15/month unlimited dial up [d/]
	Charlston	$12/month unlimited dial up [e/]
California	Cresent City	$9-$20/month unlimited dial up [f/]
	Eureka	$9-$22/month unlimited dial up [g/]

a/ Verizon is the only internet service provider (ISP) listed for Grays Harbor county
b/ Various ISPs serve Long Beach, WA
c/ Qwest service for Astoria, OR
d/ Quest service for Newport, OR
e/ Verizon service for Coos Bay, OR
f/ Verizon service for Crescent City, CA
g/ PacWest service for Eureka, CA
Note: Some ISPs require a one-time setup fee of between $8 and $25.

Time to complete data entry: Under Status Quo, state law requires the submission of various landing reports. In the States of California and Washington, standard paper forms provided by the states must be used. In Oregon, specified information may be submitted either on a paper fish ticket provided by the state or on a computer generated ticket provided specified data fields are included. Because the information is already being gathered by the processors under the Status Quo Alternative, Alternative 2 does not require that additional data be gathered. Alternative 2 would require additional time from processors in the states of Washington and California, because the data would need to be recorded on both the paper forms provided by the state and entered into the electronic fish ticket forms. Entering the fish ticket information is expected to take eight minutes per ticket, including the time necessary to check to transcription errors. For processors in all three states, two minutes per response would be required to access the internet and send the data files.

There are approximately 1,200 Pacific whiting primary season deliveries each year, with approximately 400 of the deliveries occurring in Washington and California and the remaining 800 occurring in Oregon. The burden on processors in Washington and California to submit electronic fish tickets under Alternative 2 is estimated to be 67 hours annually over Status Quo. For processors in the State of Oregon, the additional burden is only the time it takes to send the electronic fish ticket, since the state laws already requires that the information be gathered and allows the submission of a printed and signed electronic formats. For processors in the State of Oregon, it is expected to take a total of 27 hours annually to submit electronic fish tickets. In total for all three states, 93 hours annually are estimated for preparing and submitting electronic fish tickets.

Table 4.3.1.3. Total Annual Burden Hours for the Submission of Electronic Fish Tickets

Electronic Fish Tickets	No. of Respondents	Frequency of Responses	Total Annual Responses	Ave. Time per Response	Total Time (Hrs)
Transcribe information to electronic fish ticket	4	Variable	400	8 minutes	**53**
Send via email	12	Variable	1200	2 minutes	**40**
Total Electronic fish tickets	**12**	--	**1200**	--	**93**

Sorting requirements: Under status Quo, existing Federal groundfish regulations do not require individuals who receive unsorted catch on land and transport that catch to another location, sometimes out of state, to sort the catch or weigh it prior to transport. Federal law at 50 CFR Subpart K, 300.160-161 requires fish that are transported between states to be marked with an accurate packing list, bill of lading, or other similar document that lists species and number by species or specifies other appropriate measure of the quantity such as weight. When unsorted catch is transported to another location, where all or a portion of the sorting occurs, the availability of data on total Pacific whiting and incidental catch is delayed. Monitoring catch in the time necessary to monitor total catch and incidental catch, and to determine when action is needed to close the fishery because catch allocation or bycatch limits are projected to be reached, is impaired by the delay in obtaining catch data under Status Quo.

The sorting requirements proposed under Alternative 2 would have the greatest negative impact on shoreside processing facilities that are transporting catch that is either unsorted or partially sorted. In 2006, there were two processing facilities that engaged in the transportation of Pacific whiting catch, both transported catch within the state of landing. Under Alternative 2, additional time would be required to sort the catch at the time the catch is offloaded from the vessel. Adequate sorting could take hours depending on the amount and type of incidental catch in an individual delivery. The delay in handling may affect the quality of the final product. However, the need to obtain near real time bycatch data to monitor overfished species bycatch limits and the catch of Chinook salmon is critical to the maintaining the integrity of the bycatch limit management structure used in the Pacific whiting fishery.

Weighing requirements: Accuracy of fish ticket weights is an important component of the Pacific whiting shoreside monitoring program. Because all EFP catch is delivered in unsorted deliveries, fish ticket weights are used to determine the total catch amounts of each species or species group. This is in contrast to the mothership and catcher processor sectors of the Pacific whiting fishery, where catch is sub-sampled and sample weights are extrapolated to the individual haul and summed to derive total catch estimates. Using fish ticket weights for total catch is considered to be a census because all catch is weighed. In general, a census is considered to be most accurate because the understanding of total catch is not dependent of how well the samples represent what was actually caught. However, data quality is paramount to the accuracy of any census. We assume that the weights reported on fish tickets in the Pacific whiting fishery are relatively accurate, however accuracy of total catch derived from a census could be significantly affected by inaccurate scale readings or other methods (volumetrics) used to derive weights.

The level of accuracy in fish ticket weights needed to manage OYs, allocations, harvest guidelines, and bycatch limits in the Pacific whiting shoreside fishery varies by species. In general, large volume species such as Pacific whiting that are managed to the nearest metric ton have much more tolerance for error in weight estimates than species such as canary rockfish, which is managed to the nearest 10th of a metric ton. On the other hand prohibited species, such as salmon, crab and Pacific halibut are reported and managed by number rather than weight. Therefore the need for accurate scale readings for these species is not as important in the Pacific whiting fishery.

Methods used to derive fish tickets values can vary in accuracy. For most shoreside facilities, Pacific whiting deliveries are sorted and the catch is weighed on commercial scales that vary in type and performance. As described in Section 3.3.3, each state has laws and regulations that pertain to the use of scales and scale performance used by businesses for commercial purposes. Each state has an agency (county or state) that oversees weights and measures standards and conducts or oversees scale performance testing for commercial scales. Commercial scale requirements and how those requirements apply to seafood processors and fish tickets differs substantially between states.

Under Alternative 1, Status Quo, each processor in required to meet the existing state requirements as described in Section 3.3.3 of this EA and as they apply to seafood processors. Currently, only the State of Oregon specifies in regulation the methods that can be used to derive fish ticket weights for each species received (only sablefish is specified for all three states). In Oregon, fish ticket weights may be determined using actual round weights based on certified scale measurements; actual round weights measured using a hopper scale; or weights converted to round weight by multiplying the appropriate conversion weight. The State of Washington requires all commercial scales to: be tested and have a NTEP certificate of compliance if installed after 1997, be installed according to manufactures requirements, have security seals, be registered with the Washington State Department of Licensing, be maintained, and be suitable for intended use. However, Washington State code does not specifically require that fish tickets be completed with weights derived from scale that is in compliance with weights and measures regulations. The State of California has very broad-reaching and detailed requirements scales used for commercial purposes. However, at the time this document was prepared it was unclear if California code excludes seafood processors from the requirements. Fish ticket weights submitted to the State of California must use accurate weights, for groundfish species the weights are not required to be derived from scales.

In addition to having accurately working scales, data quality is maintained when a scale of the appropriate size range is used. For example: Fish totes are often weighed on large scales that may be tested and approved to weigh accurately in a range from 1,000 -7,500 lbs. Placing weights less than 1000 lbs on a scale that reads accurately between 1,000 and 7,500 lbs may misrepresent the amount being weighted. Alternative 2 would require that appropriate sized scales be used to maintain the accuracy of the data. The availability of scales at individual processing facilities is unknown at this time.

Alternative 2 would require that actual weights derived from scales be used on fish tickets; and

that the weights used on fish tickets be accurate, and derived from scales appropriate to the amount being weighed. Having Federal scale performance and testing requirements concur with state requirements may improve the degree to which state requirements are followed by processors.

4.3.2 Changes in Revenue

There is no direct change in revenue over Status Quo as a result of Alternative 2. Indirect impacts could occur if catch accounting needed improvement and resulted in a change from using a bycatch limit management approach when allocating Pacific whiting to the shore-based sector. In March 2007 the PFMC will recommend harvest specifications for the Pacific whiting fishery that NMFS will adopt into regulation. If it's determined that the bycatch catch limit management approach is difficult to manage because catch accounting improvement are needed, it may be necessary to take a more conservative approach when establishing the 2007 shore-based allocation. A more conservative approach would be to restrict harvest based on projected bycatch of overfished species, as is done in the bottom trawl fishery. In 2006, had the Council recommended that the whiting allocation be restricted by overfished species bycatch like the bottom trawl fishery, the OY would have been constrained by a projected catch of 4.7 mt of canary rockfish. This would have resulted in a U.S. Pacific whiting OY of 232,330 mt as compared to the OY of 267,662 mt that was adopted. This would have resulted in a shore-based allocation of 83,929 mt rather than a shore-based allocation of 97,718 mt, 13,789 mt less than what was available to the fishery under the bycatch limit management approach.

4.3.3 Changes in Management of the Fishery

The ability to manage overfished species bycatch limits in the Pacific whiting fishery is impaired when the catch is sorted at sea prior to being delivered to the shoreside processor. When the catch is sorted at sea, the overfished species in excess of the trip limits are discarded. Therefore, the catch of species being managed with bycatch limits are not be captured on the fish tickets. Alternative 2, contains a provision that would define 4,000 lb as the amount per trip that defines a Pacific whiting delivery to increase the likelihood that incidental catch in the Pacific whiting shoreside fishery is captured on the fish tickets, particularly overfished species and Chinook salmon. In recent years, 10,000 lb of Pacific whiting per trip has been use in the EFPs for defining targeted Pacific whiting trips and deliveries. Table 4.3.3.1. shows the number of EFP designated processors by year, the number of all processors that would be affected if the criteria for defining a Pacific whiting delivery by 10,000 lb and 4,000 lb per delivery.

Using 4,000 lb as compared to 10,000 lb to define a Pacific whiting delivery is projected to have a minimal impact on current Pacific whiting shoreside processors. In 2006, 2005, and 2003 one additional processor per year would have met the criteria for having received a Pacific whiting delivery if a threshold of 4,000 lb had been used. Because each of the processors received only one delivery in excess of 10,000 lb, using 4,000 lb to define a Pacific whiting delivery would have a minimal impact on the processing sector with improved opportunity for catch accounting of incidental catch. In 2004, the same group of processors would have been included with either a 4,000 lb or 10,000 lb threshold.

Table 4.3.3.1. Comparison of Designated EFP Processors and All Processors if the Criteria for Defining a Pacific Whiting Delivery Where Set at 10,000 lb and 4,000 lb per delivery, 2000-2005 (Pacfin, October 2006)

Year	Designated **EFP** processors	Processors Receiving one or more deliveries **>10,000 lb** (no of processors with only one delivery >10k)	Receiving no deliveries **>10,000 lb**	Receiving one or more deliveries **>4,000 lb** (no of processors with only one delivery between 10K & 4K)	Receiving no deliveries **>4,000 lb**	All
2000	12	13 (1)	15	14 (1)	14	28
2001	12	14 (2)	12	14	12	27
2002	8	11(3)	11	13 (2)	9	22
2003	9	14 (4)	9	15 (1)	8	23
2004	10	11 (1)	14	11	14	25
2005	10	10 (2)	5	11 (1)	4	15
2006	13	13	10	14 (1)	9	23

4.3.4 Pacific Whiting Communities

Changes occurring under Alternative 2 are not likely to have an effect on Pacific whiting fishing communities over Status Quo, given the minimal goods and service needed to support this alternative. It is assumed that most processors have already purchased the necessary goods and services needed to support Alternative 2. Under the status quo alternative, there is a potential for a more conservative management approach to be used if data are not adequate to support a bycatch limit approach. If this were to occur, fewer Pacific whiting would be available to the processors than would be available under Alternative 2. If this were to occur less goods and services would be needed under Status Quo.

4.4 Cumulative Effects

Cumulative effects of the alternatives must be considered. Cumulative impacts are those combined effects on quality of human environment that result from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions, regardless of what Federal or non-federal agency undertakes such actions (40 CFR 1508.7, 1508.25 (a), and 1508.25 (c))

Table 4.4.1. Expected Effects of Alternative 2, When Accumulated over Time.

Issue/Alternative	Expected effects
Alternative 2 (NMFS Preferred Alternative) Define real time Federal reporting requirements for Pacific whiting shoreside processors based on the use of electronic fish tickets. Revise sorting requirements. Require actual and accurate weights on fish tickets.	1) The 2007-2008 groundfish specification and management measures established OYs, harvest guidelines, allocations, and bycatch limits for the Pacific Coast groundfish fishery. The catch accounting requirements under Alternative 2 are expected to aid in managing the fishery to stay within the specified total catch levels. 2) The provisions of Amendment 16-4, which revised rebuilding plans for overfished species, would be supported by the catch accounting requirements on Alternative 2. 3) Amendment 10 implementing regulations are proposed to be implemented in 2008. This is a related action. Processor requirements proposed under Alternative 2 are expected to be a subset of the requirements that are likely to be in place in 2008 and beyond. 4) Amendment 20, Individual Quotas, will require improved monitoring for the Pacific whiting shoreside fishery. The actions proposed under Alternative 2 are consistent with future requirements for such a program.

5.0 CONSISTENCY WITH THE FMP AND OTHER APPLICABLE LAWS

5.1 Consistency with the FMP

The socio-economic framework in the Pacific Coast Groundfish FMP requires that proposed management measures and viable alternatives be reviewed and consideration given to the following criteria: a) how the action is expected to promote achievement of the goals and objectives of the FMP; b) likely impacts on other management measures; c) biological impacts; d) and economic impacts, particularly the cost to the fishing industry; and e) accomplishment of one of a list of criteria defined in Section 6.2.3 of the FMP.

Alternative 2 is likely to accomplish Objective 2 , of section 6.2.3 of the FMP by providing information to avoid exceeding a quota, harvest guideline or allocation. Alternative 2 is consistent with the following Goals and Objectives of the FMP:

Goal 1- Conservation: Objective 1-maintain an information flow on the status of the fishery and the fishery resource which allows for informed management decisions as the fishery occurs.

Goal 3- Utilization: Objective 10-strive to reduce the economic incentives and regulatory measures that lead to wastage of fish. Also, develop management measures that minimize bycatch to the extent practicable and, to the extent that bycatch cannot be avoided,

minimize the mortality of such bycatch. In addition, promote and support monitoring programs to improve estimates of total fishing-related mortality and bycatch, as well as those to improve information necessary to determine the extent to which it is practicable to reduce bycatch and bycatch mortality.

5.2 Magnuson-Stevens Conservation and Management Act

The Magnuson-Stevens Act provides parameters and guidance for Federal fisheries management, requiring that the Councils and NMFS adhere to a broad array of policy ideals. Overarching principles for fisheries management are found in the Act's National Standards. In crafting fisheries management regimes, the Councils and NMFS must balance their recommendations to meet these different national standards.

National Standard 1 requires that conservation and management measures shall prevent overfishing while achieving on a continuing basis, the optimum yield from each fishery for the United States fishing industry. The alternative action is for a catch accounting program. Information provided under Alternative 2 reduces the risk of overfishing because it would provide information that could be used to reduce the likelihood of overfishing while allowing for the harvests of healthy stocks.

National Standard 2 requires the use of the best available scientific information. Alternative 2 improves the speed of catch data delivery and accuracy of the data in the Pacific whiting shoreside fishery, which supports the national standard.

National Standard 3 requires, to the extent practicable, that an individual stock of fish be managed as a unit throughout its range, and interrelated stocks of fish shall be managed as a unit or in close coordination. This standard is not affected by the alternative action.

National Standard 4 requires that conservation and management measures not discriminate between residents of different States. The alternative action would not discriminate between residents of different States.

National Standard 5 is not affected by the alternative action because it does not affect efficiency in the utilization of fishery resources.

National Standard 6 requires that conservation and management measures take into account and allow for variations among, and contingencies in, fisheries, fishery resources, and catches. The alternative action meets this standard.

National Standard 7 requires that conservation and management measures minimize costs and avoid unnecessary duplication. Measures were taken to minimize the costs of the catch accounting requirements by providing fish ticket software at no cost, by providing a software that can be used to print a paper copy for submission to the state when state law allows, and by keeping scale testing requirements consistent with existing state standards.

National Standard 8 provides protection to fishing communities by requiring that conservation and management measures be consistent with the conservation requirements of this Act (including the prevention of overfishing and rebuilding of overfished stocks), take into account the importance of fishery resources to fishing communities in order to (A) provide for the sustained participation of such communities, and (B) to the extent practicable, minimize adverse economic impacts on such communities. The alternative action is consistent with this standard.

National Standard 9 requires that conservation and management measures minimize bycatch and minimize the mortality of bycatch. NMFS is required to "promote and support monitoring programs to improve estimates of total fishing-related mortality and bycatch, as well as those to improve information necessary to determine the extent to which it is practicable to reduce bycatch and bycatch mortality. The alternative action is consistent with this standard.

National Standard 10 Conservation and Management measures shall, to the extent practicable, promote the safety of human life at sea. The alternative action is consistent with this standard. Allowing vessels to retain unsorted catch is likely to reduce injuries that occur when the crew is sorting catch on deck.

Essential Fish Habitat This action is for a catch accounting system at the Pacific whiting shoreside processing facilities and will not affect fishing in EFH designated areas. Therefore, the potential effects of the alternative actions are not expected to have a "no adverse effect" on EFH, to have a positive effect resulting from reduced fishing effort in critical areas, or to have a positive effect if used to support regulations to restrict fishing in areas to protect habitat. No EFH consultation is warranted for this action.

5.3 Endangered Species Act

NMFS issued Biological Opinions under the ESA on August 10, 1990, November 26, 1991, August 28, 1992, September 27, 1993, May 14, 1996, and December 15, 1999 pertaining to the effects of the Pacific Coast groundfish FMP fisheries on Chinook salmon (Puget Sound, Snake River spring/summer, Snake River fall, upper Columbia River spring, lower Columbia River, upper Willamette River, Sacramento River winter, Central Valley spring, California coastal), coho salmon (Central California coastal, southern Oregon/northern California coastal), chum salmon (Hood Canal summer, Columbia River), sockeye salmon (Snake River, Ozette Lake), and steelhead (upper, middle and lower Columbia River, Snake River Basin, upper Willamette River, central California coast, California Central Valley, south-central California, northern California, southern California). These biological opinions have concluded that implementation of the FMP for the Pacific Coast groundfish fishery was not expected to jeopardize the continued existence of any endangered or threatened species under the jurisdiction of NMFS, or result in the destruction or adverse modification of critical habitat.

A formal Section 7 consultation under the ESA has been reinitiated for the bottom and mid-water trawl sectors of the Pacific Coast groundfish fishery. The December 19, 1999 Biological Opinion

defined an 11,000 Chinook bycatch threshold for the Pacific whiting fishery. During the 2005 Pacific whiting season, the 11,000 fish Chinook bycatch threshold was exceeded, triggering reinitiation. In addition, a new analysis of salmon bycatch in the bottom trawl fisheries based on groundfish observer data has been prepared and will be used to update the December 19, 1999 Biological Opinion. The revised Biological Opinion is projected to be completed by February 2006. During the reinitiation, the bottom and mid-water trawl fisheries fishery are within the scope of the December 15, 1999 Biological Opinion.

Lower Columbia River coho (70 FR 37160, June 28, 2005) and the Southern Distinct Population Segment (DPS) of green sturgeon (71 FR 17757, April 7, 2006) were recently listed as threatened under the ESA. As a consequence, NMFS has reinitiated its Section 7 consultation on the Council's Groundfish FMP. After reviewing the available information, NMFS concluded that, in keeping with Section 7(a)(2) of the ESA, allowing the fishery to continue under this action FMP would not result in any irreversible or irretrievable commitment of resources that would have the effect of foreclosing the formulation or implementation of any reasonable and prudent alternative measures.

The proposed alternative does not constitute an action that may affect endangered/threatened species listed under the ESA or their habitat within the meaning of the regulations implementing Section 7 of the ESA.

5.4 Marine Mammal Protection Act

Under the MMPA, marine mammals whose abundance falls below the optimum sustainable population level (usually regarded as 60 percent of carrying capacity or maximum population size) can be listed as "depleted". Populations listed as threatened or endangered under the ESA are automatically depleted under the terms of the MMPA. Currently, the Stellar sea lion population off the West Coast is listed as threatened under the ESA and the fur seal population is listed as depleted under the MMPA. Incidental takes of these species in the Pacific Coast fisheries are well under their annual PBRs. The alternative action is likely to affect the incidental mortality levels of species protected under the MMPA. The West Coast groundfish fisheries are considered Category III fisheries, where the annual mortality and serious injury of a stock by the fishery is less than or equal to one percent of the PBR level.

5.5 Coastal Zone Management Act

Section 307(c)(1) of the Federal Coastal Zone Management Act (CZMA) of 1972 requires all Federal activities that directly affect the coastal zone be consistent with approved state coastal zone management programs to the maximum extent practicable.

The proposed action is consistent to the maximum extent practicable with applicable State coastal zone management programs. This determination has been submitted to the responsible state agencies for review under Section 307(c)(1) of the CZMA by forwarding a copy of this EA to each of the relevant state agencies.

5.6 Paperwork Reduction Act

This proposed rule contains a collection-of-information requirement subject to review and approval by OMB under the Paperwork Reduction Act. This requirement has been submitted to OMB for approval. Public reporting burden for preparing and submitting electronic fish tickets is estimated to average ten minutes per individual response for Pacific whiting shoreside processors in the states of California and Washington, and two minutes per individual response for Pacific whiting shoreside processors in the State of Oregon, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection information.

Up to 12 Pacific whiting shoreside processors receive approximately 1,200 Pacific whiting primary season deliveries each year, with approximately 400 of the deliveries occurring in Washington and California and the remaining 800 occurring in Oregon. The burden on processors in Washington and California to submit electronic fish tickets under Alternative 2 is estimated to be 67 hours annually over Status Quo. For processors in the State of Oregon, the additional burden is only the time it takes to send the electronic fish ticket (2 minutes), since the state laws already requires that the information be gathered and allows the submission of a printed and signed electronic formats. For processors in the State of Oregon, it is expected to take a total of 27 hours annually to submit electronic fish tickets. For all three states, a total of 93 hours annually are estimated for preparing and submitting electronic fish tickets.

5.7 Executive Order 12866

EO 12866 Regulatory Planning and Review established guidelines for promulgating new regulations and reviewing existing regulations. The EO covers a variety of regulatory policy considerations and established procedural requirements for analysis of the benefits and costs or regulatory actions. Based on the discussion in Section 6.0, this action, is unlikely to be significant under E.O. 12866. This action will not have a cumulative effect on the economy of $100 million or more, nor will it result in a major increase in costs to consumers, industries, government agencies, or geographical regions. No significant adverse impacts are anticipated on competition, employment, investments, productivity, innovation, or competitiveness of U.S.-based enterprises.

5.8 Executive Order 13175

Executive Order 13175 is intended to ensure regular and meaningful consultation and collaboration with tribal officials in the development of Federal policies that have tribal implications, to strengthen the United States government-to-government relationships with Indian tribes, and to reduce the imposition of unfunded mandates upon Indian tribes.

The Secretary of Commerce recognizes the sovereign status and co-manager role of Indian tribes over shared Federal and tribal fishery resources. At Section 302(b)(5) of the Magnuson-Stevens Act, a seat on the Council is to be reserved for a representative of an Indian tribe with Federally recognized fishing rights from California, Oregon, Washington, or Idaho.

The U.S. government formally recognizes that the four Washington Coastal Tribes (Makah, Quileute, Hoh, and Quinault) have treaty rights to fish for groundfish. In general terms, the quantification of those rights is 50 percent of the harvestable surplus of groundfish available in the tribes' usual and accustomed (U and A) fishing areas (described at 50 CFR 660.324). Each of the treaty tribes has the discretion to administer their fisheries and to establish their own policies to achieve program objectives. This action does not alter the treaty allocation of Pacific whiting, nor does it affect the prosecution of the tribal fishery.

5.9 Migratory Bird Treaty Act and Executive Order 13186

The Migratory Bird Treaty Act of 1918 was designed to end the commercial trade of migratory birds and their feathers that, by the early years of the 20th century, had diminished populations of many native bird species. The Act states that it is unlawful to take, kill, or possess migratory birds and their parts (including eggs, nests, and feathers) and is a shared agreement between the United States, Canada, Japan, Mexico, and Russia to protect a common migratory bird resource. The Migratory Bird Treaty Act prohibits the directed take of seabirds, but the incidental take of seabirds does occur. The alternative action is not likely to affect the incidental take of seabirds protected by the Migratory Bird Treaty Act. Executive Order 13186 (Responsibilities of Federal Agencies to Protect Migratory Birds) is intended to ensure that each Federal agency taking actions that have, or are likely to have, a measurable negative effect on migratory bird populations develops and implements a Memorandum of Understanding (MOU) with the U.S. Fish and Wildlife Service that shall promote the conservation of migratory bird populations. Currently, NMFS is developing an MOU with the U.S. Fish and Wildlife Service. The alternative action is not likely to have a measurable effect on migratory bird populations.

5.10 Executive Order 12898 (Environmental Justice) and 13132 (Federalism)

There is no specific guidance on application of E.O. 12898 to fishery management actions. The E.O. states that environmental justice should be part of an agency's mission "by identifying and addressing disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority or low-income populations." These recommendations would not have federalism implications subject to E.O. 13132.

6.0 REGULATORY IMPACT REVIEW AND REGULATORY FLEXIBILITY ANALYSIS

In order to comply with Executive Order (EO) 12866 and the Regulatory Flexibility Act (RFA), this document also serves as a Regulatory Impact Review (RIR). The RIR and Initial Regulatory Flexibility Analysis (IRFA) have many aspects in common with each other and with EAs. Much of the information required for the RIR and IRFA analyses has been provided above in the EA. The following table, Table 6.0.1., identifies where previous discussions in the EA relevant to the IRFA/RIR may be found in this document.

Table 6.0.1. Regulatory Impact Review and Regulatory Flexibility Analysis

RIR Elements of Analysis	Corresponding Sections in EA	IRFA Elements of Analysis	Corresponding Sections in EA
Description of management objectives	1.3	Description of why actions are being considered	1.3
Description of the Fishery	1.4, 3.0	Statement of the objectives of, and legal basis for actions	1.0, 1.1, 1.2, 1.3
Statement of the Problem	1.3	Description of projected reporting, recordkeeping and other compliance requirements of the proposed action	2.0
Description of each selected alternative	2.0	Identification of all relevant Federal rules	5.0, 6.0
An economic analysis of the expected effects of each selected alternative relative to status quo	4.3		

6.1 Regulatory Impact Review

EO 12866, Regulatory Planning and Review, was signed on September 30, 1993, and established guidelines for promulgating new regulations and reviewing existing regulations. The EO covers a variety of regulatory policy considerations and establishes procedural requirements for analysis of the benefits and costs of regulatory actions. The RIR provides a review of the changes in net economic benefits to society associated with proposed regulatory actions. The analysis also provides a review of the problems and policy objectives prompting the regulatory proposals and an evaluation of the alternative action that could be used to solve the problems.

The RIR analysis and the environmental analysis required by NEPA have many common elements, including a description of the management objectives, description of the fishery, statement of the problem, description of the alternatives and economic analysis, and have, therefore, been combined in this document. See Table 6.1. above for a reference of where to find the RIR elements in this EA. What follows is a summary of these elements by affected group:

6.1.1 RIR Summary

The shorebased Pacific whiting fishery has been managed under a Exempted Fisheries Permit since 1992. However the EFP is supposed to be a short-term temporary and exploratory response to issues that potentially should be addressed by permanent regulations. The proposed action (Alternative 2) would be the first step towards replacing the EFP with permanent regulations as it would put in place new federal 2007 season catch accounting regulations. Although the EFP approach will continue in 2007, the proposed regulations are intended to supplement EFP

activities with regulations that mainly affect the processors or other first receivers of Pacific whiting catch from trawl vessels who fish under the EFP. Among other things, the proposed regulations will require the submission of electronic fish tickets within 24 hours of landing, the sorting of catch at time of offload and prior to transporting catch from the port of fish landing, the use of state certified scales with appropriate accuracy ranges for the amount of fish being weighed, and that all weights reported on the electronic fish tickets be from such scales. These proposed federal regulations mirror or enhance existing state regulations and associated paper-based fish ticket systems or put into federal regulation provisions associated with current EFP management. This action is expected to provide more timely reporting and improved estimates of the catch of Pacific whiting, ESA listed salmon species, and overfished groundfish species. Therefore, in a sense, this rule only causes processors to report more quickly that they are already reporting to the states including more timely and more accurate estimates of sorted catch.

6.1.2 Conservation and Management Benefits

Increased consistency with NMFS and Council EFP Policies--First step towards converting an EFP to Regulation.

Improved Quota Monitoring—timeliness— Quicker reporting will aid inseason quota monitoring and minimize risk that OYs and HG's for target and overfished species are not exceeded and provides greater opportunities to determine other appropriate in-season management adjustments to slow the fishery down. The requirement for daily submissions of electronic fish tickets, under Alternative 2, provides for timely and efficient reporting of catch data such that species allocations, OYs, bycatch limits and biological opinion thresholds can be effectively monitored and the fishery closed if necessary.

Improved Quota Monitoring—Fish Ticket accuracy—Measurement and Species Identification—Better estimates of catch leads to better estimates of commercial landings and biomass reductions—leading to better stock assessments and better projections of OYs and rebuilding periods.. Similarly, poor sorting of catch and inaccurate catch weights could result in underestimates of a species or species group catch. If actual catch amounts unknowingly exceed the amount that is reported, the risk of exceeding species allocations, OYs, bycatch limits and biological opinion thresholds is increased.

Reduced Management Costs from Improved Data Quality—The software employed from this project can reduced the number of errors that need to be corrected by state employees responsible for verifying the accuracy of fish tickets. The data-entry screens will not allow processors to report data outside usual ranges and will aid in using the right coding schemes. In the case of paper-fish tickets, state employees typically key punch the fish tickets twice to assure that the paper-fish ticket has been entered into a database correctly. With an electronic back up, there will be no reduced need for states to key in the tickets twice. In addition, processors may opt to attached a printed e-fish ticket to their paper fish ticket to make it easier for state employees to understand handwritten numbers and comments.

Improved Future Management—ITQs and In-season Management –Pacific whiting is one of the species of fish that is included in the Pacific Fishery Management Council's efforts to rationalize the groundfish trawl fleet. Most recently the Magnuson-Stevens Act was amended and the Council directed by Congress to develop an appropriate rationalization program for the Pacific trawl groundfish and Pacific whiting fisheries, including the shorebased sector. A review of ITQ systems indicates that electronic reporting of data is essential. This rule will help identify issues surrounding electronic reporting for purposes of meeting and attaining the goals of the Council's ITQ project. In addition, should electronic reporting by Pacific whiting processors prove successful and become expandable to other fisheries, then better use of observer data may be achievable. WCGOP observer data is based on sub-sampling sectors of the fishery and needs to be expanded to reflect the fishery as a whole to derive total catch. Fish tickets aid such expansion. Electronic fish tickets may allow for inseason expansion of observer data and the ability to fine tune area, seasonal, and trip limit regulations to more effectively manage the fishery while providing increased economic opportunities.

6.1.3 Industry Benefits

Changes in Revenue: There is no direct change in revenue over Status Quo as the amounts expected to be harvested will be the same.

Pacific Whiting Shoreside Processing and Harvesting Sector--Reduced Harvest Costs and Improved Product Quality--Allows the shore based catcher vessels to continue to land unsorted catch leading to reduced costs and improved product quality.

Pacific Whiting At-sea Sectors—Reduced risk of an early shutdown caused by shoreside vessels exceeding the shoreside allocation of Pacific whiting or exceeding expected overfished species impacts. For example, the Pacific whiting shoreside sector shares a 4.7 mt canary bycatch cap with the non-tribal catcher processor and mothership sectors. A significant amount of canary can be taken in a single tow. For example, in 2004 a harvesting vessel supplying a mothership, had an estimated tow of 3.9 mt of canary.

Other Groundfish Sectors—Reduced risk of early shut down caused by shoreside vessels exceeding expected overfished species impacts. For example, excess harvest of canary by the Pacific whiting shoreside sector could affect tribal groundfish fisheries, the limited entry fixed gear fishery, and the recreational groundfish fishery.

Fishing Communities—Reduced risk of loss economic activity due to an early shut-down of a groundfish commercial or recreational fishery and reduced risk of expanded rebuilding periods for overfished species. To meet the current rebuilding periods for overfished species, current fisheries are heavily regulated through depth based and trip limit measures and target species restrictions, consequently economic activity in these communities is curtailed. As mentioned previously, if the 44 mt ton OY for canary is exceeded by three tons it would extend the rebuilding time for canary by 11 years (PFMC and NMFS 2006) Although there are many variables that affect the time it takes a stock to rebuild, exceeding the rebuilding- based OY could result in an extended rebuilding period for an overfished species.

6.1.4 Industry Costs

Pacific Whiting Shoreside Processors—Computer Equipment and Software—Some, if any, processors may have to invest in computer equipment and software if they do not already have sufficient computers (two if back-up computer is considered) that runs standard Microsoft business software including Access and is connected to the internet. Hardware and software costs were estimated to range from $700-$1400. Estimates of internet access range from $60 to $265 annually.

Pacific Whiting Shoreside Processors—Labor Costs from Electronic Reporting—It is estimated that it will require Pacific whiting processors in total about 93 hours to report 1200 electronic fish tickets. Processors are reporting data that normally would have to be reported to the states through their state fish ticket systems so this requirement, except for keying in the data and transmitting the data electronic is not expected to be a noticeable cost, especially for Oregon processors as they can print out a paper fish ticket from the software and submit it to the states. For Washington and California, these processors would still have to hand fill in the paper-fish tickets-however use of the electronic software may make this task easier.

Pacific Whiting Shoreside Processors—Sorting and Scale Costs. In general, large volume species such as Pacific whiting that are managed to the nearest metric ton have much more tolerance for error in weight estimates than species such as canary rockfish, which is managed to the nearest 10^{th} of a metric ton. This rule would require that fish be sorted at the point of first off-load and then accurately weighed using appropriate scales. However the availability of scales at individual processing facilities is unknown at this time. As previously discussed in *2.2.1 Alternative 1 (Status Quo)*, processors in the State of Oregon are currently required to report actual scale weights on fish receiving tickets and all weights are required to be derived from certified scales. The State of Washington does not require marine fish receiving ticket weights to be actual scale weights. However, requirements for commercial scales are specified in state regulation and scales are generally used by the Pacific whiting processors to derive fish ticket weights (Pers. Comm. Mike Cenci, WDFW). In the State of California accurate weights are required on landing receipts, but they are not required to be actual scale weights. Given the various state requirements about the use of scales–the issue not that a processor does not have appropriate scales but whether or not they use these scales in the completion of fish tickets. One of the purposes of the IRFA is to solicit public comment when key data is not available. Therefore, this discussion will be updated based on public comment).

Under Alternative 2, additional time would be required to sort the catch at the time the catch is offloaded from the vessel. In 2006, there were two processing facilities that engaged in the transportation of Pacific whiting catch, both transported catch within the state of landing.

6.1.5 Management Costs (State and Federal)

There would be minimal increased cost to the Federal government over Status Quo as a result of the preferred alternative. No additional staffing over Status Quo is needed although workload for current staff is increased. The development of the electronic fish ticket system and management

of the PacFIN database by the PSMFC will occur with or without this action as converting the state fish ticket system is a goal of the PSMFC for which it has received federal grant funds to pursue. Inseason oversight of the Pacific whiting fishery would also occur regardless of this action including those undertaken by the states. Electronic reporting in the future may cause inseason management costs to decrease through less need to collect, organize, and summarize data by hand or key into an electronic database. Additional enforcement costs may be incurred if catch accounting concerns in 2007 require Federal enforcement action.

The RIR is designed to determine whether the proposed action could be considered a "significant regulatory action" according to E.O. 12866. E.O. 12866 test requirements used to assess whether or not an action would be a "significant regulatory action", and identifies the expected outcomes of the proposed management alternatives. 1) Have a annual effect on the economy of $100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or state, local, or tribal governments or communities; 2) Create a serious inconsistency or otherwise interfere with action taken or planned by another agency; 3) Materially alter the budgetary impact of entitlement, grants, user fees, or loan programs or the rights and obligations of recipients thereof; or 4) Raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in this executive Order. Based on results of the economic analysis contained in Section 4.3, this action is not expected to be significant under E.O. 12866.

Based on the economic analysis found in Section 4.3 of this EA, the alternative action is not significant according to EO 12866. This action will not have a cumulative effect on the economy of $100 million or more, nor will it result in a major increase in costs to consumers, industries, government agencies, or geographical regions. In addition, the alternative action is not expected to: create a serious inconsistency or otherwise interfere with action taken or planned by another agency; materially alter the budgetary impact of entitlement, grants, user fees, or loan programs or the rights and obligations of recipients thereof; or raise novel legal or policy issues arising out of legal mandates.

6.2 Initial Regulatory Flexibility Analysis

The Regulatory Flexibility Act (RFA), 5 U.S.C. 603 et seq., requires government agencies to assess the effects that various regulatory alternatives would have on small entities, including small businesses, and to determine ways to minimize those effects. When an agency proposes regulations, the RFA requires the agency to prepare and make available for public comment an Initial Regulatory Flexibility Analysis (IRFA) that describes the impact on small businesses, non-profit enterprises, local governments, and other small entities. The IRFA is to aid the agency in considering all reasonable regulatory alternatives that would minimize the economic impact on affected small entities. To ensure a broad consideration of impacts on small entities, NMFS has prepared this IRFA without first making the threshold determination whether this proposed action could be certified as not having a significant economic impact on a substantial number of small entities. NMFS must determine such certification to be appropriate if established by information received in the public comment period.

1) A description of the reasons why the action by the agency is being considered.

The Pacific whiting shoreside fishery needs to have a catch reporting system in place to: adequately track the incidental take of Chinook salmon as required in the ESA Section 7 Biological Opinion for Chinook salmon catch in the Pacific whiting fishery; and to track the catch of target and overfished groundfish species such that the fishing industry is not unnecessarily constrained and that the sector allocation and bycatch limits are not exceeded. This action is intended to address catch accounting concern that occurred during the 2006 season that compromise the ability to account for the catch of target, incidental and prohibited species.

2) A succinct statement of the objectives of, and legal basis for, the proposed rule.

The U.S. groundfish fisheries in the EEZ off the Washington, Oregon, and California coasts are managed pursuant to the Magnuson-Stevens Act and the Pacific Coast Groundfish FMP. The FMP was developed by the Council. Regulations implementing the FMP appear at 50 CFR part 660 subpart G.

This action will allow NMFS to effectively manage the Pacific whiting fishery such that harvests of Pacific whiting and incidentally caught groundfish species, including overfished species, do not result in allocations, harvest guidelines, species' OY, or bycatch limits for overfished species being exceeded. This action also provides for timely reporting of Chinook salmon catch as specified in the Endangered Species Act Section 7 Biological Opinion for Chinook salmon catch in the Pacific groundfish fishery. The proposed action is expected to aid in the sustainable management of the Pacific Coast groundfish and salmon stocks.

3) A description of and, where feasible, an estimate of the number of small entities to which the proposed rule will apply;

During 2006, 23 different processors/companies paid $17 million to fishermen who delivered a combined 280 million lbs of Pacific whiting. A major processor is one that has purchased more than 1,000,000 lbs of Pacific whiting. There were 13 major Pacific whiting processors in 2006, with the remaining 10 processors, all being minor processors, as their production levels ranged from 2 lbs to 7,000 lbs. There were no processors in the 7,000 lb to 1,000,000 lb range. None of these minor processors were associated with a trawl landing that was greater than 4,000 lbs and so it is presumed they would be unaffected by these regulations. Note that not all minor entities are "processors" in the traditional sense—some of these entities may be fishermen who directly sell their fish to a restaurant.

The SBA has established size criteria for all major industry sectors in the U.S. including fish harvesting entities, for-hire entities, fish processing businesses, and fish dealers. A business involved in fish harvesting is a small business if it is independently owned and operated and not major in the field of operation (including its affiliates) and if it has combined annual receipts not in excess of $3.5 million for all its affiliated operations worldwide. For-hire vessels are considered small entities, if they have annual receipts not in excess of $6 million. A seafood process is a small business if it is independently owned and operated, not major in its field of operation, and employs 500 or few persons on a full-time, part-time, temporary, or other basis, at

all its affiliated operations world wide. Finally, a wholesale business servicing the fishing industry (fish dealer) is a small business if it employs 100 or few persons on a full time, part-time, temporary, or other basis, at all its affiliated operations worldwide.

Based on the SBA criteria and a review of company websites, state employment websites, newspaper articles, personal communications, and The Research Group (2006), it appears that the 13 major Pacific whiting processors can be grouped into nine SBA businesses based on analysis of affiliates. Within these nine SBA businesses, there are three businesses, each of which generated at least $500 million in sales in 2003 (Seafood Business, May 2004, "Big Brands Head List of Top Suppliers."). One of these companies reports employing 4,000 people so it is presumed that the other two companies have employment levels much higher than 500 employees. . Four of these businesses have employment estimates that range from 100-250 employees, while the other plants appear to be in the 50-100 range (Because of missing data, one of these relatively small businesses may have less than 50 employees). Therefore, in terms of the SBA size standard of 500 employees, there are six "small" businesses that participated in the shorebased Pacific whiting processing sector in 2006. Annual sales information for these "small" businesses is unavailable, but total ex-vessel revenues-the value of the fish purchased from fisherman is available. In 2006, these six businesses purchased approximately $40 million in hake and other fish and shellfish from west coast fishermen. This compares to the $60 million in hake and other fish and shellfish purchased by the three large businesses.

4) A description of the projected reporting, recordkeeping and other compliance requirements of the proposed rule, including an estimate of the classes of small entities which will be subject to the requirement and the type of professional skills necessary for preparation of the report or record.

Under this alternative, Federal regulations would require Pacific whiting shoreside processors to have and use a NMFS approved electronic fish ticket program to send daily catch reports. The electronic fish tickets are based on information currently required in state fish receiving tickets or landing receipts (fish tickets). In the states of Washington and California, processors would continue to complete and submit the required paper fish tickets on forms provided by the state and then transfer the same information to the electronic fish ticket for submission. In the State of Oregon, processors could either complete paper fish ticket forms provided by the state, or as is allowed by state law, they could submit a printed and signed copy of the electronic fish tickets.

Public reporting burden for preparing and submitting electronic fish tickets is estimated to average ten minutes per individual response for Pacific whiting shoreside processors in the states of California and Washington, and two minutes per individual response for Pacific whiting shoreside processors in the State of Oregon, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection information.

No special professional skills are necessary to complete and submit electronic fish tickets.

5) An identification, to the extent practicable, of all relevant Federal rules which may duplicate, overlap, or conflict with the proposed rule.

No duplicative Federal requirements that have been identified.

6) A summary of economic impacts.

See Section 6.1

7) A description of any alternatives to the proposed rule which accomplish the stated objectives of applicable statutes and which minimizes and significant economic impacts of the proposed rule on small entities.

There were no other alternatives to the proposed rule that accomplish the stated objectives.

7.0 LIST OF PREPARERS

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8.0 REFERENCES

Alderdice, D. F. and F. P. J. Velsen. 1971. Some effects of salinity and temperature on early development of Pacific herring (*Clupeal pallasi*). J. Fish Res. Board Can. 28(10):1545-1562.

Allen, M. J. 1982. Functional structure of soft-bottom fish communities of the southern California shelf. Ph.D. Dissertation. University of California, San Diego, California. 577p.

Allen, M. J. and G. B. Smith. 1988. Atlas and zoogeography of common fishes in the Bering Sea and northeastern Pacific. NOAA, NMFS Tech. Rep. 66:151p.

Archibald, C. P., D. Fournier, and B.M. Leaman. 1983. Reconstruct of stock history and development of rehabilitation strategies for Pacific ocean perch in Queen Charlotte Sound, Canada. N. Amer. J. Fish. Mgmt. 3:283-294.

Bailey, K. M. 1982. The early life history of the Pacific hake, *Merluccius productus*. Fish. Bull. 80:589-598.

Bailey, K. M., R. C. Francis, and P.R. Stevens. 1982. The life history and fishery of Pacific whiting, *Merluccius productus*. Calif. Coop. Oceanic Fish. Invest. Rep. 23:81-98.

Bannister, K. 1989. The Book of the Shark. The Apple Press, London, 128 p. [A well-written look at shark biology and ecology].

Beamish, R. J., and G. A. McFarlane. 1999. Reevaluation of the interpretation of annuli from otoliths of a long-lived fish, Anoplopoma fimbria. Second International Symposium on Fish Otolith Research and Application. Fisheries Res

Carlson, H. R., and R. E. Haight. 1972. Evidence for a home site and homing of adult yellowtail rockfish, *Sebastes flavidus*. J. Fish. Res. Bd. Canada 29:1011-1014.

CDFG August 2003, Peer Review of the California Department of Fish and Game's Commercial Pacific Herring Fishery Management and Use of the Coleraine Fishery Model.

Castro, J.I. 1983. The Sharks of North American Waters. Texas A&M University Press, College Station, 180 p.

Cenci, M.. January 2007. WDFW Personal Communication.

Culver, B. January 2007. WDFW Personal Communication

Burgner, R. L. 1991. The life history of sockeye salmon (*Oncorhynchus nerka*). In C. Groot and L. Margolis (eds.) Life history of Pacific salmon. Univ. British Columbia Press, Vancouver, British Columbia.

Boehlert, G. W. and R. F. Kappenman. 1980. Variation of growth with latitude in two species of rockfish (*Sebastes pinniger and S. diploproa*) from the northeast Pacific ocean. Mar. Ecol. Prog. Ser. 3:1-10.

Dark, T. A. and M. E. Wilkins. 1994. Distribution, abundance, and biological characteristics of groundfish off the coast of Washington, Oregon and California, 1977-1986. NOAA, NMFS Tech. Rep.117:73p.

Dorn, M. W. 1995. Effects of age composition and oceanographic conditions on the annual migration of Pacific whiting, *Merluccius productus*. Calif. Coop. Oceanic Fish. Invest. Rep. 36:97-105.

Emmett, R. L., S. L. Stone, S. A. Hinton, and M. E. Monaco. 1991. Distribution and abundance of fishes and invertebrates in West Coast estuaries, Volume II: Species life history summaries. NOAA/NOS Strategic Environmental Assessments Division.

Eschmeyer, W. N., E. S. Herald, and H. Hammon. 1983. A field guide to Pacific Coast fishes of North America. Houghton Mifflin, Boston, Massachusetts. 336p.

Ferguson A. & G. Cailliet 1990. Sharks and rays of the Pacific Coast. Monterey Bay Aquarium, Monterey California. 64 pp.

Forrester, C. A. and J. A. Thomson. 1969. Population studies on the rock sole Lepidopsetta bilineata of northern Hecate Strait, B.C. Fish. Res. Bd. Canada Tech. Rep. 108:104.

Fraidenburg, M. E. 1980. Yellowtail rockfish, *Sebastes flavidus*, length and age composition off California, Oregon, and Washington in 1977. Mar. Fish. Rev. 42:54-56.

Gilbert, C. H. 1912. Age at maturity of the Pacific coast salmon of the genus *Oncorhynchus*. Fish. Bull., U.S. 32:3-22.

Giorgi, A. E. and J. L. Congleton. 1984. Effects of current velocity on the development and survival of lingcod, *Ophiodon elongatus*, embryos. Env. Bio. Fish. 10:15-27.

Gotshall, D. W. 1981. Pacific Coast Inshore Fishes. Sea Challengers and Western Marine Enterprises Publication, Los Osos California.

Gunderson, D. R. 1971. Reproductive patterns of Pacific ocean perch (*Sebastodes alutus*) off Washington and British Columbia and their relation to bathymetric distribution and seasonal abundance. J. Fish. Res. Board Canada 28:417-425.

Hart, J. L. 1973. Pacific Fishes of Canada. Bull. Fish. Res. Bd. Canada 180:730p.

Hart, J. L. 1988. Pacific Fishes of Canada. Bull. Fish. Res. Bd. Canada 180:1-730.

Healey, M. C. 1991. The life history of Chinook salmon (*Oncorhynchus tshawytscha*). In C. Groot and L. Margolis (eds.), Life history of Pacific Salmon. Univ. of British Columbia Press. Vancouver, British Columbia.

Healey, M. C. 1986. Optimum size and age at maturity in Pacific salmon and effects of size selective fisheries. Can. Spec. Publ. Fish. Aquat. Sci. 89:39-52.

Healey, M. C. 1983. Coastwide distribution and ocean migration patterns of stream- and ocean type Chinook salmon, Oncorhynchus tshawytscha. Can. Field-Nat. 97:427-433.

Hollowed, A. B. 1992. Spatial and temporal distribution of Pacific hake, *Merluccius productus*, larvae and estimates of survival during early life stages. Calif. Coop. Oceanic Fish. Invest. Rep. 33:100-123.

Hutton, L. and S. Parker. 2000. Shoreside Whiting Observer Program: 2000. Marine Resources Program. Oregon Department of Fish and Wildlife. Newport, Oregon. 19p.

Ito, D. H. 1986. Comparing abundance and productivity estimates of Pacific ocean perch in waters off the United States. In Proc. Int. Rockfish Symposium. Alaska Sea Grant College Pgm, University of Alaska. Anchorage, Alaska. p. 287-298.

Jagielo, T. H. 1990. Movement of tagged lingcod, *Ophiodon elongatus*, at Neah Bay, Washington. Fish. Bull. 88:815-820.

Kendall, A. W., Jr. and A. C. Matarese. 1987. Biology of eggs, larvae, and epipelagic juveniles of sablefish, Anoplopoma fimbria, in relation to their potential use in management. MarineFisheries Review 49:1-13.

Lineaweaver, T. H. and R. H. Backus 1984. The natural history of sharks. Nick Lyons Book, New York NY. 256 pp

Lorz, H. V., W. G. Pearcy, and M. Fraidenburg. 1983. Notes on the feeding habits of the yellowtail rockfish, *Sebastes flavidus*, off Washington and in Queen Charlotte Sound. Calif. Fish. Game 69:33-38.

Love, M. S., Morris, P., McCrae, M., and Collins, R. 1990. Life history aspects of 19 rockfish species (Scorpaenidae: Sebastes) from the southern California bight. NOAA, NMFS Tech. Rep. 87.

Love, M. S. 1991. Probably more than you want to know about the fishes of the Pacific coast. Really Big Press, Santa Barbara, California. 215p.

Love, M. S., M. H. Carr, and L. J. Haldorson. 1991. The ecology of substrate-associated juveniles of the genus Sebastes. Environ. Biol. Fish. 30:225-243.

Macall and He 2002. 2002. Bocaccio rebuilding analysis for 2002 (final revised version).

Mason, J. E. 1995. Species trends in sport fisheries, Monterey Bay, California, 1959-86. Mar. Fish. Rev. 57:1-16.

Mason, J. C., R. J. Beamish, and G.A. McFarlane. 1983. Sexual maturity, fecundity, spawning, and early life history of sablefish (*Anoplopoma fimbria*) in waters off the Pacific coast of Canada. In Proc. Int. Sablefish Symp. Alaska Sea Grant College Program, University of Alaska. Anchorage, Alaska. p. 137-141.

Mathews, S. B. and M. LaRiviere. 1987. Movement of tagged lingcod, *Ophiodon elongatus*, in the Pacific Northwest. Fish Bull. 85:153-159.

Matthews, K. R. 1992. A telemetric study of the home ranges and homing routes of lingcod, *Ophiodon elongatus*, on shallow rocky reefs off Vancouver Island, British Columbia. Fish. Bull. 90:784-790.

MBC 1987. Ecology of important fisheries species offshore California. Washington, D.C: Minerals Management Service, Pacific Outer Continental Shelf Region.

McFarlane, G. A. and R. J. Beamish. 1983a. Biology of adult sablefish (*Anoplopoma fimbria*) in waters off western Canada. In Proc. Int. Sablefish Symp. Alaska Sea Grant College Program, University of Alaska. Anchorage, Alaska. p. 59-80.

McFarlane, G. A. and R. J. Beamish. 1983b. Preliminary observations on the juvenile biology of sablefish (*Anoplopoma fimbria*) in waters off the West Coast of Canada. In Proc. Int. Sablefish Symp. Alaska Sea Grant College Program, University of Alaska. Anchorage, Alaska. p. 119-135.

McFarlane, G. A. and R. J. Beamish. 1986. Biology and fishery of Pacific hake *Merluccius productus* in the Strait of Georgia. Int. N. Pac. Fish. Comm. Bull. 50: 365-392.

McPhail, J. D., and C. C. Lindsey. 1970. Freshwater fishes of Northwestern Canada and Alaska. Bull. Fish. Res. Board Canada 173:381.

Miller, D. J. and R. N. Lea. 1972. Guide to the coastal marine fishes of California. Calif. Dept. Fish and Game, Fish. Bull. 157:249p.

Miller, D. J. and J. J. Geibel. 1973. Summary of blue rockfish and lingcod life histories; a reef ecology study and giant kelp *Macrocystis pyrifera*, experiments in Monterey Bay, California. Calif. Dept. Fish and Game, Fish Bull. 158:131p.

NOAA. 1990. West coast of North America coastal and ocean zones strategic assessment: Data atlas. U.S. Dep. Commer. NOAA. OMA/NOS, Ocean Assessments Division, Strategic Assessment Branch. Invertebrate and Fish Volume.

Norton, E. C., and R. B. MacFarlane. 1995. Nutritional dynamics of reproduction in viviparous yellowtail rockfish, *Sebastes flavidus*. Fish. Bull. 93:299-307.

Nottage , J.D., and S.J. Parker. 2006. Analysis of Landings Data for the 2005 SHoreside Hake Observation Program.

O'Connell and Funk 1986. Age and growth of yelloweye rockfish (Sebastes ruberrimus) landed in southeastern Alaska. Pages 171-185 in Anchorage, Alaska: Alaska Sea Grant College Program.

Pearcy, W. G. 1992. Movements of acoustically-tagged yellowtail rockfish *Sebastes flavidus* on Heceta Bank, Oregon. Fish. Bull. 90:726-735.

PFMC. 1996. Environmental assessment to Amendment 10 to the Pacific Coast groundfish fishery management plan and amendment 12 to the Pacific salmon fishery management plan. Pacific Fishery Management Council. Portland, Oregon. 21p.

PFMC and NMFS. 2006. Proposed Acceptable Biological Catch and Optimum Yield Specifications and Management Measures for the 2007-2008 Pacific Coast Groundfish Fishery, and Amendment 16-4: Rebuilding Plans For Seven Depleted Pacific Coast Groundfish Species; Final Environmental Impact Statement Including Regulatory Impact Review and Initial Regulatory Flexibility Analysis. Pacific Fishery Management Council, Portland, OR. October 2006.

Ralston, S., E. B. Brothers, D. A. Roberts, and K. M. Sakuma. 1996. Accuracy of age estimates for larval *Sebastes jordani*. Fish. Bull. 94:89-97.

Ralston, S., D. Pearson, and J. Reynolds. 1998. Status of the chilipepper rockfish stock in 1998. In Status of the Pacific Coast Groundfish Fishery Through 1998 and Recommended Acceptable Biologic Catches for 1999: Stock Assessment and Fishery Evaluation, Appendix Portland, OR: Pacific Fishery Management Council.

Reilly, C. A., T. W. Wyllie Echeverria, and S. Ralston. 1992. Interannual variation and overlap in the diets of pelagic juvenile rockfish (Genus: *Sebastes*) off central California. Fish. Bull. 90:505-515.

Richardson, S. L. and W. A. Laroche. 1979. Development and occurrence of larvae and juveniles of the rockfishes *Sebastes crameri*, *Sebastes pinniger*, and *Sebastes helvomaculatus* (Family *Scorpaenidae*) off Oregon. Fish. Bull. 77:1-46.

Ricker, W. E. 1972. Hereditary and environmental factors affecting certain salmonid populations. In R.C. Simon and P.A. Larkin (eds.) The stock concept in Pacific salmon. MacMillan Lectures in Fisheries. Univ. British Columbia; Vancouver, British Columbia.

Rosenthal, R. J., L. Haldorson, L. J. Field, V. Moran-O'Connell, M. G. LaRiviere, J. Underwood, and M. C. Murphy. 1982. Inshore and shallow offshore bottomfish resources in the southeastern Gulf of Alaska (1981-1982). Alaska Dept. Fish and Game, Juneau, Alaska.

Seafood Trend Newsletter. June 26, 2006. Ken Talley Editor, Seattle, Wa, seafoodtrend@aol.com

Shaw, W. N. and T. J. Hassler. 1989. Species profiles: Life histories and environmental requirements of coastal fishes and invertebrates (Pacific Northwest) -- lingcod. USFWS Biol. Rep. (11.119), Army Corps of Engineers. TR EL-82-4:10p.

Stauffer, G. D. 1985. Biology and life history of the coastal stock of Pacific whiting, *Merluccius productus*. Mar. Fish. Rev. 47:2-9.

Smith, P. E. 1995. Development of the population biology of the Pacific hake, *Merluccius productus*. Calif. Coop. Oceanic Fish. Invest. Rep 36:144-152.

Smith, B. D., G. A. McFarlane, and A.J. Cass. 1990. Movements and mortality of tagged male and female lingcod in the Strait of Georgia, British Columbia. Trans. Am. Fish. Soc. 119: 813-824.

Stanley, R. D., B. M. Leaman, L. Haldorson, and V. M. O'Connell. 1994. Movements of tagged adult yellowtail rockfish, *Sebastes flavidus*, off the West Coast of North America. Fish. Bull. 92:655-663.

Stein, D. L., B. N. Tissot, M. A. Hixon, and W. Barss. 1992. Fish-habitat associations on a deep reef at the edge of the Oregon continental shelf. Fish. Bull. 90:540-551.

Sumida, B. Y. and H. G. Moser. 1984. Food and feeding of Bocaccio and comparison with Pacific hake larvae in the California current. Calif. Coop. Oceanic Fish. Invest. Rep. 25:112-118.

Svetovidov, A. N. 1952. Clueidae. Acad. Nauk SSSR, Zool. Inst., Fauna SSSR, Ryby, 2(1), N.S. 48, 331 p. (Transl. Israel Program Sci., 1963)

Tagart, J. V. 1991. Population dynamics of yellowtail rockfish (*Sebastes flavidus*) stocks in the northern California to Vancouver Island region. Ph.D. Dissertation. University of Washington, Seattle, Washington.

Tanasich, R. W., D. M. Ware, W. Shaw, and G. A. McFarlane. 1991. Variations in diet, ration, and feeding periodicity of Pacific hake (*Merluccius productus*) and spiny dogfish (*Squalus acanthias*) off the lower West Coast of Vancouver Island. Can. J. Fish. Aquat. Sci. 48: 2118-2128.

Taylor, E. B. 1991. A review of local adaptation in Salmonidae, with particular reference to Pacific and Atlantic salmon. Aquaculture 98:185-207.

The Research Group. 2006. Review of the West Coast Commercial Fishing Industry in 2004. Prepared for the Pacific States Marine Fisheries Commision.

Weinberg, K. L. 1994. Rockfish assemblages of the middle shelf and upper slope off Oregon and Washington. Fish. Bull. 92:620-632.

Weidoff, B., J. Conrad, and S. Parker 2004. Shoreside Hake Observation Program: 2003. Marine Resource Program, Oregon Department of Fish and Wildlife. Hatfield Marine Science Center, Newport, Oregon. 25p.

Weidoff, B. and S. Parker 2004. Shoreside Hake Observation Program: 2004. Marine Resource Program, Oregon Department of Fish and Wildlife. Hatfield Marine Science Center, Newport, Oregon. 33p.

Ware and McFarlane 1989 Fisheries production domains in the Northeast Pacific Ocean. In Effects of Ocean Variability on Recruitment and an Evaluation of Parameters Used in Stock Assessment Models, edited by Beamish, R. J. and G. A. McFarlane. Pages 359-379. Canadian Special Publications in Fisheries and Aquatic Sciences 108.

Wilkins, M. E. 1986. Development and evaluation of methodologies for assessing and monitoring the abundance of widow rockfish, *Sebastes entomelas*. Fish. Bull. 84:287-310.

A MAXIMIZED RETENTION AND MONITORING PROGRAM FOR THE PACIFIC WHITING SHORESIDE FISHERY

IMPLEMENTING AMENDMENT 10
TO THE PACIFIC COAST GROUNDFISH FISHERY MANAGEMENT PLAN

DRAFT ENVIRONMENTAL ASSESSMENT

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Abstract: This Environmental Assessment analyzes the effects of establishing a maximized retention and monitoring program in the Pacific whiting shoreside fishery off the coast of Washington, Oregon, and California. The shorebased whiting fishery has been managed under exempted fisheries permit since 1992. Exempted fishing permits are intended to be used as a short-term temporary and exploratory response to issues that potentially should be addressed by permanent regulations. Establishing maximized retention requirements and a federal monitoring program will allow NMFS to: account for Chinook salmon catch as specified in the Endangered Species Act section 7 Biological Opinion for Chinook salmon catch in the Pacific groundfish fishery; meet standardized bycatch reporting requirements specified by the Magnuson-Stevens Fishery Conservation and Management Act; collect biological data on catch that would otherwise not be available; and create the regulatory structure necessary to efficiently manage the Pacific whiting fishery without exempted fishing permits. The alternative programs considered in this Environmental Assessment provide a benefit to the fishery participants by allowing the fishery to be prosecuted efficiently and the quality of Pacific whiting to be maintained. This EA analyzes the effects that a maximized retention program with different approaches for catch monitoring has on the socioeconomic, biological, and physical environments.

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1.0 PURPOSE OF AND NEED FOR ACTION

1.1 Introduction

The groundfish fishery in the Exclusive Economic Zone (EEZ), offshore waters between 3 and 200 nautical miles (nm), off the coasts of Washington, Oregon, and California (WOC) is managed under the Pacific Coast Groundfish Fishery Management Plan (FMP), while the nearshore areas are managed by the states and tribes. The Pacific Coast Groundfish FMP was prepared by the Pacific Fishery Management Council (Council) under the authority of the Magnuson Fishery Conservation and Management Act (subsequently amended and renamed the Magnuson-Stevens Fishery Conservation and Management Act). The FMP has been in effect since 1982.

Actions taken to amend FMPs or to implement regulations to govern the groundfish fishery must meet the requirements of several Federal laws, regulations, and executive orders. In addition to the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act), these Federal laws, regulations, and executive orders include: National Environmental Policy Act (NEPA), Regulatory Flexibility Act (RFA), Endangered Species Act (ESA), Marine Mammal Protection Act (MMPA), Coastal Zone Management Act (CZMA), Paperwork Reduction Act (PRA), Executive Orders (E.O.) 12866, 12898, 13132, and 13175, and the Migratory Bird Treaty Act.

NEPA regulations require that NEPA analysis documents be combined with other agency documents to reduce duplication and paperwork (40 CFR§§1506.4). Therefore, this EA will ultimately become a combined regulatory document to be used for compliance with not only NEPA, but also E.O. 12866, RFA, and other applicable laws. NEPA, E.O. 12866, and the RFA require a description of the purpose and need for the proposed action as well as a description of alternative actions that may address the problem.

- Chapter One describes the purpose and need of the proposed action.
- Chapter Two describes a reasonable range of alternative management actions that may be taken to meet the proposed need.
- Chapter Three contains a description of the socioeconomic, biological, and physical characteristics of the affected environment.
- Chapter Four examines changes in the socioeconomic, biological, and physical environments resulting from the alternative management actions.
- Chapter Five addresses consistency with the FMP and other applicable laws.
- Chapter Six is the regulatory impact review and regulatory flexibility analysis.
- Chapter Seven is a list of individuals who help prepare this document.
- Chapter Eight provides a list of references for this document.

1.2 Summary of the Proposed Action

The proposed action is to create the regulatory framework for a maximized retention and monitoring program for the Pacific whiting shoreside fishery. Maximized retention encourages full retention of all catch while recognizing that minor discard events that include large animals (>6ft in length) and minor levels of operational discard may occur. The program would included a monitoring mechanism for catch accounting that is adequate to maintain the integrity of the program and ensure that resource management objectives are being met.

Council consideration of this action has developed from several issues and priorities under recent Council discussion and analysis. In 1996, the Council adopted a combined amendment to the groundfish and salmon FMPs: Amendment 10 to the groundfish FMP and Amendment 12 to the salmon FMP. Under the combined amendment, the FMPs allowed for salmonids to be retained in the Pacific whiting trawl fishery (otherwise prohibited for all net gear) when the fishery was managed with a Council-approved monitoring program. As discussed in more detail below, the Pacific whiting shoreside fishery is currently managed annually under exempted fishing permits (EFPs) that provide for the required monitoring program. This action is intended to transition the Pacific whiting shoreside fishery from annual EFPs to management via long-term Federal regulations, in keeping with the goals and objectives of the FMP, and with Council and NMFS objectives as requirements of the ESA and the Magnuson-Stevens Act.

NMFS is considering a related action under an EA titled "Catch Accounting Requirements for Pacific Whiting Shoreside Processors/First Receivers Participating in the Shore-Based Fishery" This related action considers the required submission of electronic fish tickets within 24 hours of landing, the sorting of catch at the time of offload and prior to transporting catch from the port of landing, and the use of scales with appropriate accuracy ranges for the amount of fish being weighed. Proposed federal regulations for the related action mirror or enhance existing state regulations and associated paper-based fish ticket systems or put into federal regulation provisions associated with 2007 EFP management. The related action is expected to provide more timely reporting and improved estimates of the catch of Pacific whiting, ESA listed salmon species, and overfished groundfish species. If approved, the related action would be implemented in 2007.

This EA addresses all components of a monitoring program for the Pacific whiting shoreside fishery while the related EA considers only a small portion of a monitoring program that occurs at the processing facilities. The alternatives considered in the related EA are not repeated in this EA. However, if the Council requests additional catch accounting requirements for processor/first receiver that were not analyzed under the related EA, these new requirements will be analyzed under this EA before it is finalized.

1.3 Purpose and Need for the Proposed Action

The purpose of the proposed action is to create the regulatory structure necessary to efficiently prosecute and manage the Pacific whiting shoreside fishery without an EFP while providing accurate catch data such that the ESA and Magnuson-Stevens Act requirements are adequately met. The Pacific whiting shoreside fishery needs to have a catch monitoring system in place to adequately track the incidental take of Chinook salmon as required in the ESA Section 7 Biological Opinion for Chinook salmon catch in the Pacific whiting fishery; to meet the standardized reporting methodology defined by the Magnuson-Stevens Act; and to track the catch of target and overfished groundfish species such that the fishing industry is not unnecessarily constrained and that optimum yields (OYs), harvest guidelines, sector allocations and bycatch limits are not exceeded.

The purpose of the proposed action is to:

- ➢ Establish a regulatory standardized reporting methodology for the collection and verification of accurate and timely catch data for the Pacific whiting shoreside fishery
- ➢ Establish a regulatory monitoring mechanism that is adequate to maintain the integrity of the maximized retention program.
- ➢ Establish a regulatory program that minimizes discarding of catch to the extent practicable.
- ➢ Establish a regulatory program that benefits shore-based Pacific whiting sector participants by allowing the fishery to be prosecuted efficiently.

1.4 Management of the Pacific Whiting Shoreside Fishery

The Pacific whiting fishery is managed under a "primary" season structure where vessels harvest Pacific whiting until the sector allocation is reached and the fishery is closed. This is different from most West Coast groundfish fisheries, which are managed under a "trip limit" structure, where catch limits are specified by gear type and species (or species group) and vessels can land catch up to the specified limits. Incidental catch of other groundfish species in the Pacific whiting fishery, however, is managed under the trip limits structure.

To allow the Pacific whiting industry to have the opportunity to harvest the full Pacific whiting OY, the non-tribal commercial fishery is managed with bycatch limits for certain overfished species. To date, bycatch limits have been established for darkblotched, canary and widow rockfish. With bycatch limits, the industry has the opportunity to harvest a larger amount of Pacific whiting, if they can do so while keeping the total catch of specific overfished species within adopted bycatch limits. Regulations provide for the automatic closure of the commercial (non-tribal) portion of the Pacific whiting fishery, upon attainment of a bycatch limit. This is different from the bottom trawl fishery where harvest availability of target species is often constrained by the projected catch of overfished species.

In 1991, the first year that the Pacific whiting fishery was fully a domestic fishery (i.e. all available harvest was fully utilized by domestic fishing entities,) vessels in the at-sea processing sector began to voluntarily carry observers to provide much needed catch data. In 1992, when significant landings were expected to be harvested by the Pacific whiting shoreside fishery, an observer program was established through the use of EFPs. EFPs allow vessels to engage in activities that are otherwise illegal for the purpose of collecting information that may lead to a management decision or to address specific environmental concerns (50 CFR 600.10 and 600.745.) Each year since 1992, EFPs have been issued to vessels in the Pacific whiting shoreside fishery to allow unsorted catch to be landed. Without an EFP, groundfish regulations at 50 CFR 660.306 (a)(2) and (a)(6) require vessels to sort their catch at sea. The vessels fishing under the EFPs are required to deliver catch to designated processors. Each designated processor has a written agreement with the state where they are located that specifies the term of participation. The designated processor agreements require processors to follow more rigorous catch accounting and reporting requirements than those required by existing state law.

Because vessels fishing under the Pacific whiting EFPs are allowed to land unsorted catch, landings tend to included species in excess of the trip limits, non-groundfish species, protected species, and prohibited species such as salmon that would otherwise be illegal to have on board the vessel. Vessels fishing for Pacific whiting without EFPs must discard as soon as practicable all prohibited species (including salmon and halibut), protected species, non-groundfish species, and groundfish species in excess of cumulative limits.

Unlike the at-sea sectors (catcher/processor and mothership sectors) of the Pacific whiting fishery, where catch is sorted and processed shortly after it has been taken, vessels in the shoreside fishery must hold primary season Pacific whiting on the vessel for several hours or days until it can be offloaded at a shoreside processor. Pacific whiting deteriorates rapidly, so it must be handled quickly and immediately chilled to maintain product quality. This is particularly true if the Pacific whiting is to be used to make surimi (a fish paste product). The quality or grade of surimi is highly dependent on the freshness of the Pacific whiting, which demands careful handling and immediate cooling or processing for the fishery to be economically feasible. Because rapid cooling can retard flesh deterioration, most vessels prefer to dump their unsorted catch directly below deck into the refrigerated salt water tanks. However, dumping the unsorted catch into the refrigerated salt water tanks precludes the immediate sorting or sampling of the catch. Fishers generally prefer to quickly and efficiently handle the catch so they can return to port for offloading.

The Shoreside Whiting Observation Program (SHOP), is a coordinated monitoring effort by the States of Oregon, Washington, and California. The SHOP was initially established in 1992 to provide oversight to the EFP activities including: coordination of

50 CFR 660.370 (Groundfish) Specifications and management measures * * *

(e) *Prohibited species*. Groundfish species or species groups under the PCG FMP for which quotas have been achieved and/or the fishery closed are prohibited species. In addition, the following are prohibited species:

(1) Any species of salmonid.
(2) Pacific halibut.
(3) Dungeness crab caught seaward of Washington or Oregon.

observer sampling, collection of other necessary catch data, and transmission of summarized catch data to NMFS. Although the program's structure and priorities have changed over the years and observers are no longer used, the SHOP has maintained the primary responsibility of monitoring EFP activities and for providing catch data collected at the processing facilities to NMFS for management of the fishery.

Management of the salmon and groundfish fisheries has also changed substantially since the early 1990's. Since 1992, new salmon evolutionarily significant units (ESUs) have been listed under the ESA, and several groundfish species that are incidentally taken in the Pacific whiting fishery have been declared overfished. These changes have affected management of the Pacific whiting fishery and are summarized below.

1.4.1 ESA Opinions and Thresholds for the Pacific Whiting Fishery

NMFS has issued Biological Opinions under the ESA pertaining to the effects of the Pacific Coast groundfish FMP fisheries on Chinook salmon on August 10, 1990, November 26, 1991, August 28, 1992, September 27, 1993, May 14, 1996, and December 15, 1999. The August 1992, Biological Opinion included an analysis of the effects of the Pacific whiting fishery on listed Chinook salmon. The Biological Opinions have concluded that Chinook is the salmon species most likely to be affected, while other salmon species are rarely encountered in the Pacific whiting and other groundfish fisheries. The analysis determined that there was a spatial/temporal overlap between the Pacific whiting fishery and the distribution of ESA listed Chinook salmon such that it could result in incidental take of listed salmon. The 1992 Biological Opinion included an incidental take statement that authorized the incidental take of 0.05 salmon per metric ton of Pacific whiting. The Biological Opinion identified the need for continued monitoring of the fishery to evaluate impacts on salmon, and specifically emphasized the need to monitor the emerging shoreside fishery because fishing patterns and bycatch rates were likely to differ from those observed on the at-sea processors.

NMFS reinitiated a formal Section 7 consultation under the ESA in 2005 for both the Pacific whiting midwater trawl fishery and the groundfish bottom trawl fishery. The December 19, 1999 Biological Opinion had defined an 11,000 Chinook incidental take threshold for the Pacific whiting fishery. During the 2005 Pacific whiting season, more than 11,000 Chinook were taken, triggering reinitiation. NMFS prepared a Supplemental Biological Opinion dated March 11, 2006, which addressed salmon take in both the Pacific whiting midwater trawl and groundfish bottom trawl fisheries. In that Supplemental Biological Opinion, NMFS concluded that catch rates of salmon in the 2005 Pacific whiting fishery were consistent with expectations considered during prior consultations. Chinook bycatch has averaged about 7,300 fish over the last 15 years and has only occasionally exceeded the reinitiation trigger of 11,000. Since 1999, annual Chinook bycatch has averaged about 8,450 fish. The Chinook ESUs most likely affected by the Pacific whiting fishery have generally improved in status since the 1999 Section 7 consultation. Although these species remain at risk, as indicated by their ESA listing, NMFS concluded that the higher observed bycatch in 2005 does not require a reconsideration of its prior "no jeopardy" conclusion with respect to the fishery. For the groundfish bottom trawl fishery, NMFS concluded that incidental take in the groundfish fisheries is within the overall limits articulated

in the Incidental Take Statement of the 1999 Biological Opinion. The groundfish bottom trawl limit from that opinion was 9,000 fish annually. NMFS will continue to monitor and collect data to analyze take levels. NMFS also reaffirmed its prior determination that implementation of the Groundfish FMP is not likely to jeopardize the continued existence of any of the affected ESUs.

1.4.2 Amendment 10 and Subsequent FMP Developments

In 1996, to address the treatment and disposition of salmon in the Pacific whiting shoreside fishery, an EA was prepared to analyze amendments to both the groundfish FMP (FMP Amendment 10) and salmon FMP (FMP Amendment 12). The 1996 EA analyzed two management alternatives regarding the retention of salmon taken with groundfish trawl gear. The first alternative was to maintain the then current salmon and groundfish FMPs, under which retention of salmon in the groundfish trawl fisheries would not have been permitted and the practice of retaining salmon in the Pacific whiting shoreside fishery was only authorized under an EFP. The second and preferred alternative was to maintain salmon as a prohibited species in the groundfish FMP and add trawl gear to the list of gears that may retain salmon if allowed under other pertinent regulations such as salmon fishing regulations at 50 CFR Part 660, Subpart H. The preferred alterative also included a provision for the salmon FMP to be amended to allow retention of salmonids in the trawl fishery when a Council-approved monitoring program, one that meets certain minimum guidelines (see section 3.3.2), was established in the Pacific whiting shoreside fishery (PFMC 1996). At their October 21-25, 1996, meeting the Council recommended the preferred alternative, including the temporary use of EFPs to monitor the incidental take of salmon until a permanent monitoring program could be implemented. Both the salmon and groundfish FMPs were amended to include the provisions of the preferred alternative; however, implementing regulations for the Pacific whiting shoreside fishery were never adopted.

In 1996, the Sustainable Fisheries Act (SFA) amended the Magnuson Fishery Conservation and Management Act (renamed the Magnuson-Stevens Fishery Conservation and Management Act). The SFA required that FMPs establish a standardized reporting methodology to assess the amounts and types of bycatch in a fishery, and required that FMPs identify and rebuild overfished stocks. The FMP was revised to include, an overfished species threshold of $B_{25\%}$ (25 percent of estimated unfished biomass level). Groundfish stocks with depletion levels that fall below $B_{25\%}$ are to be considered overfished. At this time, seven stocks continue to managed via overfished species rebuilding plans: bocaccio, canary rockfish, cowcod, darkblotched rockfish, POP, widow rockfish, and yelloweye rockfish.

Amendment 16-1 set a framework for overfished species rebuilding parameters and requirements into the FMP, and set an initial requirement that NMFS implement an observer program in the groundfish fishery through a Council-approved Federal regulatory framework. Amendments 16-2 and 16-3 revised the FMP to include rebuilding plans for the seven overfished species identified above, plus lingcod. Lingcod was most recently assessed in 2005 and declared rebuilt at that time, the coastwide stock having exceeded the FMP's rebuilding goal of a stock size of at least 40 percent of estimated unfished biomass level. Amendment 16-4, approved December

2006, revised the rebuilding parameters for the seven species currently managed via rebuilding plans.

Amendment 18 to the FMP, approved September 2006, revised the FMP to include the Council's bycatch minimization policies, programs, and requirements. Among other requirements, the FMP, as revised by Amendment 18, now includes a detailed discussion of the groundfish fishery's standardized total catch reporting and compliance monitoring program (Section 6.4). At the same time that the Council was developing Amendment 18, it was also taking a look back at Amendment 10 to determine how to move the Pacific whiting shoreside fishery out of EFP management. Amendment 18 includes provisions that facilitate that move to a long-term Federal regulatory structure: parameters for electronic monitoring programs in Section 6.4.1.1, and parameters for full retention programs in 6.5.3.1.

1.5 Environmental Review Process and Public Scoping

The purpose of the environmental review process is to determine the range of issues that the NEPA document (in this case the EA) needs to address. The environmental review process is intended to ensure that problems are identified early and properly reviewed; issues of little significance do not consume time and effort; and that the draft NEPA document is thorough and balanced. The environmental review process should: identify the public and agency concerns; clearly define the environmental issues and alternatives to be examined in the NEPA document; eliminate non-significant issues; identify related issues; and identify state and local agency requirements that must be addressed. The following public review and scoping presented in this document is in reference to the development of a regulatory amendment for a full retention and monitoring program in the Pacific whiting shoreside fishery.

An EA was prepared in 1996 to analyze amending both the groundfish FMP (FMP Amendment 10) and salmon FMP (FMP Amendment 12) to address the treatment and disposition of salmon in the Pacific whiting shoreside fishery these amendments were approved in 1996, but have not had implemented through regulation. This EA considers an action to revise Federal groundfish regulations to move the Pacific whiting shoreside fishery out of EFP management, in support of FMP provisions from Amendment 10 and the subsequent FMP amendments described above.

In April 2003, NMFS Northwest Region staff met with the Northwest Fisheries Science Center (NWFSC) and West Coast groundfish Observer Program (WCGOP) staff to begin discussion on the development of a monitoring program to support a full retention management structure in the Pacific whiting shoreside fishery. This was followed in May 2003, by a meeting with the staff from Washington Department of Fish and Wildlife (WDFW), Oregon Department of Fish and Wildlife (ODFW), and California Department of Fish and Game (CDFG) to further discuss the development of Federal regulations for a full retention and monitoring program.

In September 2003, NMFS brought a preliminary EA before the Council that contained a range of alternatives for the Council to consider. The Council recommend that the range of alternatives be further developed prior to public review, therefore NMFS held a public scoping meeting on December 8, 2003, in Newport, Oregon to further engage Federal and State

personnel and to involve industry in the development of the alternatives. NMFS Northwest Region staff met with staff from WDWF, ODFW, and CDFG as well as with individuals from Archipelago Marine Research Ltd.[1] (Archipelago) and the Pacific whiting shoreside industry to discuss full retention and monitoring.

At its June 2004, meeting in Foster City, California the Council reviewed the initial EA and adopted a revised range of alternatives for public review. Following this meeting, the alternatives were revised and a draft EA was sent out for public review in August 2004. The Council was scheduled to select a preferred alternative at their October 31 - November 5, 2004, meeting in Portland, Oregon, however the selection of a preferred alternative was delayed.

In November 2004, NMFS Northwest Region staff meet with representatives from NMFS Office for Law Enforcement (OLE), WCGOP, WDFW, ODFW, and CDFG to discuss the 2005 Pacific whiting shoreside fishery, the application of EMS technology, and the development of full retention requirements. In 2005, the fishery was managed under EFPs.

In November 2005, NMFS Northwest Region staff meet with representatives from NMFS OLE, the WCGOP, ODFW, and CDFG to discuss the 2006 fishery, available resources for monitoring, sampling at shoreside processing facilities, and the use of an EFP for the 2006 fishery. In 2006, the fishery was managed under EFPs.

In addition to the meetings described above, prior to the start of the 2004, 2005 and 2006 Pacific whiting seasons, NMFS and Archipelago staff have attended the ODFW-sponsored meetings for EFP participants. The outcome of data collection to evaluate EMS and monitoring as well as the range of alternative management actions have been discussed at these meetings. Fruitful discussions at these meetings helped shape the range of alternatives presented and analyzed in this EA.

In May 2006, NMFS Northwest Region staff met with representatives from WCGOP, WDFW, ODFW, and CDFG to further discuss the development of a Federal program to replace the need for annual EFPs. In July 2006, NMFS Northwest Region staff meet with technical staff from, WCGOP, WDFW, ODFW, and CDFG to discuss technical issues associated with implementing a monitoring program in the Pacific whiting shoreside fishery. The purpose of the monitoring program was reaffirmed during the meeting. Discussions focused on the data reporting needs and the current reporting structures in each states; the need to reduce under reporting and delayed fish ticket submissions; the different state approaches to sampling catch at shoreside processing facilities; and the use of bycatch limits to reduce impacts on overfished species. In August 2006, NMFS Northwest Region staff and representatives from WCGOP, WDFW, ODFW, and CDFG discussed the outcome of the technical meeting and held further discussions on the implementation of a Pacific whiting shoreside fishery monitoring program.

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[1]Archipelago Marine Research Ltd is a world leader in the field of fisheries monitoring and marine environmental assessment. Based in Victoria, British Columbia, Archipelago has been providing marine biological services since 1978.

At the Council's September 2006, meeting in Foster City, California, NMFS presented a summary of the discussions it had held with the states, and suggested a process and schedule for implementing Federal regulations for a maximized retention and monitoring program for the Pacific whiting shoreside fishery. The Council received public comment on the issue before providing guidance to NMFS on the range of alternatives for consideration in the EA. At this same meeting, the Council recommended that NMFS host a listening session to allow the states and fishery participants to further present NMFS staff with information concerns on the Pacific whiting shoreside monitoring program development. The listening session was held on September 29, 2006, and participants included NMFS staff, WCGOP, ODFW, CDFG, and industry stakeholders.

At the Council's November 2006 meeting, NMFS presented a draft of Chapters One and Two of this EA, which identified a range of alternative actions. After consideration, the Council recommended that the range of alternatives presented by NMFS be analyzed . In addition, the Council recommended that a Shoreside Whiting Amendment Workgroup (SWAG) be formed to develop an additional alternative which was to be a hybrid of the Alternatives 3 and 4. On January 2, 2007 the SWAG meet to define the hybrid Alternative. The hybrid Alternative (Alternative 5) has been included in this analysis.

1.5.1 Issues and Concerns Raised Through Scoping

While the initial purpose of the proposed action was to develop and implement a monitoring program for the treatment and disposition of incidentally taken salmon in the shore-based Pacific whiting fishery, the importance of establishing full retention and monitoring options to reduce bycatch and track multiple aspects of the shore-based Pacific whiting fishery became apparent through the scoping process. Below is a summary of issues that stakeholders asked NMFS to take into consideration when preparing the EA and regulatory amendment:

Full/Maximized retention:

- The need to consider the merits of a full retention program
- The need to define full retention
- Need for an allowance to sort catch at sea
- The need to discontinue annual EFPs
- The importance of having industry support for a monitoring program
- The need to verify catch shoreside

Monitoring:

- The need to have clearly defined objectives for the monitoring program
- The need for the monitoring program to be built on the existing EFP infrastructure
- The need for consistency across states
- Resources available to implement a monitoring program differ by state
- The need for appropriate monitoring levels
- Allowing discard at sea would require observers to be aboard the vessels
- Using Federal observers on catcher vessels is an inefficient use of resources

- The logistics of port sampling is difficult/unusual for NMFS's WCGOP
- Implementation of a monitoring program must be appropriate for IFQs
- Having Pacific States Marine Fish Commission (PSMFC) administer a NOAA directed observation program
- How the need for industry samplers changes
- If weighmasters are appropriate

EMS:

- Letting vessel owner/operators have access to their EMS images
- Insurance and liability concerns for industry with video cameras
- The need to protect vessel owner/operators
- The need to address data confidentiality and privacy rights
- The adequacy of EMS testing for supporting a rulemaking
- The need to have more than one company providing EMS services
- The failure rate of EMS
- The time it takes to do analysis

Overages:

- The need to ensure that overages are handled appropriately
- The need for port-specific market values of overage fish

Recordkeeping and Reporting:

- The ability to track bycatch with an audit process
- The ability to audit logbooks for discard
- The need for almost realtime data to monitor bycatch limits
- The applicability of current paper logbooks for this fishery
- The need to have a way to correct fish tickets
- If program includes electronic fish ticket, there is a need to meet the requirements of all three states
- Processors need to have a specific person responsible for bycatch accounting

Costs:

- The funding source
- The need for improved cost estimates
- The cost to the fishery of full retention monitoring program
- The costs relative to the economic importance of the fishery to each state
- The inclusion of Federal, State, and/or Industry funding options
- The shore-based Pacific whiting fleet's ability to fund a monitoring program

Other:

- The use of Pacific whiting shoreside fishery hard bycatch caps
- The use of individual vessel bycatch caps
- The possible use of a "penalty box" system
- The importance of the States and industry to be involved in the process
- The need to accommodate the early California fishery
- The use of permit endorsements

1.6 Decision to be Made

From the information in this EA, NMFS must decide whether or not to establish a maximized retention and monitoring program for the Pacific whiting shoreside fishery. It must also be determined if the proposed action and/or preferred alternative would or would not be a major Federal action, significantly affecting the quality of the human environment. If NMFS determines that the proposed action would not significantly affect the quality of the human environment, then a Finding of No Significant Impact (FONSI) may be prepared. If the NMFS determines that the action would significantly affect the Pacific Coast groundfish fishery, then preparation of an Environmental Impact Statement will be required prior to making the decision on wether and how to establish the program.

1.7 Applicable Federal Permits, Licences, or Authorizations Needed in Conjunction with Implementing this Proposal

A Pacific Coast groundfish limited entry permit with a shoreside Pacific whiting endorsement is being considered as part of Alternatives 3, 4 and 5. Such an endorsement would be available to vessels with trawl-endorsed limited entry permits. The primary purpose of the endorsement is to support fishery monitoring logistics; the endorsement would be an annual declaration by a vessel owner/operator of an intent to fish in the primary Pacific whiting shoreside fishery, such a declaration allows the pool of vessels requiring monitoring to be known to managers in advance of the season.

Requiring processor permits is not currently included within the alternative actions. However, processor permits may be considered in a future, but related action.

2.0 ALTERNATIVES

2.1 Introduction

This chapter describes the alternative management actions that could be taken to eliminate the need to issue EFPs for management and monitoring the Pacific whiting shoreside fishery. The primary issues taken into consideration when developing the alternatives were:

- The management approach for the fishery,
- Federal permits and endorsements,
- Recordkeeping and reporting,
- Methods of monitoring catcher vessels at sea, including the funding mechanisms,
- Methods for monitoring catch at the shoreside processors, including the funding mechanisms, and,
- The disposition of overage fish and prohibited species.

Five different approaches to managing and monitoring the Pacific whiting shoreside fishery are defined and analyzed in this EA. The following alternatives, which are fully explained later in this section, include:

- Alternative 1: (No Action) - Require all vessels participating in the Pacific whiting shoreside fishery to sort their catch at sea. Vessels would continue to be included in the pool of vessels that are sampled by the existing WCGOP.

- Alternative 2: (Status Quo) - Continue to use EFPs and manage the fishery as a maximized retention fishery. Vessels would pay for EMS coverage and NMFS would continue to pay for or conduct EMS monitoring and analysis. The states would continue to manage the Pacific whiting shoreside vessels under EFPs.

- Alternative 3: (Groundfish Observers) - Adopt Federal regulations for a maximized retention program with Federal or industry funded observers. Observers would monitor catch retention at sea and collect catch data at the processing facility for fish ticket verification.

- Alternative 4: (Electronic Monitoring System) - Adopt Federal regulations for a maximized retention program with Federal or industry funded EMS and catch monitors. EMS would be used to monitor full retention at sea and catch monitors would collect catch data at the processing facility for fish ticket verification.

- Alternative 5: (Hybrid) - Adopt Federal regulations for a maximized retention program with industry-funded EMS and if needed, Federal observers for monitoring catch retention at sea. Industry funded data compliance monitors would collect catch data for fish ticket verification and to assure data quality. Industry funded plant monitors would collect biological data and transport

donation fish to a food bank storage location.

The No Action Alternative (Alternative 1) defines the default management structure that would occur if EFPs were discontinued and no other program were implemented for the Pacific whiting shoreside fishery. Alternative 2 defines the Status Quo management structure, which has been in place since 1992 under annual EFPs. Alternatives 3, 4 and 5 define different approaches for establishing maximized retention programs with monitor and reporting requirements. The purpose of the programs specified under Alternatives 3, 4, and 5 is to minimize the discarding of catch, while allowing for the collection of accurate total catch data. Alternatives 3, 4 and 5 offer suboptions for funding provisions and handling of overage fish (identified as 3A, 3B, 4A, 4B, 5A and 5B). Alternative 5 is the hybrid alternative, which blend parts of Alternatives 3 and 4. Table 2.1 is a summary of the five alternatives which are described in detail in sections 2.2.1 to 2.2.5.

Table 2.1. Summary of Monitoring Program Alternatives for the Pacific Whiting shoreside Fishery.

Issues	Alternative 1 (No Action) Trip Limit Regime	Alternative 2 (Status Quo) Maximized Retention with annual EFPs	Alternative 3 (Groundfish Observers) Maximized Retention with Observers	Alternative 4 -NMFS Preferred (EMS and Catch monitors) Maximized Retention with EMS and Catch Monitors	Alternative 5 (Hybrid)
Management structure	• Trip limits for species other than whiting • Catch sorted at sea; prohibited species and groundfish must be discarded at sea. • Whiting OY likely to be constrained by projected bycatch of overfished species	• Issue annual EFPs • Maximized retention • Whiting OY may be fully available with fleetwide bycatch limits for overfished species • In cooperation with NMFS, states coordinate and oversee monitoring program	• Implement Federal regulations • Maximized retention • Whiting OY may be fully available with fleetwide bycatch limits for overfished species • With high coverage level, may be adequate to support sector bycatch limits. • NMFS coordinates and oversees monitoring program	• Same As Alternative 3 • NMFS coordinates and oversees monitoring program	• Same As Alternative 3 • NMFS coordinates and oversees monitoring program
Federal permits and endorsements	• Vessels required to have limited entry permit with trawl endorsement	• Vessels required to have limited entry permit with trawl endorsement • Voluntary EFP permit issued annually	• Vessels required to have limited entry permit with trawl endorsement • Annual whiting endorsement to identify intent to fish	• Same As Alternative 3	• Same As Alternative 3 • Whiting endorsement includes vessel requirements (e.g. 100% EMS, carry at-sea observer if needed, report high bycatch areas, mandatory pre-season meeting**)**
Recordkeeping and reporting	• Paper trawl logs • Paper fish tickets • No Federal reporting requirements	• Paper trawl logs - with discard events noted • Paper fish tickets • Begin field testing of electronic logbooks and fish tickets in 2007	• When fully developed, (as early as 2008) require electronic logbooks • Processors - Daily electronic fish ticket submission requirements. Required in 2007 under related action, may be revised as needed by this action	• Same As Alternative 3	• When fully developed, (as early as 2008) require electronic logbooks and electronic fish tickets • Processors - Daily whiting and bycatch reporting requirements (to NMFS) for catch limit monitoring c/

Issues	Alternative 1 (No Action) Trip Limit Regime	Alternative 2 (Status Quo) Maximized Retention with annual EFPs	Alternative 3 (Groundfish Observers) Maximized Retention with Observers		Alternative 4 -NMFS Preferred (EMS and Catch monitors) Maximized Retention with EMS and Catch Monitors		Alternative 5 (Hybrid)
Monitoring shore-based catcher vessels at-sea	• WCGOP observers quantify discards at sea; vessel selected at random from pool of all trawl vessels	• EMS on vessels to monitor maximized retention • NMFS issues EFPs • States manage fishery under EFP • NMFS coordinates EMS monitoring • Retain current authority to place WCGOP observers	• Observers monitor maximized retention at sea and quantify discard events		• EMS used to monitor maximized retention at sea**.** Full coverage of all trips • Retain current authority to place WCGOP observers		• EMS used to monitor maximized retention at sea. Full coverage of all trips • WCGOP observers deployed by NMFS to quantify discard events, if needed. • NMFS funds EMS analysis • Vessels procure EMS service from permitted provider
			3A Federally funded	**3B Industry funded**	**4A Federally funded**	**4B Industry funded NMFS Preferred**	
			• WCGOP selects vessels at random from pool of all trawl vessels • NMFS deploys observers	• Direct pay by industry a/ • NMFS funds infrastructure • Vessels procure observers from permitted provider	• Vessels selected from pool of all trawl vessels • NMFS coordinates EMS • NMFS funds EMS analysis	• Direct pay by industry a/ • NMFS funds EMS analysis • Vessels procure EMS service from permitted provider	
Monitoring shoreside processors	• OR - Port samplers collect fish tickets, prepare landing and prohibited species summaries. Industry samplers collect species composition samples and biological data • WA & CA – Port samplers collect fish tickets, species composition samples and biological data	• OR - Port samplers collect fish tickets, prepare landing and prohibited species summaries. Industry samplers collect species composition samples and biological data • WA & CA – Port samplers collect fish tickets, species composition samples and biological data • States collects and summarize fish ticket data inseason	• Observers sample deliveries at processing facility to collect data for fish ticket verification; salmon counts; and biological data • State port sampler effort may be used elsewhere		• Monitors observe weighing and collect data for fish ticket verification • State port samplers continue to collect biological data • Plant samplers (processor employees) continue to collect age structure data in OR		• Data compliance monitors collect data for fish ticket verification. Direct pay by industry a/ • Plant monitors (processor employees) collect biological data and transport donation catch. • NMFS responsible for overseeing training • Offloads monitored at a level that assures accurate accounting of Chinook salmon and overfished rockfish • Use current industry funding as starting point for number of data compliance monitors that could be hired.
			3A Federally funded	**3B Industry funded**	**4A Federally funded**	**4B Industry funded NMFS Preferred**	
			• WCGOP observers b/ • NMFS deploys observers	• Direct pay by industry a/	• WCGOP observers b/	• Direct pay by industry a/	

Issues	Alternative 1 (No Action) Trip Limit Regime	Alternative 2 (Status Quo) Maximized Retention with annual EFPs	Alternative 3 (Groundfish Observers) Maximized Retention with Observers		Alternative 4 - NMFS Preferred (EMS and Catch monitors) Maximized Retention with EMS and Catch Monitors		Alternative 5 (Hybrid)	
Disposition of Overage Fish	• No overages landed	• Overages reported on fish tickets or overage tickets • Vessel abandons overage and value remitted to state upon landing • Prohibited species donated • State enforcement tracks compliance	• Overages reported on fish tickets and sales abandoned or donated to charity		• Same As Alternative 3		• Same As Alternative 3	
			3A State system (Status Quo)	**3B Federal system**	**4A State system (Status Quo)**	**4B Federal system**	**5A State system (Status Quo)**	**5B Federal system**
			• Overage fish abandoned to state • Prohibited species donated • State enforcement tracks compliance	• Profit from sale of overage fish illegal • Donation program	• Same As Alternative 3	• Same As Alternative 3	• Same As Alternative 3	• Same As Alternative 3

a/ The legal and policy issues for new direct pay observer programs, where industry members pay directly for observer services, have not yet been fully explored.
b/ Vessel and processor observers may or may not be the same individual and would depend on the chosen sample design.
c/ Processors allowed to correct daily reports, however, a penalty will be developed for non-compliance.

2.2 Alternatives

2.2.1 Alternative 1 (No Action): Trip Limit Regime

Management Structure: Under this alternative the management of the Pacific whiting shorebased fishery would revert to a trip limit regime. All catch would be required to be sorted at sea. Vessels using midwater trawl gear in the Pacific whiting shoreside fishery would be subject to prohibitions specified at 50 CFR 660.306 (a)(2) and (6), and 50 CFR 660.405 (a)(1), which prohibit the retention of prohibited species as defined at §§ 660.302 and 660.370 (e), and prohibit the retention of groundfish in excess of cumulative trip limits.

Federal Permits and Endorsements: A Pacific Coast groundfish limited entry permit with a trawl endorsement would be required to participate in the fishery.

Recordkeeping and Reporting: No Federal reports are required of fishers or processors under the No Action Alternative. Federal regulations at 50 CFR 660.303 would continue to require vessels to make and/or file, retain, or make available any and all reports (i.e., logbooks, fish tickets, etc.) of groundfish harvests and landings as required by the applicable state law.

Monitoring Shore-based Catcher Vessels At Sea: Under the No Action Alternative, the WCGOP would be responsible for providing at-sea observer coverage for Pacific whiting shoreside vessels as specified at 50 CRF 660.314 (c)(2). When notified by NMFS of any requirement to carry an observer, the regulations at 50 CFR 660.303 (i)(5) prohibit a vessel from taking and retaining, possessing, or landing any groundfish without a WCGOP observer.

The sampling priorities for WCGOP observers deployed to trawl vessels are to collect data that are used for total catch estimates of each groundfish species or species group over the entire fishing year, and to collect fishery dependent biological data that are otherwise not available on shore. The WCGOP sets coverage priorities for different fisheries and fleets that comprise the groundfish fishery. Observers are deployed on vessels in the active sampling unit or pool of vessels selected for coverage. Vessels in the pool are generally selected at random. However, in the case of the open access fishery observers may be deployed on vessels of opportunity[2]. The proportion of a particular fishery or fleet that receives observer coverage is based on the WCGOP coverage plan.

Although the WCGOP strives for a 20 percent coverage level of vessels in the bottom trawl fisheries, it is likely the Pacific whiting shoreside fishery would be given a lower coverage priority when considering: 1) the data needs of the Pacific whiting fishery relative to the total catch data needs for the entire groundfish fishery, 2) the limited number of observers available to be deployed, 3) current data available from other sectors of the Pacific whiting fishery, and 4) the availability of historical data that can be factored in to catch estimates.

Monitoring Shoreside Processors: Under the No Action Alternative, each state would continue to hire, train, and pay for port biologists to: collect fish ticket data; complete landing summaries; and, to collect biological data. Additional port samplers may also be funded by the PSMFC. In the state of Oregon, industry samplers may continue to be used to collect biological data from whiting and other groundfish that are landed on Pacific whiting trips.

[2]A vessel of opportunity is a vessel that was not prescheduled for coverage; rather, it is a vessel that was contacted prior to leaving on a fishing trip and was willing and able to carry an observer for that trip.

Disposition of Overage Fish: Under this alternative there are no allowances for landing legal overages. Therefore, all overage fish would need to be discarded at sea.

2.2.2 Alternative 2 (Status Quo): Maximized Retention under Annual Exempted Fishing Permits

Management Structure: Under the Status Quo Alternative, the fishery would continue to operate under annual EFPs. Each year, the three states would submit an EFP request to NMFS and NMFS would issue EFPs. The three states would continue to coordinate certain EFP activities including: identification of interested vessels; hosting mandatory meetings; preparing designated shoreside Pacific whiting processor agreements; coordination of inseason data collection and transmission to NMFS; and, preparation of year end summaries.

Under this alternative, a maximized retention program would be defined within the terms and conditions of the EFPs. Vessels targeting Pacific whiting with midwater trawl gear during the primary season for the shore-based sector would be allowed to land unsorted catch that may include species that are prohibited by regulations at 50 CFR 660.306 (a)(2) and (6), and 50 CFR 660.405 (a)(1). Maximized retention encourages full retention of all catch while recognizing that minor discard events that include large animals (>6ft in length) and minor levels of operational discard may occur.

Federal Permits and Endorsements: A Pacific Coast groundfish limited entry permit with a trawl endorsement would be required to participate in the fishery. In addition, each participating vessel would need to apply for and be issued an EFP.

Recordkeeping and Reporting: Under the No Action alternative, Federal regulations at 50 CFR 660.303 would continue to require vessels to make and/or file, retain, or make available any and all reports (i.e., logbooks, fish tickets, etc.) of groundfish harvests and landings as required by the applicable state law. Recordkeeping and reporting requirements needed to support the maximized retention program would be specified within the terms and conditions of the EFP.

Field testing of electronic logbooks could be conducted under the EFP. When requested by the states, NMFS or PSMFC, selected vessels would be required to use electronic logbooks. As the system became more fully developed, the terms and conditions of the EFPs could require all vessels to carry and use electronic logbooks.

Under the terms and conditions of the EFP, vessels may only land catch at processing facilities that are listed as a designated processor. Each state would continue to hold designated processor agreements with the Pacific whiting shoreside processing facilities. Specific requirements for how deliveries of Pacific whiting must be sorted and reported, and how overage fish and prohibited species are to be handled would continue to be specified in the designated processor agreements and state regulations. In the absence of a rulemaking that puts recordkeeping and reporting requirements for Pacific whiting shoreside processing facilities into regulation for 2007, field testing of electronic fish tickets would be on a voluntary basis.

Monitoring Shore-based Catcher Vessels At Sea: Under the Status Quo Alternative, observer and other monitoring requirements would continue to be specified in the terms and conditions of the EFPs.

Vessels could be required to carry a state-sponsored sampler or a WCGOP observer when requested to collect data at-sea. The terms and conditions of the EFPs specify that observer regulations at 50 CFR 660.306 and 50 CFR 660.314 regarding vessel responsibilities and prohibitions, would apply to both state samplers and WCGOP observers. Observer coverage requirements at 50 CFR 660.360 and 50 CFR 660.314 are independent of the EFP, meaning

when notified by NMFS of any requirement to carry an observer under regulations specified at 50 CRF 660.314 (c)(2), a vessel is prohibited from taking and retaining, possessing, or landing any groundfish without a WCGOP observer (50 CFR 660.303 (i)(5)). However, given the full retention management approach for the fishery, the Pacific whiting shoreside fishery would likely be a low priority for WCGOP observer coverage.

Requirements for vessels to have EMS would continue to be specified in the terms and conditions of the EFP and NMFS would continue to maintain a service contract with a qualified EMS provider. Vessel responsibilities specified in the EFP would continue to include: requirements to have EMS coverage to conduct EFP fishing; requirement for EMS installations; prohibition from intentionally damaging EMS equipment; responsibility for scheduling EMS equipment maintenance and data retrieval; need to conduct regular system checks; and, responsibility for scheduling EMS removal. Violations of the terms and conditions of an EFP would continue to be a violation of Federal regulations at 50 CFR 660.306 (a) (4).

Monitoring Shoreside Processors: Under the Status Quo Alternative, the State would continue to hire, train, and pay for port biologists to collect fish ticket data; complete landing summaries, and collect biological data; and verify salmon counts. Additional port samplers may also be funded by the PSMFC. In the state of Oregon, industry samplers would continue to be used to take species composition data, and to collect biological data from groundfish.

Disposition of Overage Fish: Under the Status Quo Alternative, unless otherwise specified, the terms and conditions of the EFP would continue to require vessels to abandon overage fish and prohibited species to the state of landing. Each state would be responsible for the distribution, tracking, and sales of the overage fish. How overages are handled would likely vary between states.

2.2.3 Alternative 3 (Groundfish Observers): a Maximized Retention Program with Observer Monitoring

Management Structure: Under Alternative 3, a maximized retention program would be specified in Federal regulation. The groundfish regulations would be revised to allow vessels targeting Pacific whiting with midwater trawl gear during the primary season for the shore-based sector to land unsorted catch that may include species that are currently prohibited by regulations at 50 CFR 660.306 (a)(2) and (6), and 50 CFR 660.405 (a)(1). Maximized retention encourages full retention of all catch while recognizing that minor discard events that include large animals (>6ft in length) and minor levels of operational discard may occur.

Federal Permits and Endorsements: A Pacific Coast groundfish limited entry permit with a trawl endorsement would be required. A Pacific whiting shoreside endorsement is being considered as part of this alternative. Such an endorsement could be attached to any limited entry permit with a trawl endorsement. The purpose of the endorsement would be to indicate the vessels' intent to fish in the Pacific whiting shoreside fishery.

Recordkeeping and Reporting: Under Alternative 3, recordkeeping and reporting requirements would be specified in Federal regulation. The recordkeeping and reporting requirements would be adequate to support a "real-time" inseason data system (i.e. preliminary catch weights would be available in a central database within a relatively short period of time from the date the was catch landed) as is needed for managing fleetwide or sector bycatch limit management. To the extent possible, Federal recordkeeping and reporting requirements would be consistent with state regulatory requirements to avoid the burden of unnecessary duplication.

As software becomes more fully developed and is adequately field tested, vessels may be

required to submit electronic vessel logbooks. Implementation of a maximized retention program under this alternative would not be delayed by the electronic logbooks development process. If such software is not adequately developed by the effective date of the final action, interim action would be taken and final regulations would be adopted at a later date.

Requirements for vessels to use electronic logbooks are being implemented under the related action, "Catch Accounting Requirements for Pacific Whiting Shoreside Processors/First Receivers Participating in the Shore-based fishery." Revisions to the related action could be taken under this action if the results of the initial year indicate that revisions are needed for 2008. Processors may be required to submit printed electronic fish tickets or state paper fish tickets to meet state regulatory requirements. As with electronic vessel logbooks, it should be noted that implementation of a maximized retention program under this alternative would not be delayed by the electronic fish ticket development process.

To support electronic recordkeeping and reporting, computer hardware and software requirements for vessels and processing facilities would be specified in Federal regulation. Vessels and processors would be required to provide particular computer hardware, operating system, and basic software (i.e. Microsoft Access version 2003 or later is PSMFC software is used). Electronic fish ticket software would be provided at no cost by NMFS or PSMFC or compatible data transmission procedures could be NMFS-approved.

Monitoring Shore-based Catcher Vessels At Sea: Under Alternative 3, observer coverage requirements would be specified in Federal regulation for vessels that target Pacific whiting during the primary season for the shore-based sector. Observers would be deployed on vessels in the Pacific whiting shoreside fishery to monitor compliance with maximized retention regulations and to estimate species and weight of catch that may be discarded at sea. Observers would: provide documentation on compliance with maximized retention regulations; may be able to estimate species and quantities of discarded groundfish; and may collect biological data that would otherwise not be available at the processing facility (i.e. marine mammal and seabird interactions).

> *Alternatives 3A and 3B*: Alternative 3 is further divided into Alternatives 3A for Federally funded observers and Alternative 3B for industry funded observers.
>
> Under Alternative 3A, NMFS would use Federally appropriated funds to provide observers for monitoring Pacific whiting vessels at-sea. This is the funding approach currently used in the non-whiting groundfish fisheries. At this time, the WCGOP funds are the only Federal funds available for hiring observers for the Pacific Coast groundfish fishery. Under this alternative, existing WCGOP funds would be used to provide observer coverage for the Pacific whiting shoreside fishery. Selection of vessels for observer coverage would likely be similar to that described under Alternative 1, the No Action Alternative, or WCGOP could choose to include the Pacific whiting vessels in the same coverage pool as non-whiting trawl fisheries. In the non-whiting or bottom trawl fisheries, vessels are randomly selected from the pool of all trawl vessels. Because existing resources are not adequate to cover a larger pool of vessels, coverage levels in the non-whiting fisheries would likely be reduced below current levels during the summer months, if no additional resources became available.
>
> Under Alternative 3B, vessel owners or operators would be required by regulation to procure the services of a NMFS-certified or -permitted observer from a NMFS permitted observer provider. This type of observer is commonly referred to as a "pay-as-you-go" or "third party" observer. This is the funding approach currently used in the mothership and catcher processor sectors of the Pacific whiting fishery. NMFS would be required to

use existing funds for administrative and analytical infrastructure unless an amendment to the Magnuson-Stevens Act was made to allow NMFS to accept funds directly from industry for administrative and analytical infrastructure costs. Under a Federally regulated pay-as-you-go or third party system fishery participants would be responsible for: making arrangements with a NMFS permitted observer provider; having an observer available for their vessels; and, paying the observer providers directly for the observer costs. The observer providers collect the fees directly from the vessels, recruit qualified individuals, provide insurance and benefits to the observers, deploy the observers, and assure that the observer data is delivered to NMFS.

Monitoring Shoreside Processors: Under Alternative 3, processors would be required to have an observer: to collect data for estimating total catch of groundfish and verifing the accuracy of fish tickets; and, to quantify the total catch of prohibited species, particularly salmon. Because observers are biological technicians, they may also collect biological data on Pacific whiting and other marine species that are landed with Pacific whiting. If adequate observer coverage were obtained under this alternative, industry and port sampler efforts may be available for use in collecting data from non-whiting fishing activities.

Alternatives 3A and 3B: Alternative 3 is further divided into Alternatives 3A for Federally funded observers and Alternative 3B for industry funded observers.

Under Alternative 3A, NMFS would use Federally appropriated funds to provide observers to monitor Pacific whiting deliveries at the shoreside processing facilities. The mechanics of this structure are the same as that described in the previous section (monitoring shore-based catcher vessels at sea) under Alternative 3A. At this time, the WCGOP funds are the only Federal funds available for hiring observers for the Pacific Coast groundfish fishery. Under Alternative 3A, WCGOP observer coverage would be extended to the Pacific whiting shore-based processors. Individual observers assigned to sample at Pacific whiting shoreside processors may be different individuals from the vessel observers and therefore the coverage level would likely to be similar to that described for vessels under Alternative 1, the No Action alternative. Under Alternative 1, the number of observers available to sample at Pacific whiting shoreside processors would be weighed against the need for those same observers to sample other groundfish fisheries to meet the Magnuson-Stevens Act requirements on bycatch accounting. If WCGOP chooses to use the same observer for both the Pacific whiting shoreside vessel and processor, they would likely be included as part of the same coverage pool as non-whiting trawl fisheries. In the non-whiting or bottom trawl fisheries, vessels are randomly selected from the pool of all trawl vessels. Because existing resources would need to cover a larger pool of vessels and processors, coverage levels in the non-whiting fisheries would be reduced below current levels during the summer months.

Under Alternative 3B, Pacific whiting shoreside processors would be required by regulation to procure the services of a NMFS-certified or -permitted observer from a NMFS permitted observer provider. This type of observer is commonly referred to as a "pay-as-you-go" or "third party" observer, this is the funding approach currently used for processors in the mothership and catcher processor sectors of the Pacific whiting fishery. NMFS would be required to use existing funds for administrative and analytical infrastructure because an amendment to the Magnuson-Stevens Act would be required for NMFS to accept funds directly from industry for administrative and analytical infrastructure costs. Under a Federally regulated pay-as-you-go or third party system, fishery participants would be responsible for: making arrangements with a NMFS permitted observer provider; having an observer available for their processing facility; and, paying the observer providers directly for the observer costs. The observer

providers collect the fees directly from the processor, recruit qualified individuals, provide insurance and benefits to the observers, deploy the observers, and assure that the observer data is delivered to NMFS.

Disposition of Overage Fish: Federal regulations would specify how overage fish and prohibited species must be handled.

Alternatives 3A and 3B: Alternative 3 is further divided into Alternative 3A for a state system in which overage fish and prohibited species are abandoned to the state of landing and Alternative 3B for a Federal system in which overage fish and prohibited species cannot be sold.

Under Alternative 3A, overage fish would continue to be abandoned to the state of landing. Vessels would be required to abandon all overage fish and prohibited species. The weight and/or number of species being abandoned would be required to be reported on fish tickets. Payment from the sales of overage fish that are required to be remitted shall be at "fair market" value. This structure was defined above under Alternative 2.

Under Alternative 3B, Federal regulations would prohibit the sale of overage fish and prohibited species. However, overage fish and prohibited species could be donated to a hunger relief organization.

2.2.4 Alternative 4 (Electronic Monitoring System): a Maximized Retention Program with an EMS for Monitoring Vessels at Sea and Catch Monitors for Verification of Fish Ticket Data.

Management Structure: Under Alternative 4, a maximized retention program would be specified in Federal regulation. The groundfish regulations would be revised to allow vessels targeting Pacific whiting with midwater trawl gear during the primary season for the shore-based sector to land unsorted catch that may include species that are currently prohibited by regulations at 50 CFR 660.306 (a)(2) and (6), and 50 CFR 660.405 (a)(1). Maximized retention encourages full retention of all catch while recognizing that minor discard events that include large animals (>6ft in length) and minor levels of operational discard may occur.

Federal Permits and Endorsements: A Pacific Coast groundfish limited entry permit with a trawl endorsement would be required. A Pacific whiting shoreside endorsement is being considered as part of this alternatives. Such an endorsement could be attached to any limited entry permit with a trawl endorsement. The purpose of the endorsement would be to indicate the vessels' intent to fish in the Pacific whiting shoreside fishery.

Recordkeeping and Reporting: Under Alternative 4, recordkeeping and reporting requirements would be specified in Federal regulation. The recordkeeping and reporting requirements would be adequate to support a "real-time" inseason data system (i.e. preliminary catch weights would be available in a central database within a relatively short period of time from the date the was catch landed) as is needed for managing fleetwide or sector bycatch limit management. To the extent possible, Federal recordkeeping and reporting requirements would be consistent with state regulatory requirements so that the burden of unnecessary duplication can be avoided.

As the software becomes more fully developed and is adequately field tested, vessels may be required to submit electronic vessel logbooks. Requirements for vessels to use electronic logbooks could be implemented as early as 2008. However, it should be noted that implementation of a maximized retention program under this alternative would not be delayed by the electronic logbooks development process. If such software is not adequately developed by the effective date of the final action, interim action would be taken and electronic logbook requirements would be adopted into final regulation at a later date.

Requirements for processors to use electronic fish tickets are being implemented under the related action, "Catch Accounting Requirements for Pacific Whiting Shoreside Processors/First Receivers Participating in the Shore-based fishery." Processors may be required to submit printed electronic fish tickets or state paper fish tickets to meet state regulatory requirements. As with electronic vessel logbooks, it should be noted that implementation of a maximized retention program under this alternative would not be delayed by the electronic fish ticket development process.

To support electronic recordkeeping and reporting, computer hardware and software requirements for vessels and processing facilities would be specified in Federal regulation. Vessels and processors would be required to provide particular computer hardware, operating system, and basic software (i.e. Microsoft Access version 2003 or later is PSMFC software is used). Electronic fish ticket software would be provided at no cost by NMFS or PSMFC or compatible data transmission procedures could be NMFS-approved.

Monitoring Shore-based Catcher Vessels At Sea: Under Alternative 4, EMS coverage requirements would be specified in Federal regulation for vessels that target Pacific whiting during the primary season for the shore-based sector. EMS would be installed on vessels in the Pacific whiting shoreside fishery to monitor compliance with maximized retention regulations. EMS has been used to document retention and/or discard of catch. EMS is a data collection tool that uses a software operating system connected to an assortment of electronic components, including video recorders, to create a data collection of vessel activities. The EMS is designed to independently monitor vessel fishing activities and provide accurate, timely, and verifiable data. Because EMS would be used as a compliance monitoring tool, NMFS believes it is necessary for 100 percent of the Pacific whiting trips to be monitored.

EMS requirements specified in Federal regulations would include: EMS service provider permitting process; EMS service provider responsibilities; EMS service provider data confidentiality standards, EMS coverage requirements for vessels; prohibitions against intentionally damaging EMS equipment on vessels; vessel responsibilities for scheduling EMS installations, equipment, maintenance and data retrieval; and, vessel responsibilities for scheduling EMS removal.

> *Alternatives 4A and 4B*: Alternative 4 is further divided into Alternatives 4A for Federally funded EMS and Alternative 4B for industry funded EMS.
>
> Under Alternative 4A, (Status Quo) NMFS would use existing WCGOP funds to provide EMS for monitoring Pacific whiting vessels at-sea. Currently, no money is available specifically for the implementation of an EMS monitoring program in the Pacific whiting shoreside fishery. Under Alternative 4A, only a small number of EMS units may be provided. Vessels chosen to use EMS could be selected at random from the pool of all Pacific whiting shoreside vessels. Given the need to use WCGOP base funds for observer coverage in non-whiting groundfish fisheries, the availability of Federal funds to provide for EMS coverage in the Pacific whiting shoreside fishery would likely be quite low.
>
> Under Alternative 4B, vessel owners or operators would be required by regulation to procure EMS services from a permitted EMS service provider. NMFS would be required to use base funds for administrative costs and analysis without an amendment to the Magnuson-Stevens Act to allow NMFS to accept funds directly from industry for administrative and analytical infrastructure costs. The fishing industry would be responsible for: making arrangements with an EMS permitted observer provider; having an EMS available for their vessel; and, paying directly for the EMS costs. The EMS service providers collect the fees directly from the vessels; purchase and maintain EMS

equipment; provide for timely installation and removal of EMS equipment; and, assure that the EMS data analysis is delivered to NMFS.

Monitoring Shoreside Processors: Under Alternative 4, dockside monitoring at Pacific whiting shoreside facilities would be conducted by catch monitors. The phrase "catch monitor" is being used in a general sense to describe individuals whose duty station is at the Pacific whiting shoreside processing facilities and who collect independent data that can be used for verification of fish tickets or used to evaluate the accuracy of fish tickets.

Catch monitors under this action could be defined as any of following individuals or be specifically defined to meet the identified needs of the proposed program:

- *Observers* are biological technicians, educated in the natural sciences, trained in species identification and biological sampling. They collect catch and effort data used to estimate total catch;

- *Weigh masters* are standards inspectors that are employed by the states, by independent third parties, or are self employed and who are licensed or certified as a weigh master. These individuals are trained in the types and use of commercial scales, species identification, recordkeeping, and non-compliance. Weigh masters monitor weighing activities for accuracy, and sign or certify fish ticket weights;

- *Enforcement technicians* are individuals employed by NMFS OLE who are trained in compliance standards and species identification and who monitor the weighing process for compliance with weighing and sorting requirements (see section 2.3 Alternatives considered but rejected from detailed analysis);

- *Port samplers* are biological aides who are employed by the states or PSMFC and trained in interviewing fishermen, species identification, recordkeeping, and summarizing basic field data;

- *Industry samplers* are individuals directly employed by the processors who have basic training in biological data collection[3] and species identification and who collect basic biological information on the catch and catch composition.

Monitoring Shoreside Processors (NMFS preferred approach)

- Data Quality Monitors - third party employees paid for by industry and trained by NMFS in techniques used for the verification of fish ticket data. These individuals would be trained in: species identification; observation and sub-sampling techniques relative to the verification of fish ticket data; the types and use of commercial scales; documentation procedures for compliance purposes; and recordkeeping. NMFS would define verification methods and would coordinate or conduct the training of these individuals. One data quality monitor would be required at each Pacific whiting first receiver. NMFS would work with PSMFC to provide oversight to the program for data quality purposes.

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[3] The use of processors as samplers in Oregon was based on a cooperative research development study conducted in 1998 (Builder 2000). The study examined the quality of fish length data collected by processors who were provided with basic training. The study found that the length data collected by trained processors was adequate to provide much need length data for stock assessment purposes. The accuracy of catch data used for management of the fishery was not evaluated in this study.

- Industry samplers and port biologists would continue to collect fishery dependent data with the decision to use industry samplers and/or port biologists to collect length data being made by the individual states. Training of industry samplers in species identification and measuring techniques would be coordinated by NMFS. These individuals would be responsible for storing and enumerating prohibited species, retrieving salmon snouts and coded wire tags, and transporting prohibited species for food bank donation.

Alternatives 4A and 4B: Alternative 4 is further divided into Alternatives 4A for Federally funded catch monitors and Alternative 4B for industry funded catch monitors.

Under Alternative 4A, NMFS would use Federally appropriated funds to monitor Pacific whiting deliveries at the shoreside processing facilities. At this time, there are no Federal funds specifically appropriated for catch monitors for Pacific whiting shoreside processors. Therefore, a Federally funded program would use observers as catch monitors unless other funds became available. This is the same structure as was described above for Alternative 3A in the section titled "monitoring shoreside processors".

Under Alternative 4B, Pacific whiting shoreside processors would be required by regulation to procure the services of a catch monitor. NMFS would be required to use existing funds for administrative and analytical infrastructure because an amendment to the Magnuson-Stevens Act would be required for NMFS to accept funds directly from industry for administrative and analytical infrastructure costs. Under a Federally regulated third party system, the fishing industry would be responsible for: procuring the services of a catch monitor; having the catch monitor available at the processing facility; assuring that the specified coverage requirements are met; and, paying for the services of the catch monitor.

Disposition of Overage Fish: Federal regulations would specify how overage fish and prohibited species must be handled.

Alternatives 4A and 4B: Alternative 4 is further divided into Alternative 4A for a state system in which overage fish and prohibited species are abandoned to the state of landing and Alternative 4B for a federal system in which overage fish and prohibited species cannot be sold.

Under Alternative 4A, overage fish would continue to be abandoned to the state of landing. Vessels would be required to abandon all overage fish and prohibited species. The weight and/or number of species being abandoned would be required to be reported on fish tickets. Payment from the sales of overage fish that are required to be remitted shall be at "fair market" value. This structure was defined above under Alternative 2.

Under Alternative 4B, Federal regulations would prohibit the sale of overage fish and prohibited species. However, overage fish and prohibited species could be donated to a hunger relief organization.

2.2.5 Alternative 5 (Hybrid): a Maximized Retention Program with an EMS for Monitoring Vessels at Sea, Compliance Monitors for Verification of Fish Ticket Data, and Plant Monitors for the Collection of Biological Data.

Management Structure: Under Alternative 5, a maximized retention program would be specified in Federal regulation. The groundfish regulations would be revised to allow vessels targeting

Pacific whiting with midwater trawl gear during the primary season for the shore-based sector to land unsorted catch that may include species that are currently prohibited by regulations at 50 CFR 660.306 (a)(2) and (6), and 50 CFR 660.405 (a)(1). Maximized retention encourages full retention of all catch while recognizing that minor discard events that include large animals (>6ft in length) and minor levels of operational discard may occur. As with Alternatives 3 and 4, adopting a monitoring program for the Pacific whiting shoreside fishery into Federal regulation implies that NMFS would provide oversight, including the coordination of the monitoring program.

Federal Permits and Endorsements: A Pacific Coast groundfish limited entry permit with a trawl endorsement would be required. A Pacific whiting shoreside endorsement is being considered as part of this alternatives. Such an endorsement could be attached to any limited entry permit with a trawl endorsement. The purpose of the endorsement would be to indicate the vessels' intent to fish in the Pacific whiting shoreside fishery. The endorsement could be used to define other requirements of participation such as, EMS coverage, at-sea observer coverage as requested, reporting of high bycatch areas, and mandatory participation in a pre-season meeting.

Recordkeeping and Reporting: Under Alternative 5, recordkeeping and reporting requirements would be specified in Federal regulation. Processors would be required to submit a summarized version of state fish ticket data daily. Processors would be allowed to correct daily reports. A penalty will be developed for processors who do not correct daily reports.

As the software becomes more fully developed and is adequately field tested, vessels may be required to submit electronic vessel logbooks. Requirements for vessels to use electronic logbooks could be implemented as early as 2008. However, it should be noted that implementation of a maximized retention program under this alternative would not be delayed by the electronic logbook development process. If such software is not adequately developed by the effective date of the final action, interim action would be taken and electronic logbook requirements would be adopted into final regulation at a later date.

As software for electronic fish tickets becomes more fully developed and is adequately field tested, processors would be required to submit electronic fish tickets daily. Processors may be required to submit printed electronic fish tickets or state paper fish tickets to meet state regulatory requirements. As with electronic vessel logbooks, it should be noted that implementation of a maximized retention program under this alternative would not be delayed by the electronic fish ticket development process. Electronic fish ticket requirements would be adequate to support a real-time inseason data system (i.e. Microsoft Access version 2003 or later is PSMFC software is used). Electronic fish ticket software would be provided at no cost by NMFS or PSMFC or compatible data transmission procedures could be NMFS-approved.

To support electronic recordkeeping and reporting, computer hardware and software requirements for vessels and processing facilities would be specified in Federal regulation. Vessels and processors would be required to provide a personal computer, operating system, and basic software (i.e. Microsoft Access version 2003 or later is PSMFC software is used). Electronic fish ticket software would be provided at no cost by NMFS or PSMFC or compatible data transmission procedures could be NMFS-approved.

Monitoring Shore-based Catcher Vessels At Sea: Under Alternative 5, EMS coverage requirements would be specified in Federal regulation for vessels that target Pacific whiting during the primary season for the shore-based sector. EMS would be installed on vessels in the Pacific whiting shoreside fishery to monitor compliance with maximized retention regulations. EMS has been used to document retention and/or discard of catch. EMS is a data collection tool that uses a software operating system connected to an assortment of electronic components,

including video recorders, to create a data collection of vessel activities. The EMS is designed to independently monitor vessel fishing activities and provide accurate, timely, and verifiable data. As with Alternative 4B, full EMS coverage would be used so all Pacific whiting trips are monitored.

EMS requirements specified in Federal regulations would include: EMS service provider permitting process; EMS service provider responsibilities; EMS service provider data confidentiality standards, EMS coverage requirements for vessels; prohibitions against intentionally damaging EMS equipment on vessels; vessel responsibilities for scheduling EMS installations, equipment, maintenance and data retrieval; and, vessel responsibilities for scheduling EMS removal.

Vessel owners or operators would be required by regulation to procure EMS services from a permitted EMS service provider. NMFS would be required to use base funds for administrative costs and analysis without an amendment to the Magnuson-Stevens Act to allow NMFS to accept funds directly from industry for administrative and analytical infrastructure costs. The fishing industry would be responsible for: making arrangements with an EMS permitted observer provider; having an EMS available for their vessel; and, paying directly for the EMS costs. The EMS service providers: collect the fees directly from the vessels; purchase and maintain EMS equipment; provide for timely installation and removal of EMS equipment; and, assure that the EMS data analysis is delivered to NMFS.

Monitoring Shoreside Processors: Under Alternative 5, dockside monitoring at Pacific whiting shoreside facilities would be conducted by two different types of catch monitors who collect independent data that can be used for verification of fish tickets, for the collection of biological data, and for transporting donation catch .

Catch monitors under this action could be defined as any of following individuals:

> *Data compliance monitors*: independent individuals hired through a third party who collect data to verify fish ticket data and verify information collected by plant monitors, and provide information to NMFS.
>
> *Industry monitors*: plant employees who have basic training in biological data collection and species identification and who collect biological information on the catch. These individuals would be responsible observing vessel offload, conducting bycatch species composition, enumerating and storing prohibited species, retrieving salmon snouts and other coded wire tag (CWT), transporting prohibited species for food bank donation, and collecting biological information for Pacific whiting and for predominate bycatch species.

Disposition of Overage Fish: Federal regulations would specify how overage fish and prohibited species must be handled.

Alternatives 5A and 5B: Alternative 5 is further divided into Alternative 5A for a state system in which overage fish and prohibited species are abandoned to the state of landing and Alternative 5B for a federal system in which overage fish and prohibited species cannot be sold.

> Under Alternative 5A, overage fish would continue to be abandoned to the state of landing. Vessels would be required to abandon all overage fish and prohibited species. The weight and/or number of species being abandoned would be required to be reported on fish tickets. Payment from the sales of overage fish that are required to be remitted shall be at “fair market” value. This structure was defined above under Alternative 2.

Under Alternative 5B, Federal regulations would prohibit the sale of overage fish and prohibited speicies. However, overage fish and prohibited species could be donated to a hunger relief organization.

2.3 Alternatives Considered but Eliminated from the Detailed Analysis

Approaches that were considered but not analyzed in this document, include:

- ➢ Amending the Pacific Coast Groundfish and Pacific Salmon FMPs to allow salmon taken with trawl gear to be retained and landed without the development of an adequate monitoring mechanism;
- ➢ Using existing Federally funded WCGOP observers at coverage levels that are greater than coverage levels in the non-whiting trawl fisheries to monitor maximized retention at sea;
- ➢ Having NMFS enforcement agents or enforcement officers monitor maximized retention at sea or to monitor weighing activities at shoreside processing facilities;
- ➢ Having state funded maximized retention monitors at sea or for monitoring weighing activities at shoreside processing facilities;
- ➢ A maximized retention program with unmonitored fishing at sea;
- ➢ A maximized retention program with less than 100 percent of the hauls being monitored at sea;
- ➢ Vessel owned EMS equipment or EMS equipment from non-permitted service providers;

Amending the Pacific Coast Groundfish and Pacific Salmon FMPs to allow salmon taken with trawl gear to be retained and landed without an adequate monitoring mechanism. Management of the salmon and groundfish fisheries has changed substantially since the mid-1990's, when it was first determined that monitoring of salmon retained by vessels using trawl gear was necessary. Since the mid-1990s, new salmon ESUs have been listed under the ESA, commercial salmon fisheries have been severely restricted, and the importance of bycatch reduction and accounting have been mandated by the Magnuson-Stevens Act. Allowing unmonitored landings of trawl caught salmon would not be consistent with the ESA or the Magnuson-Stevens Act.

Using existing Federally funded WCGOP observers at coverage levels that are greater than coverage levels in the non-whiting trawl fisheries to monitor maximized retention at sea. The sampling priorities for WCGOP observers deployed to trawl vessels are to collect data that are used for total catch estimates of each groundfish species or species group over the entire fishing year, and to collect fishery dependent biological data that are otherwise not available on shore. The WCGOP sets coverage priorities for different fisheries and fleets that comprise the groundfish fishery. Observers are deployed on vessels in the active sampling unit, and vessels are selected at random for coverage. The target coverage level for a particular fishery or fleet is based on the WCGOP coverage plan, which is driven by total catch and bycatch data needs.

It is likely the Pacific whiting shoreside fishery would be given one of the lowest coverage

priorities by the WCGOP when considering: 1) the data needs of the Pacific whiting fishery relative to needs for the entire groundfish fishery, 2) the limited number of observers, 3) data availability from other sectors of the Pacific whiting fishery, and 4) the availability of historical data. To require greater observer coverage would have a direct effect on the ability of the WCGOP to monitor other fisheries and to meet the Magnuson-Stevens Act mandates.

Having NMFS enforcement agents or enforcement officers monitor maximized retention at sea or to monitor weighing activities at shoreside processing facilities.
No funds are currently available for the development a catch monitoring program by NMFS OLE.

Having state funded maximized retention monitors at sea or for monitoring weighing activities at shoreside processing facilities.
None of the three states participating in the management of this fishery have funds available for the development or ongoing support of a monitoring program for the Pacific whiting shoreside fishery. Resources available for catch monitoring are limited and can vary greatly between years. Basing future regulatory requirements on an unknown funding base could result in either the fishery being severely constrained or data and monitoring needs being unmet.

A maximized retention program with unmonitored fishing at sea or a maximized retention program with less than 100 percent of the hauls being monitored at sea.
To verify maximized retention of catch in the Pacific whiting shoreside whiting fishery, it is necessary for all vessels to be monitored from the time that the first haul is retrieved until the time that the catch is offloaded at the processing facility. The sampling scheme applied to the Pacific whiting shoreside fishery is a census, meaning that the total catch values are not derived from estimates or extrapolations, but from actual counts or weights of each species or species complex. NMFS determined that a level of 100 percent monitoring was the only monitoring level that was appropriate for accurately documenting compliance with maximized retention.

Because the catch of prohibited species and overfished species are rare and intermittent, any discarding at sea of these species would also be rare and intermittent. Only high levels of monitoring are appropriate for documenting such occurrences.

Vessel owned EMS equipment or EMS equipment from non-permitted service providers.
Having equipment that meets a specific performance standard is critical to the success of an EMS based monitoring program. At this time, this is a relatively new monitoring tool for fisheries management and there are no Federal equipment or performance standards for EMS systems, nor has there been a type-approval process developed for EMS systems. The development of either Federal standards or a type approval processes are timely and costly. In the absence of either Federal standards or a type approved process, and given the rapid change in technology, NMFS believes that permitting EMS providers will assure that the EMS equipment used to monitor the Pacific whiting fishery meets the needs of the fishery and fisheries management, while allowing new EMS providers to enter the fishery.

Permitting EMS service providers allows for better oversight of the businesses that handle confidential EMS data. Allowing EMS services to be provided without a permitting process may impair the ability to remove or sanction business who do not provide adequate service or who do not abide by the defined responsibilities.

3.0 AFFECTED ENVIRONMENT

This chapter describes the Pacific Coast groundfish fishery and the resources that would be affected by the alternative action. Physical resources are discussed in Chapter 3.1, biological resources are described in Chapter 3.2, and socio-economic resources are described in Chapter 3.3. Other recent NEPA documents prepared for the Pacific Coast groundfish fishery provide detailed information pertaining to the physical, biological and socio-economic environment. These NEPA documents include: the EIS for the Pacific Coast Groundfish Fishery Management Plan, EFH Designation and Minimization of Adverse Impacts; the EIS prepared for the Proposed Acceptable Biological Catch and Optimum Yield Specifications and Management Measures for the 2007-2008 Pacific Coast Groundfish Fishery; and; the EA for a related action titled "Catch Accounting Requirements for Pacific Whiting Shoreside Processors/First Receivers Participating in the Shore-based fishery." Rather than repeat information detailed in the other NEPA documents, the information has been summarized in this document and the reader is referred to the appropriate sections in the other NEPA documents for further detail.

3.1 Physical Characteristics of the Affected Environment

The coastal ocean off Washington, Oregon, and California is a biogeographic region that is referred to as the Coastal Upwelling Domain (Ware and McFarlane 1989). Coastal upwelling results in high production of phytoplankton from April through September fueled by the nearly continuous supply of nutrients, and a high biomass of copepods, euphausiids and other zooplankton during summer. The Coastal Upwelling Domain is part of the California Current system. The California Current is a broad, slow, meandering current that moves toward the equator. In deep waters offshore of the continental shelf, the currents flow southward all year round; however, over the continental shelf, southward flows occur only in spring, summer, and fall. During winter months, the flow over the shelf reverses, and the water moves northward as the Davidson Current.

Pacific whiting are a California current species that undertake an extended spawning migration during which the adults swim south to spawn in the southern California Bight in fall and winter. Pacific whiting migrate from as far north as Vancouver Island to southern California, a distance of several thousand kilometers. The Pacific whiting fishery has historically occurred during the northern migration of adults. The northern migrating adults and the northward drift of larvae and juveniles takes place at depths where fish take advantage of the poleward undercurrent.

The physical environment and its relation to Pacific whiting are more fully described in the April 2007 EA for a related action titled "Catch Accounting Requirements for Pacific Whiting Shoreside Processors/First Receivers Participating in the Shore-based fishery". In addition, the Pacific Coast Groundfish Fishery Management Plan, EFH Designation and Minimization of Adverse Impacts, contains detailed information on the physical environment. Readers who are interested in detailed information on the West Coast marine habitat and physical oceanography are referred to Section 3.2 of the final EFH EIS. A copy of the EFH EIS can be obtained by contacting the Sustainable Fisheries Division, Northwest Region, NMFS, 7600 Sand Point Way, NE, Seattle, WA 98115–0070; or viewing the internet posting at www.nwr.noaa.gov/Groundfish-Halibut/Groundfish-Fishery-Management/NEPA-Documents/index.cfm.

3.2 Biological Characteristics of the Affected Environment

There are over 90 species of groundfish managed under the groundfish FMP. These species include over 60 species of rockfish in the family Scorpaenidae, 7 roundfish species, 12 flatfish species, assorted sharks, skates, and a few miscellaneous bottom-dwelling marine fish species.

The groundfish species occur throughout the EEZ and occupy diverse habitats at all stages in their life history.

Pacific whiting range from Sanak Island in the western Gulf of Alaska to Magdalena Bay, Baja California Sur. They are most abundant in the California Current System (Bailey 1982; Hart 1973; Love 1991; NOAA 1990). In general, Pacific whiting is a very productive species with highly variable recruitment patterns (recruitment-the biomass of fish that mature and enter the fishery each year) and a relatively short life span when compared to most other groundfish species. In 1987, the Pacific whiting biomass was at a historically high level due to an exceptionally large number of fish that spawned in 1980 and 1984 (fished spawned during a particular year are referred to as year classes). As these large year classes passed through the population and were replaced by moderate sized year classes, the overall size of the Pacific whiting stock declined. The Pacific whiting stock stabilized between 1995 and 1997, but then declined to its lowest level in 2001. The female spawning biomass of Pacific whiting in 2001 was estimated to be less than 20 percent of the unfished biomass. As a result, the stock was believed to be below the overfished threshold ($B_{25\%}$) and was declared overfished on April 15, 2002 (67 FR 18117).

Since 2001, the Pacific whiting stock has increased substantially due to a strong 1999 year class that matured and entered the spawning population. NMFS announced that the Pacific whiting stock was estimated to be above the target rebuilding biomass ($B_{40\%}$) in 2003 and was no longer considered to be an overfished stock. A Pacific whiting stock assessment was prepared in early 2006, and the Pacific whiting biomass was estimated to be between 31 percent and 38 percent of its unfished biomass. In 2006, the U.S. ABC (73.88 percent of the U.S.-Canada coastwide ABC) was 518,294 mt and the U.S. total catch OY with a 40-10 precautionary adjustment was 269,069 mt. In the absence of a strong year class recruiting to the fishery, the Pacific whiting stock is projected to decline to near or below the overfished threshold in the next few years. A 2007 stock Pacific whiting stock assessment which was available to the Council at its March 2007 meeting shows that the stock biomass is continuing to decline.

Species that are incidentally taken in the Pacific whiting fishery may be commingled with Pacific whiting or merely in the vicinity of Pacific whiting schools, depending on the relationships between the various species. The most common groundfish species taken in EFP catches between 2002 and 2006 include: yellowtail rockfish, widow rockfish, sablefish, spiny dogfish (*Squalus acanthias*), chilipepper rockfish and lingcod. Major factors affecting bycatch are: area, depth, season, time of day, and environmental conditions. Overall abundance of a particular species is also relevant.

The Magnuson-Stevens Act requires an FMP to rebuild overfished stocks. The term "overfished" describes a stock whose abundance is below its overfished/rebuilding threshold. Overfished/rebuilding thresholds are generally linked to the same productivity assumptions that determine the ABC levels. In 2007, seven groundfish species continue to be designated as overfished: bocaccio (south of Monterey), canary rockfish, cowcod (south of Point Conception), darkblotched rockfish, Pacific ocean perch, widow rockfish, and yelloweye rockfish. The most common overfished groundfish species taken in Pacific whiting shoreside fishery between 2002 and 2006 have been widow rockfish, canary rockfish, POP, and darkblotched rockfish. The Pacific whiting fishery has no impact on overfished cowcod and bocaccio stocks because these stocks are found farther south than where the Pacific whiting fishery has historically occurred.

Non-groundfish species are also encountered in the Pacific whiting shoreside fishery. Species managed under the Coastal Pelagic Species Fishery Management Plan were incidentally taken in the Pacific whiting shoreside fishery between 2000 and 2006, including jack mackerel (*Trachurus symmetricus*), Pacific mackerel (*Scomber japonicus*), and squid. Like Pacific

whiting, mackerel are schooling species that are not associated with the ocean bottom, and that migrate in coastal waters. In addition, walleye pollock (*Theragra chalcogramma*) and American shad (*Alosa sapidissima*) were observed in the fishery between 2001 and 2006.

Prohibited species, including salmon (primarily Chinook salmon), Dungeness crab, and Pacific halibut are also encountered in the fishery. Chinook is the salmon species most likely to be affected by the groundfish fishery because of the spatial/temporal overlap between the Pacific whiting fishery and the distribution of Chinook salmon such that it could result in incidental take of listed salmon. Infrequent encounters with marine mammals have also been documented in the Pacific whiting shoreside fishery.

The biological environment and its relation to the Pacific whiting shoreside fishery were fully described in a April 2007 EA for a related action titled "Catch Accounting Requirements for Pacific Whiting Shoreside Processors/First Receivers Participating in the Shore-based fishery" and are not repeated in this EA. Readers who are interested in further biological information including information on the status of the groundfish resources, are referred to Section 4.0 of the EIS, prepared for the Proposed Acceptable Biological Catch and Optimum Yield Specifications and Management Measures for the 2007-2008 Pacific Coast Groundfish Fishery. Copies of the EIS can be obtained from the Council, by writing to 7700 NE Ambassador Place, Suite 200, Portland, OR 97220-1384; or calling 503-820-2280; or viewing the internet posting at http://www.pcouncil.org. Appendix B2 to the final EFH EIS titled: The Pacific Coast Groundfish Fishery Management Plan, EFH Designation and Minimization of Adverse Impacts, also contains detailed information on the life histories of the groundfish species. A copy of the EFH EIS can be obtained by contacting the Sustainable Fisheries Division, Northwest Region, NMFS, 7600 Sand Point Way, NE, Seattle, WA 98115–0070; or viewing the internet posting at www.nwr.noaa.gov/Groundfish-Halibut/Groundfish-Fishery-Management/NEPA-Documents/index.cfm.

3.3 Socio-Economic Characteristics of the Affected Environment

3.3.1 The Pacific Whiting Shoreside Fishery

Section 1.4 of this document describes the management structure of the Pacific Whiting Shoreside Fishery, including how EFPs have been used to support a catch monitoring program. The purpose of this section is to describe the socio-economic environment related to the alternative action including: allocations, recent harvests, harvesters, processors, and fishing communities where Pacific whiting are landed and processed. Detailed information on the socio-economic environment as it relates to the shoreside processing sector was presented in the April 2007, EA for a related action titled "Catch Accounting Requirements for Pacific Whiting Shoreside Processors/First Receivers Participating in the Shore-based fishery" and therefore will not be repeated in this EA. Readers who are interested in reading more about the socio-economic characteristics of the affected environment as they relate to Pacific whiting harvest levels, sector allocations, season start dates, and shoreside processors are referred to the EA for the related action. Relevant information on Pacific whiting shoreside vessels, the monitoring and catch accounting mechanisms for the fishery, and Pacific whiting communities are presented in this EA.

Pacific Whiting Shoreside Vessels: Vessels participating in the Pacific whiting shore-based fishery are required to have a general limited entry groundfish permit with a trawl endorsement. In 2007, there are approximately 175 limited entry trawl permits, with trawl endorsements that are identified as being registered to a catcher processor vessels in the Pacific whiting fishery. Any of those permits could be used by a vessel wishing to participate in the Pacific whiting

shoreside fishery.

The number of catcher vessels participating in the Pacific whiting primary season fishery (EFP and non-EFP vessels) has varied slightly over the past several years. Total shore-based vessel participation has ranged from thirty-eight vessels in 2000, to thirty-one vessels in 2002, with subsequent years participation being within that range. Though most Pacific whiting shoreside vessels are less than 80 feet (ft) in length, the proportion of vessels less than 80 ft has decreased from 68 percent of the fleet in 2002 to 58 percent of the fleet in 2006. Table 3.3.1.1. shows the numbers of vessels by length group that participated in the Pacific whiting shoreside fishery between 2002 and 2006.

In addition to the Pacific whiting primary season, vessels participating in the Pacific whiting shoreside fishery also participate in other West Coast fisheries. Most Pacific whiting shoreside vessels also participate in the bottom trawl groundfish fishery and my Pacific whiting shoreside vessels landed catch in the coastal pelagic and crab fisheries. Catch data shows that Pacific whiting shoreside vessels have landed catch in every other West Coast fishery management group; however revenues from the shrimp, salmon, and highly migratory fisheries may be considered minor compared to revenues from the general groundfish and crab fisheries. Table 3.3.1.1. shows the estimated revenues by fishery that vessels actively engaged in the Pacific whiting shoreside fishery received from their participation in the Pacific whiting and other West Coast fisheries between 2002 and 2006. In addition to West Coast fisheries, several whiting vessels also participate in the Alaska groundfish fisheries. Revenues from participation in the Alaska fisheries are not shown here.

Average gross revenues per vessel have more than doubled since 2002. Gross revenues from Pacific whiting in 2002 were approximately $139,606 per vessel and have increased to $454,728 and $379,014 per vessel in 2005 and 2006 respectively (Table 3.3.1.2). During this same period, the exvessel price of Pacific whiting increased from approximately $0.045 per pound in 2002 to $0.062 per pound in 2006 as the demand for Pacific whiting has increased, particularly in the export market for headed and gutted product. With higher OYs in 2005 and in 2006 than were available from 2002 to 2004, the average number of pound harvested by each vessel also increased from 2002 to 2006 (Table 3.3.1.3). Assuming that changes in gross revenues are an indicator of changes in net revenues, then the increase interest in participation in the Pacific whiting shoreside fishery in 2007 is likely due to increasing net revenues.

Table 3.3.1.1. Revenue of Shore-Based Pacific Whiting Vessels by Year, Vessel Length, and Species Management Group, 2002-2006. (PacFIN January 2007)

Year	Vessel Length (ft)	No. of vessels issued EFPs	Pacific Whiting ($)	Crab ($)	Other Groundfish ($)	Other Species ($)	Shrimp/Prawn ($)
2002	<70	5	412,086	407,138	715,279	(D)	172,494
	70-74	5	914,620	91,871	397,033	(D)	160,585
	75-79	10	1,403,347	252,184	597,202	(D)	46,746
	80-84	4	770,883	389,005	421,834	2,932	--
	85-89	4	687,231	--	177,398	(D)	--
2002 Total		30	4,188,166	1,140,198	2,308,745	4,414	379,824
2003	<70	8	537,890	1,238,027	1,103,348	(D)	279,582
	70-74	4	931,816	237,971	545,605	(D)	98,839
	75-79	11	1,877,797	1,267,603	1,171,440	1,607	36,114
	80-84	3	595,391	794,243	236,531	(D)	--
	85-89	5	856,464	--	54,049	2,085	--
2003 Total		34	5,715,780	5,260,538	3,218,331	11,371	414,535
2004	<70	4	808,740	1,673,677	819,442	(D)	--
	70-74	6	2,055,228	726,841	1,640,110	3,835	--
	75-79	6	2,193,020	802,903	968,681	7,262	--
	80-84	4	1,681,745	454,976	840,124	19,092	(D)
	85-89	4	1,152,754	--	60,870	2,673	--
	>89	2	(D)	--	(D)	(D)	--
2004 Total		26	7,890,487	3,658,397	4,329,226	39,861	(D)
2005	<70	4	872,374	894,509	417,607	(D)	--
	70-74	6	2,447,081	189,484	1,389,033	59,131	158,797
	75-79	7	3,256,265	326,055	1,030,668	68,546	44,124
	80-84	4	2,392,754	476,212	426,068	7,538	--
	85-89	4	1,962,455	(D)	122,014	41,843	--
	>89	3	1,801,452	(D)	129,051	15,727	--
2005 Total		28	12,732,381	1,886,260	3,514,441	192,785	202,921
2006	<70	6	1,265,587	2,172,725	744,687	(D)	--
	70-74	7	2,131,813	604,605	1,170,100	(D)	21,632
	75-79	6	2,513,579	601,905	707,860	2,150	--
	80-84	4	1,325,662	699,112	92,375	7,400	--
	85-89	6	3,135,570	(D)	235,788	8,715	--
	>89	4	2,135,240	210,593	250,464	16,373	--
2006 Total		33	12,507,451	4,288,951	3,201,272	37,676	21,632

Note: (D) indicates data concealed for disclosure/confidentiality purposes

Table 3.3.1.2. Average Per Vessel Revenue of Pacific Whiting and Non-whiting, 2002-2006 (PacFIN January 2007)

Year	Whiting revenue per vessel ($)	Non-whiting revenue per vessel ($)
2002	139,606	127,773
2003	168,111	261,905
2004	303,480	308,480
2005	454,728	207,015
2006	379,014	228,773

Note: values in table are not all encompassing and protect confidential ity

Table 3.3.1.3. Pacific Whiting Shoreside Fishery, Number of Vessels by Weight of Whiting, 2002-2006 (PacFIN January 2007)

Year	Number of Vessels				
	< 2 million lb (907 mt)	2-5 million lb (907-2,268 mt)	5-7 million lb (2,268-3,175 mt)	7-9 million lb (3,175-4,082 mt)	>9 million lb (>4,082 mt)
2002	7	19	4	1	--
2003	7	26	4	1	--
2004	3	6	7	7	9
2005	2	7	5	13	7
2006	5	7	8	8	5

3.3.2 Catch Monitoring and Accounting

In 1996, to address the treatment and disposition of salmon in the Pacific whiting shoreside fishery, an EA was prepared to analyze amendments to both the groundfish FMP (FMP Amendment 10) and salmon FMP (FMP Amendment 12). The preferred alterative included a provision for the salmon FMP to be amended to allow retention of salmonids in the trawl fishery when a Council-approved monitoring program (one that is sufficient to define the chinook bycatch rate, detect and changing patterns in bycatch, assure compliance with specified management limitations, and provide for the collection of coded wire tags) was established in the Pacific whiting shoreside fishery (PFMC 1996). At their October 21-25, 1996, meeting the Council recommended the preferred alternative, including the temporary use of EFPs to monitor the incidental take of salmon until a permanent monitoring program could be implemented. Both the salmon and groundfish FMPs were amended to include the provisions of the preferred alternative; however, implementing regulations for the Pacific whiting shoreside fishery were never adopted.

Each year since 1992, EFPs have been issued by NMFS to vessels in the Pacific whiting shoreside fishery to allow unsorted catch to be landed at shoreside processing facilities. Each year, most if not all Pacific whiting shoreside vessels apply for and carry EFPs. EFPs specify the terms and conditions that participating vessels must follow to be included. Vessels fishing under the Pacific whiting EFPs are allowed to land unsorted catch at shoreside processing facilities, including species in excess of the trip limits and species such as salmon that would otherwise be illegal to have on board the vessel. Without an EFP, groundfish regulations at 50 CFR 660.306(a)(2) and (a)(6) require vessels to sort their catch at sea and discard as soon as practicable all prohibited species (including salmon and halibut), protected species, and to discard groundfish species in excess of cumulative limits at sea.

Unlike the at-sea sectors of the Pacific whiting fishery, where catch is sorted and processed shortly after it has been taken, vessels in the shoreside fishery hold primary season Pacific whiting on the vessel for several hours or days until it can be offloaded at a shoreside processor. Pacific whiting deteriorates rapidly, so it must be handled quickly and immediately chilled to maintain product quality. This is particularly true if the Pacific whiting is to be used to make surimi (a fish paste product). The quality or grade of surimi is highly dependent on the freshness of the Pacific whiting, which demands careful handling and immediate cooling or processing for the fishery to be economically feasible. Because rapid cooling can retard Pacific whiting flesh deterioration, most primary season vessels prefer to dump their unsorted catch directly below deck into the refrigerated salt water tanks. However, dumping the unsorted catch into the

refrigerated salt water tanks precludes the immediate sorting or sampling of the catch. Fishers prefer to quickly and efficiently handle the catch so they can return to port for offloading. In general, under a primary season structure, vessels that are quick and efficient are able to harvest more catch before the allocation is reached than vessels that sort at sea.

Monitoring and catch accounting of EFP landings has been coordinated by the SHOP since 1992. Participants in the SHOP include: catcher vessels that have been issued EFPs, designated processing plants along the Pacific Coast, PFMC, NMFS, PSMFC, ODFW, CDFG, and WDFW. The SHOP has coordinated the collection of and compilation of catch data to provide information needed to monitor attainment of the Pacific whiting shore-based allocation and for evaluating incidental catch, particularly Chinook salmon and other prohibited species. In recent years, the SHOP has also coordinated the collection of inseason data needed to monitor bycatch limits that have been established for overfished groundfish species.

From 1992 to 1994, catch composition sampling was given highest priority in the management of the EFP fishery. During the 1992-1994 period, SHOP set a goal of having observers sample 30 percent of the deliveries while at sea and having observers sample 20 percent of the unobserved deliveries while at the processing facility (M. Saelens, ODFW, pers. comm. 10/12/06). The at-sea observer's role was to confirm retention of the catch. By 1995, the SHOP sampling goal had declined to 10 percent of the landings and the sampling priority had shifted, with more emphasis being given to the collection of biological information (otoliths, lengths, weight, sex, maturity) on Pacific whiting and select bycatch species such as yellowtail rockfish, widow rockfish, darkblotched rockfish, canary rockfish, sablefish, bocaccio, Pacific chub mackerel and jack mackerel. The sampling rate was decreased following a statistical analysis that had indicated that there was no significant difference between the fish ticket data and observer data during the early 1990's. Given the fishery management needs of the Pacific whiting fishery in 1995, it was determined that fish ticket data was an adequate representation of species composition for landed catch.

To explore the possibility of increasing biological sample data and increasing the precision of statistical estimates and leading to improved stock assessments, a project referred to as the Fishing Industry and Research Scientists Together (FIRST) project, was conducted in Oregon in from June 1998 to November 1998 (Builder 2000). The specific goal of this project was to examine the feasibility of collecting additional fish length data by training and using plant workers. Similar studies had found that it was feasible to have plant workers collect fish lengths, which was considered easier than having plant workers obtain data on fish age or species compositions (Gallucci et.al., 1996). In most groundfish fisheries, fishery-dependent data, including length data, are collected by port biologists hired by the states. However, port biologist sampling has been constrained by financial and logistical considerations. During the FIRST project, plant workers sampled 150 sablefish, Dover sole, and yellowtail rockfish deliveries. When the length data collected by plant samplers was compared to the port samplers, the quality of the length data was similar. However, time constrains on the plant workers, work priorities, and motivation to take samples were identified as being somewhat problematic during the project (Builder 2000).

In 1998, at shoreside processing facilities in Oregon, plant samplers began to be used to increase the collection of biological information (length, weight, age, maturity) from the Pacific whiting shoreside fishery. Data were collected from Pacific whiting and selected bycatch species (yellowtail rockfish, widow rockfish, sablefish, Pacific mackerel, jack mackerel, and prohibited species)(Weeks and Hutton 1998). In Washington and California, port samplers continued to collect biological data. In California and Washington, the port samplers monitor a portion of all deliveries and collect biological data and species composition data that is used to distinguish the species on fish tickets. In all three states, port samplers collect fish ticket data during the Pacific

whiting shoreside fishery and provide information to the SHOP, where it is compiled for inseason monitoring.

In 1999, language was added to the EFPs to require vessels to deliver EFP catch to state designated processors. It was determined that there was a need to better define the roles of shoreside processors and the state agencies in monitoring incidental catch and enforcing management measures, specifically for yellowtail rockfish. Designated processors are identified by each of the states, and have signed written agreements that specify the standards and procedures they agree to follow when accepting unsorted EFP catch.

The proportion of landings observed by shoreside plant samplers and port biologists varied substantially among processors and between years. Table 3.3.2.1 compares the percentage sampled at each designated Pacific whiting shoreside processor from 2002 to 2005. In 2005, the overall sampling rate was 36 percent of the deliveries or 29 percent of the Pacific whiting by weight. In 2006, the overall sampling rate was 48 percent of the deliveries or 43 percent of the Pacific whiting by weight.

Table 3.3.2.1 Percent of trips observed by SHOP at each processor, 2004-2006 (data excerpted from Weidoff and Parker 2004, Nottage and Parker 2005, Jesse and Saelens 2007)

State	Port	Deliveries					
		2004		2005		2006	
		percent sampled	sampled /total	percent sampled	sampled /total	percent sampled	sampled /total
Washington	Westport, Ocean Gold	11.0	19/172	12.5	24/192	18.8	36/192
	Illwaco, Jessies	13.2	5/38	9.8	82/8	38.3	36/94
Oregon	Astoria						
	DeYang	--	--	--	--	100.0	34/34
	Bornstein	--	--	--	--	73.0	27/37
	Del Mar	--	--	--	--	100.0	17/17
	Warrenton						
	Pacific Coast	17.3	32/185	0	0/202 /a	30.8	60/195
	Newport						
	Ocean Beauty	19.3	11/57	34.4	61/21	42.2	19/45
	Trident	22.0	53/241	20.3	51/251	28.7	47/164
	Pacific Shrimp	61.5	139/225	100.0	227/227	100.0	163/163
	Charleston	100.0	106/106	100.0	87/87	100.0	93/93
California	Cresent City	10.3	3/29	13.3	2/15	25.0	7/28
	Eureka	5.0	4/80	3.0	2/66	12.3	9/73
	Moss Landing	--	--	100.0	1/1	--	--

a/ Plant sampler observed 23 deliveries, however data reported to SHOP was incomplete and deemed unusable.

The costs associated with operating the SHOP have increased since the program began in 1992. Table 3.3.4.2 shows the In-season budget history for the SHOP between 1995-2005. In 1995, the budget was approximately $93,000, with approximately $25,000 for samplers and $68,000 for coordination/data processing costs) as compared to approximately $141,560 in 2005 (approximately $27,000 for plant samplers and $114,560 for coordination/data processing costs) (Nottage and Parker 2005). These government costs cover state agencies providing sampling personnel, infrastructure, data summary and analysis during winter months, data tracking, and Council support on bycatch issues. In 2005, an additional $70,000 which is not included in

Table 3.3.4.2 were for additional ODFW staff. In the past, the costs were relatively minor. However, the costs have become increasingly substantial over time as management agencies have increased their focus on bycatch issues, which requires the data to be available sooner and require months of staff time for data analysis.

Table3.3.4.2. In-season Budget History for the Shoreside Hake Observation Program, 1995-2005 (data excerpted from Nottage and Parker 2005)

Year	State Budgets for SHOP ($)		Industry Funding Oregon ($)	Industry Samplers Oregon ($)	Total Funds All Sources ($)	Cost per day ($)	Cost per mt whiting ($)
	Oregon	Washington & California					
1995	~20,000	18,000	~30,000	25,000	93,000	912	1.23
1996	~20,000	18,000	~30,000	29,000	97,000	815	1.11
1997	17,706	27,000	30,294	30,000	105,000	1,522	1.21
1998	19,000	27,000	30,000	30,000	106,000	876	1.22
1999	18,000	27,000	33,339	32,544	110,883	1,218	1.32
2000	18,000	27,000	38,152	32,544	115,696	1,244	1.38
2001	18,000	27,000	46,738	35,770	127,508	1,678	1.76
2002	17,926	27,000	38,371	29,808	113,105	3,649	2.52
2003	18,000	18,000	40,519	29,808	106,327	3,544	2.09
2004	22,000	18,000	53,467	27,000	120,467	2,008	1.33
2005	28,693	18,000	67,867	27,000	141,560	2,178	1.45

Vessels fishing under EFPs are required to retain all catch, with a few exceptions such as very large species (>6 feet in length) and hauls where there is a concern about vessel safety. In 2004 a pilot study was initiated and funded by the NWFSC in which a video-based electronic monitoring system (EMS) was used as a tool to verify full retention of catch by Pacific whiting EFP vessels. The 2004 study field-tested EMS on 26 fishing vessels for 100 percent data capture of on-deck fishing operations. EMS systems consist of two or more closed circuit television cameras, global positioning systems (GPS), hydraulic and winch sensors, and on-board data storage. In 2004, the EMS was in place throughout the 61 day season for the shore-based sector. During this time, the EMS captured virtually the entire fishery, with sensors recording 98 percent and the cameras recording 96 percent of the 1,762 fishing events and 1,019 fishing trips.

From the EMS pilot study, it was determined that EMS could be used to accurately identify the time and location of discard events. As a result of the study, EFP criteria were revised to define maximized retention (most catch is retained) rather than full retention (all catch is retained.) The EMS technology (EMS equipment installed on the vessels and data analysis) was again used and funded by the NWFSC during the 2005 and 2006 seasons. Following the 2004 and 2005 seasons, the NWFSC participated in public meetings with the fishery participants to discuss the types of information that had been collected, EMS performance, participants behavior relative to the catch retention standards, and to seek input on mechanism for further reducing documented discard events in the fishery. EMS has moved beyond the experimental stage and has been identified as an effective tool for monitoring full and maximized retention as defined in EFPs for the Pacific whiting fishery. Vessels fishing under the EFP will be required to pay directly to the EMS provider for services in 2007. In 2007, no Federal funding is available for EMS coverage. Further information of the EMS system can be found in Appendix B.

As noted above, unsorted Pacific whiting EFP catch is generally delivered to the shoreside processing facilities, where it is sorted and processed. However, in a few cases catch has been transported by truck from the original processing facility to a secondary processor. This has occurred: during the early season fishery off California when catch has been trucked to Washington state for processing; during the coastwide season when catch from coastal areas in Washington was trucked to a Puget Sound processor; and in Oregon, where sorted catch was trucked to a nearby facility.

Federal groundfish catch sorting requirements are currently specified at 660.370(h)(6) for species or species groups with trip limits, size limits, quotas, harvest guidelines, or OYs. Under Federal regulations at 660.306(a)(7), it is unlawful for any person to fail to sort the catch prior to the first weighing after offloading. The groundfish must be sorted to the appropriate species or species groups for the fishery in which the vessel is participating. The state of landing may have additional sorting requirements, including requirements for non-groundfish species. Sorting requirements for vessels are also specified in the terms and conditions of the EFP. Under the existing Federal groundfish regulations, individuals who receive unsorted catch on land and transport that catch to another location, sometimes out of state, are not required to sort the catch or weigh it prior to transport. Federal law at 50 CFR Subpart K, 300.160-161 requires fish that are transported between states to be marked with an accurate packing list, bill of lading, or other similar document that lists species and number by species or specifies other appropriate measure of the quantity such as weight. When unsorted catch is transported to another location, where all or a portion of the sorting occurs, the availability of data on total Pacific whiting and incidental catch is delayed. One to two week delays in obtaining catch data occurred in the 2006 fishery (Brian Culver, WDFW Pers. Comm.) Regulatory requirements that prohibit unsorted Pacific whiting catch from being transported from the point of first landing are expected to be implemented by early summer 2007 through the related action titled “Catch Accounting Requirements for Pacific Whiting Shoreside Processors/First Receivers Participating in the Shore-based Fishery”.

Current Federal groundfish regulations recognize that each state has recordkeeping and reporting laws or regulations that address the records that need to be kept and/or reports that need to be filed. The Federal groundfish regulations concur with state law by requiring fishery participants to report all data and in the exact manner required by applicable state law or regulation. Regulatory requirements that require processors to submit electronic fish tickets within 24 hours of landing and prior to transporting catch from the port of first landing are expected to be implemented by early summer 2007 through the related action titled “Catch Accounting. Requirements for Pacific Whiting Shoreside Processors/First Receivers Participating in the Shore-based fishery”. The electronic fish tickets are based on information currently required in state fish receiving tickets or landing receipts (hereafter referred to as state fish tickets). The daily reports would be used to track catch allocations, bycatch limits and prohibited species catch. Processors would provide the computer hardware and software (Access 2003 or later) necessary to support the electronic fish ticket program.

Each state requires the submission of fish tickets that include the actual weight or an estimated weight of each species or species group of groundfish. In the State of Oregon, weights reported on fish tickets for the Pacific whiting fishery must have been derived from a certified scale. The states of Washington and California do not specifically require that processors record actual scale weights on fish tickets. For all three states, other data such as the date of landing, gear, vessel, dealer, etc. are also included on the fish tickets. The weights reported on fish tickets are used to determine the total catch by species or species group in the Pacific whiting shoreside fishery. Catch in excess of trip limits, unmarketable catch, and non-groundfish catch are included on the fish tickets. Unlike groundfish, prohibited species are managed by number of of individuals.

Each state has laws and regulations that pertain to the use of scales and scale performance by businesses for commercial purposes. Each state has an agency (county or state) that oversees weights and measures standards and conducts or oversees scale performance testing for commercial scales. Commercial scale requirements and how those requirements apply to seafood processors and catch reports differs substantially between states.

In Oregon, all weighing and measuring devices being used commercially in the state must be licensed with the Department of Agriculture prior to being used. Each scale must meet state standards for design, readability, accuracy, and reliability, based on National Institute of Standards and Technology (NIST) Handbook 44. Oregon Measurement Standards approval seals are applied to only those examined devices which meet all appropriate design, installation, and accuracy requirements. However, the state recognizes that knowledgeable, concerned personnel operating correct equipment, result in correct weighing and measuring. Oregon requires an approved means of sealing any mechanism used for adjusting a measurement element on a commercial weighing or measuring device. The state also recommends that all devices be placed under appropriate planned maintenance and service programs to avoid unexpected correction expense. The user of the device is responsible for the accuracy of the scale at all times.

In Washington, Pacific whiting deliveries are sorted and though not required by law, the catch is weighed on commercial scales that vary in type and performance. There is current Washington State regulatory code pertaining to the use of weighing and measuring devices installed after July 5, 1997 used for commercial purposes (Chapter 16-664 WAC). Like Oregon requirements, commercial scales are required to be traceable to a National Type Evaluation Program (NTEP)[4] Certificate of Conformance[5]. In Washington, the owner or operator of weighing or measuring equipment is responsible for the maintenance and accuracy of weighing or measuring devices at all times. Washington Weights and Measures approval seals are placed on devices which meet all appropriate design, installation and accuracy requirements. The seal indicates that the device passed the inspection during the specified month and year. Weights and Measures officials perform unannounced inspections.

In the State of California, the Division of Measurement Standards is responsible for weights and measures. California requires any scale used commercially to be "type approved" for such use. Commercial use of a non type approved scale is illegal in California. Additionally, each commercial scale must have a registered service agent place it into service, or inspected by a local weights and measures official prior to use. There are a number of requirements such as suitability, position, environmental factors, level, interface with other devices and accessories, etc., which affect proper legal use of the equipment and which require the knowledge of a service agent. County weights and measures inspectors inspect and test various types of weighing and measuring devices. The inspector certifies the devices by affixing a paper seal to them. From time-to-time inspectors conduct inspections for compliance with the requirements set by laws and regulations. At the time this document was being prepared, it was not clear how

[4] A program of cooperation between the National Conference on Weights and Measures, the National Institute of Standards and Technology, the states, and the private sector was created for just this purpose. Through twelve participating laboratories, NTEP evaluates the performance, operating characteristics, features and options of weighing and measuring devices against the applicable standards.

[5] An official National Type Evaluation Program Certificate of Conformance is issued by NCWM following successful completion of the evaluation and testing of a device. This Certificate indicates that the device meets applicable requirements for commercial weighing and measuring equipment in the U.S.

California laws for commercial scales applies to Pacific whiting shoreside processors or what has been in practice in the Pacific whiting fishery. Though weights reported to the state on the landing and receipt of fish are required to be “accurate” there appears to be no specific requirement for the weights to have been derived from a scale.

3.3.2 Pacific Whiting Fishery Management

As previously discussed in Section 1.4 of this EA, the Pacific whiting fishery is managed under a "primary" season structure where vessels harvest Pacific whiting until the sector allocation is reached and the fishery is closed. This is different from most West Coast groundfish fisheries, which are managed under a "trip limit" structure, where catch limits are specified by gear type and species (or species group) and vessels can land catch up to the specified limits. Incidental catch of other groundfish species in the Pacific whiting fishery, however, is managed under the trip limits structure.

Overfished species: To allow the Pacific whiting industry to have the opportunity to harvest the full Pacific whiting OY, the non-tribal commercial fishery is managed with bycatch limits for certain overfished species. To date, bycatch limits have been established for darkblotched, canary and widow rockfish. With bycatch limits, the industry has the opportunity to harvest a larger amount of Pacific whiting, if they can do so while keeping the total catch of specific overfished species within adopted bycatch limits. Regulations provide for the automatic closure of the commercial (non-tribal) portion of the Pacific whiting fishery, upon attainment of a bycatch limit. This is different from the bottom trawl fishery, where harvest availability of target species is often constrained by the projected catch of overfished species.

Pacific Salmon: NMFS reinitiated a formal Section 7 consultation under the ESA in 2005 for both the Pacific whiting midwater trawl fishery and the groundfish bottom trawl fishery. The December 19, 1999 Biological Opinion had defined an 11,000 Chinook incidental take threshold for the Pacific whiting fishery. During the 2005 Pacific whiting season, more than 11,000 Chinook were taken, triggering reinitiation. NMFS prepared a Supplemental Biological Opinion dated March 11, 2006, which addressed salmon take in both the Pacific whiting midwater trawl and groundfish bottom trawl fisheries. In that Supplemental Biological Opinion, NMFS concluded that catch rates of salmon in the 2005 Pacific whiting fishery were consistent with expectations considered during prior consultations. Chinook bycatch has averaged about 7,300 fish over the last 15 years and has only occasionally exceeded the reinitiation trigger of 11,000. Since 1999, annual Chinook bycatch has averaged about 8,450 fish.

NMFS is required to monitor and collect data to analyze take levels. The Biological Opinion defines reasonable and prudent measures that include the continued monitoring of the Pacific whiting fishery such that the data is sufficient to define the bycatch rate for each sector and is adequate to detect any changing patterns of bycatch. In addition, it is necessary to evaluate the projected catch at least monthly, and to determine if action is necessary to reduce the take of Chinook salmon.

3.3.3 Overages and prohibited species catch

Because vessels fishing under the Pacific whiting EFPs are allowed to land unsorted catch, landings including species in excess of the trip limits, non-groundfish species, protected species, and prohibited species that would otherwise be illegal to have on board the vessel. Under the EFP structure, vessels are allowed to land the unsorted catch providing that they forfeit the catch in excess of trip limits and prohibited species catch to the state of landing. The processors are allowed to process the marketable catch excluding salmon and Pacific halibut, but they must pay

the state of landing fair market value for the catch. Fair market value is defined differently by each state. Prohibited species catch must be donated to a nonprofit food bank.

3.3.4. Pacific whiting shoreside vessels fishing without EFPs

In 2006, a single shoreside vessel with history in the whiting fishery has found a profitable was to partially process headed and Gutted Pacific whiting at sea . The vessel uses a smaller net and tows of short duration to maintain quality. Head and gut machines were used at sea and the product immediately placed in thick slurry of ice. As a result, the 69 foot vessel was able to significantly increased its at-sea production of Pacific whiting in 2006. Becasue fish that are headed and gutted with no further processing (such as freezing) are not considered to be a product, the vessel's activities does not result in its activity being that of a catcher/processor. The operation which occurred during the primary season for the shore-based sector was allowed to operate within the RCAs without an EFP or other specific monitoring requirements. The ex-vessel price of the partially processed catch was approximately four times greater than whiting landed whole in unsorted EFP landings. All indication is that production of non-EFP catch is expected to increase in 2007 as the shoreside processing facility that accepts, freezes and ships the product, is ready to buy whiting from additional vessels. Particularly, whole round whiting from non-whiting boats that currently discard 100 percent of their whiting catch.

3.3.5. Counties Affected by the Pacific Whiting Shoreside Industry

Counties that are actively involved in the Pacific whiting shoreside industry include: Pacific County, Washington; Grays Harbor County, Washington; Clatsop County, Oregon; Lincoln County, Oregon; Coos County, Oregon; Del Norte County, California; and Humbolt County, California. These counties tend to have economies that are based on tourism, natural resources, and government. The largest industries reported by the Bureau of Economic Analysis in counties associated with the Pacific whiting shoreside industry are generally: forestry, fishing, and other, manufacturing, government and government enterprise, health care and social assistance, accommodation and food services, and retail trade. Industries falling within the forestry, fishing, and other, and manufacturing sectors are largely made up of timber and fishing industry related business, and timber and seafood processing. Food Services, accommodation, and retail trade are largely made up of businesses reliant on the tourism sector.

Readers who are interested in further information on coastal counties and fishing communities are referred to Section 7 of the EIS, prepared by the Council staff, for the Proposed Acceptable Biological Catch and Optimum Yield Specifications and Management Measures for the 2007-2008 Pacific Coast Groundfish Fishery. Copies of the EIS can be obtained from the Council, by writing to 7700 NE Ambassador Place, Suite 200, Portland, OR 97220-1384; or calling 503 820-2280; or viewing the internet posting at http://www.pcouncil.org.

Table 3..3.5.1 EFP Whiting Landings, Revenue, and Participation by Year and Region
(PacFIN February 2007)

Year	Port Region	Number of vessels a/	
2002	California	3	$272,422
	Newport and Coos Bay	13	$1,809,682
	Astoria and Ilwaco	9	$1,209,296
	Northern Washington/Puget Sound	6	(D)
2003	California	3	$170,011
	Newport and Coos Bay	15	$2,195,300
	Astoria and Ilwaco	13	$1,670,804
	Northern Washington/Puget Sound	5	(D)
2004	California	4	$640,302
	Newport and Coos Bay	14	$3,361,010
	Astoria and Ilwaco	7	$1,276,740
	Northern Washington/Puget Sound	5	(D)
2005	California	6	$427,176
	Newport and Coos Bay	14	$4,536,123
	Astoria and Ilwaco	7	$2,498,728
	Northern Washington/Puget Sound	6	(D)
2006	California	6	$632,222
	Newport and Coos Bay	11	$4,536,123
	Astoria and Ilwaco	13	$4,194,711
	Northern Washington/Puget Sound	9	(D)

a/ Some vessels deliver to more than one port
(D) Northern Washington / Puget Sound information is hidden because there are fewer than 3 processors

3.3.6 West Coast Observer Programs for Groundfish

In 1996, the SFA amended the Magnuson Fishery Conservation and Management Act (renamed the Magnuson-Stevens Fishery Conservation and Management Act). The SFA required that FMPs establish a standardized reporting methodology to assess the amounts and types of bycatch in a fishery, and required that FMPs identify and rebuild overfished stocks.

There are currently two Federal observer programs being operated by the NMFS Northwest Fishery Science Center in the Pacific coast grounfish fishery: the At-sea Hake Observer Program and the West Coast Groundfish Observer Program (WCGOP). These two programs are very different from each other particularly in how they are funded, the type of sampling and fishery data that is used to derive total catch, and availability of data for inseason management.

The WCGOP is year round federally funded program that provides observers for all of the commercial groundfish fisheries except the Pacific whiting fishery. Because monitoring of the Pacific whiting shoreside sector has been carried out under the EFPs, WCGOP observers have not been used to provide coverage for that sector. The Pacific States Marine Fish Commission is under contract to provide observers who are trained by NMFS. All sampling protocols and coverage strategies are defined by NMFS. Because there are few observers in relation to the number of vessels in the groundfish fishery, observer sampling coverage has focused on obtaining bycatch data at sea which can be combined with state fish ticket data to derive bycatch ratios for different fishing areas and target fishing strategies. Vessel logbook data is used to estimate fleetwide fishing effort. Using observer, fish ticket and logbook the fishery is modeled to derive estimate of total catch by species. Due to the delayed availability of fish ticket and

logbook data, and the time needed to process obsever data, the final analysis of estimated total catch by species is typically not finalized until well over one year after the fishing year has ended.

In contrast, the At-Sea Hake Observer Program which is a seasonal program where the operational costs are shared by NMFS and the vessel owners. Observer coverage levels are defined in regulation for each processing vessel and are based on overall vessel length: all processing vessels over 125 ft are required to carry two observers, and processing vessels 125 ft and under are required to carry one observer. These coverage levels allows very large samples to be taken from almost every haul. Each processing vessel make the necessary arrangements and pays directly to third-party companies that provide observer services and which are licensed by NMFS Alaska Region to provide such services. NMFS provides training and sampling gear for the observers. Sampling protocols are also defined by NMFS. An at-sea hake observer's primary duties include recording haul information, determining the official total catch, and sampling hauls for species composition. Each observer submits electronic data files to NMFS for inclusion in the NorPAC database one or more times per day. These data are available within hours for inseason catch evaluation. Because there is such a high level of sampling coverage, NMFS expands these data during the season to unsampled portions of hauls and unsampled hauls to derive total catch by species (species groups). The data are finalized a few days after the observers return from sea and finalized data are available within weeks after the end of the season.

4.0 ANALYSIS OF THE ALTERNATIVES

The terms "effect" and "impact" are used synonymously under NEPA. Impacts include effects on the environment that are ecological, aesthetic, historic, cultural, economic, social, or health, whether direct, indirect, or cumulative. Direct effects are caused by the action itself and occur at the same time and place. Indirect effects are caused by the action and are later in time or farther removed in distance, but are still reasonably foreseeable. Indirect effects may include growth-inducing effects and other effects related to induced changes in the pattern of land use, population density or growth rate, and related effects on air and water and other natural systems, including ecosystems. Cumulative impacts are those impacts on the environment that result from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions, regardless of what agency (Federal or non-federal) or person undertakes such other actions. Cumulative impacts can result from individually minor but collectively significant actions taking place over a period of time.

Sections 4.1 through 4.3 of this document discuss the direct and indirect impacts on the physical, biological, and socio-economic environment that are likely to occur under each of the proposed alternatives, including the Status Quo alternative. Section 4.4 presents the reasonably foreseeable cumulative effects of the environment from the proposed alternatives.

4.1 Effects on the Physical Environment

Alternatives 2-5 would implement a maximized retention and monitoring program for the Pacific whiting shoreside fishery. None of the alternative actions is expected to change current fishing behavior and are therefore not expected to have a direct effect on the physical environment over Status Quo (Alternative 1.) The Pacific whiting shoreside vessels are currently required to have and use Vessel Monitoring Systems (VMS) that provide hourly reports of the vessel's fishing position to NMFS. VMS cannot provide data that can be used to verify the type of gear that is being used with the vessel. Midwater trawl gear is required in the Pacific whiting primary season fishery. At this time, there are no habitat protection areas that prohibit the use of midwater trawl gear in the geographic areas where the Pacific whiting fishery occurs. Although groundfish observers under Alternatives 3A and 3B, and EMS under Alternatives 4A, 4B and 5, may be able to provide additional data that could be used to verify the use of midwater trawl gear as it relates to habitat protection areas, the indirect benefit is minimal because there are no habitat protection areas that prohibit the use of midwater trawl gear in the geographic areas where the Pacific whiting fishery occurs.

4.2. Effects on the Biological Environment

Effects on the biological environment resulting from fishery management actions primarily include changes in species mortality levels resulting from implementation of the alternatives. Because the alternative action is for a catch monitoring program and does not change existing fishing practices, no direct biological effects are expected to result from the alternative action. Indirect effects from fishery management actions include changes in fishing practices that affect the biological environment, but are further away in time or location than those occurring as a direct impact. Indirect biological impacts could result if catch data were inaccurate or delayed such that fishery specifications (bycatch limits, species allocations, OYs, and biological opinion thresholds) could not be adequately monitored or the fishing stopped before one of the specifications were exceeded. If a fishery specification were exceeded, the magnitude of the impact would depend of the status of the stock (healthy, precautionary zone, or overfished), the proportion of allowable fishing mortality represented by fishery specification that was exceeded, and the stock's sensitivity to changes in fishing mortality. If other fisheries could not be

effectively managed to stay within the same fishery specification, cumulative indirect impacts could result.

4.2.1 Indirect Biological Effects

Valid and timely data are needed to monitor total catch of Pacific whiting, Chinook salmon, and non-whiting groundfish, particularly overfished species. Positive indirect biological effects could occur if the quality of catch data were improved such that more timely and accurate data were available for managing the fishery inseason and keeping total catch within the fishery specifications, including: bycatch limits, species allocations, OYs, and biological opinion thresholds. Negative indirect biological effects could result if catch data used to manage the fishery inseason were inaccurate or delayed such that fishery specifications could not be adequately monitored or the fishing stopped before one of the fishery specifications were exceeded.

In 2007, seven groundfish species continue to be managed via overfished species rebuilding plans: bocaccio (south of Monterey, California), canary rockfish, cowcod (south of Point Conception, California), darkblotched rockfish, POP, widow rockfish, and yelloweye rockfish. The most common overfished groundfish species taken in Pacific whiting shoreside fishery between 2002 and 2006 were widow rockfish, canary rockfish, POP, and darkblotched rockfish. The overfished cowcod and bocaccio stocks are found farther south than where the Pacific whiting shorebased fishery primary season has historically occurred. Therefore the Pacific whiting fishery does not impacts the overfished portion of the cowcod and bocaccio stocks.

If a fishery specification for precautionary zone and healthy groundfish species or species groups is exceeded, the risk to the stock is generally lower than it is for overfished species. If a fishery specification of a constraining overfished species were greatly exceeded due to unreported discarding at sea, inaccurate catch accounting, or delayed catch reporting, the risk of exceeding rebuilding-based OYs is increased. The risk to the stock of exceeding the rebuilding based OY is particularly a concern for canary rockfish because it is sensitive to changes in harvest levels. For example, if the 2007 canary rockfish OY were exceeded by 3 mt, it is projected to result in the rebuilding time being extended by 11 years (PFMC and NMFS 2006.) There are many variables that affect the time it takes a stock to rebuild, fishing mortality is only one of those variables. However, exceeding the rebuilding based OY could result in an extended rebuilding period for a overfished species.

In the Pacific whiting fishery (all sectors,) salmon are caught over a broad range from northern California to Washington; therefore, the fishery affects many of the ESA listed Chinook. All activities that affect ESA listed species are subject to some form of ESA review and constraint with the goal being to reduce mortality and improve the status of the species to the point where the survival and recovery of the species is reasonably assured. To that end, all activities, including the Pacific whiting fishery, are obligated to be manage to stay within their respective take limits as defined in the associated incidental take statements. Adequate monitoring is required to ensure that activities are operating within their respective take limits. Adequate monitoring is not discretionary. To avoid negative biological consequences that may result to a species if the prescribed take limits are exceeded, there is a collective obligation of all activities to be managed within the defined limits considered necessary for the species' survival and recovery.

Comparison of the alternatives: Each of the Alternatives 2, 3A, 3B, 4A, 4B and 5 considers catch monitoring as two distinct components, at-sea monitoring and on shore monitoring. In the following comparison of indirect biological impacts, both components of monitoring are discussed and compared to the other alternatives.

Under Alternative 1, the No Action Alternative, inseason catch accounting would be similar to the bottom trawl fishery. In the bottom trawl fishery, inseason catch estimates are based on: historical data for each target fishery, WCGOP at-sea discard data, logbook data, and unverified fish ticket data. As data becomes available, inseason estimates are updated with the best available data. Under Alternative 1, a one-two year delay in obtaining final catch estimates could be expected. The lack of catch data under Alternative 1 increases the risk of OYs, allocation, or biological opinion thresholds being exceeded over status quo (Alternative 2). Under Alternative 1, twenty percent or less of the fishing trips would have WCGOP observers sampling coverage and there would be no mechanism for fish ticket verification. In a fishery such as Pacific whiting, where the non-target species are generally less than two percent of the catch by weight and where the incidental catch of overfished species and Chinook salmon often occur as rare species (very low occurrence) or rare events (periodic hauls with large amounts of incidental catch of a single species), low levels of observer coverage could result in substantial over or under estimates of the actual catch of an incidentally caught species.

Under Alternative 2, Status Quo, EMS would continue to be used to monitor all fishing trips from the time the gear was first set and until the time that the vessel returned to port. Port biologists and plant samplers would continue to collect biological data and some catch composition data at the processing facility. EMS coverage of all trips assures that catch is retained until landing. Because full EMS coverage reduces the likelihood of catch being discarded at sea, the opportunity to conduct accurate shoreside catch accounting of all species is improved over Alternatives 1, 3A, ad 4A, but similar to Alternatives 3B, 4B and 5.

Biological data collected by plant samplers would include age structure data (lengths, otoliths, scales, snouts, etc .) and would continue to provide much needed fishery dependent length and age data use in stock assessments. Providing quality fishery dependent length and age data is expected to have a beneficial effect, as it helps stock assessment scientists better understand a stock's population status and changes in the stock. Stock assessments are important to the management process because they are generally used as the basis for setting future harvest levels. Catch composition data would continue to be used to compare to fish ticket values for verification, particularly for verification of overfished species, and for to provide a breakdown by species of market categories with mixed catch (i.e. slope rockfish). The quality of fish length data collected by industry samplers who were provided with basic training, was found to be adequate to provide much needed length data for stock assessment purposes (Builder 2000). However, the accuracy of other types of catch data used for management of the fishery has not been fully evaluated. An analysis of data reported to SHOP in 2005 compared species composition and fish ticket values, identified potential sources of error in the collection and reporting of species composition data, and evaluated discrepancies in species composition data reported by industry samplers and port biologists (Nottage and Parker 2006). The SHOP analysis found that the most frequently occurring data discrepancies between composition samples and species reported on fish tickets were in the total weight of rockfish species, including yellowtail rockfish, widow rockfish, yelloweye rockfish, canary rockfish, darkblotched rockfish, and POP. Similar discrepancies were observed in an informal 2004 analysis (Steve Parker, pers. com.) Though the majority of species composition samples appeared to accurately represent catch, the misidentification of species, particularly rockfish, was most prevalent with plant samplers. The SHOP analysis specifically identified the need to further develop species identification skills to improve quality of data collected by plant samplers (Nottage and Parker 2006).

Studies similar to Builder (2000) found that the feasability of having processors obtaining data on fish lengths was easier than obtaining data on fish age or species compositions (Gallucci et.al., 1996). Selecting fish from mixed market categories requires fish identification skills, which can be difficult even for a trained port sampler or observer. Age composition sampling by

collecting otoliths, opercle bone, or fin rays is also difficult and requires knowledge of fish anatomy and proper storage and documentation techniques. Incomplete labeling of salmon held for sampling by the processing facilities resulted in data quality issues (Nottage and Parker 2006). Because the sampling rate and approach under Alternative 2 does not specifically focus on fish ticket verification, the risk of catch amounts being underestimated would remain a concern, particularly for overfished rockfish species and Chinook salmon. If the amount of catch is underestimated, the risk of exceeding a fishery specification, including: bycatch limits, species allocations, OYs, and biological opinion thresholds is increased. There is less of a risk of a fishery specification being exceeded under Alternative 2 than under Alternatives 1, 3A, or 4A, but more of a risk than under Alternatives 3B, 4B, or 5. It is important to note that as more constraints are placed on a fishery and as the value of the fishery relative to other fishing opportunities increases, the incentives to intentionally underestimate the weight of constraining species also increases (Randall 2004).

Under Alternative 3A, WCGOP observers would monitor catch retention on less than twenty percent of the Pacific whiting trips. Because existing WCGOP resources would need to cover a larger pool of vessels, coverage levels in the non-whiting fisheries would be reduced below current levels during the April-May period off northern California and in the summer months (June-August) north of 42° north latitude. However, rather than drastically reduce coverage in the non-whiting fisheries, the Pacific whiting shoreside fishery could be given a lower observer coverage priority, resulting in much less than twenty percent observer coverage. Coverage priorities are generally based on the bycatch data needs. When comparing the data needs of the Pacific whiting shoreside fishery to other sectors of the groundfish fishery, the Pacific whiting shoreside fishery is likely to have a lower priority for observer coverage because data are available from other sectors of the Pacific whiting fishery, which could be used to estimate discarded catch, and because of the availability of historical catch data from the fishery. However, the need for adequate monitoring of Chinook salmon catch is not expected to be met if less than twenty percent of the hauls were sampled. With twenty percent or less of all trips being monitored for catch retention at sea, the risk of at sea discarding on non-observed trip is increased. If catch is discarded at sea, it would be expected to result in underestimates of total catch mortality for some or all species. With a twenty percent or less observer coverage level, more conservative management of the Pacific whiting shoreside fishery would be necessary to manage the fishery to stay within the OYs, harvest guidelines, allocations, and bycatch limits.

Under Alternative 3A, WCGOP observers would also sample catch at the processing facilities. Observers are biological technicians, educated in the natural sciences, and trained in species identification and biological sampling. Observers are generally used to collect catch and effort data used for the estimation of total catch. They also collect biological data on length, sex, and age (otoliths, scales, snouts). The observer sample data could be used to support post season analysis to assess the accuracy of fish ticket data, but because of the need for data quality checks and analysis information would not provide fish ticket verification during the season. Catch monitors, weighmasters or enforcement technicians are trained as standards inspectors and in the types and use of commercial scales and documentation of non-compliance. Under Alternative 3A, on shore observer coverage levels would be similar to the coverage of the fleet at-sea, twenty percent or less of all trips. With twenty percent or less sampling coverage of all trips, estimates based on composition sample data could have a high degree of error when compared to fish ticket data. Substantial differences in catch can occur between trips in the Pacific whiting fishery because incidental catch is generally a very small proportion of the overall catch by weight (generally less than two percent by weight). However, incidental catch of the most constraining species and Chinook salmon tend to be rare species or rare events that could result in substantial differences between estimates based on observer data, actual catch, and catch reported on fish tickets. Because an analysis of WCGOP data for fish ticket verification could not be done inseason, the accuracy of fish ticket data used to manage the fishery inseason would

be most similar to Alternatives 1, 2 and 4A. Delayed verification of fish ticket data increases the risk that some reported catch is underestimated. If catch is underestimated, the risk of exceeding a fishery specification (e.g. bycatch limits, species allocations, OYs, and biological opinion thresholds) is increased. Exceeding a fishery specification is of greatest concern for the most sensitive overfished species. It is important to note that as more constraints are placed on a fishery and as the value of the fishery relative to other fishing opportunities increases, the incentives to intentionally underestimate the weight of constraining species also increases (Randall 2004).

If WCGOP effort is shifted from the other groundfish fisheries during the summer months to provide observer coverage under Alternative 3A or 4A, substantial coverage reductions in the non-whiting trawl fisheries would be expected. In 2005, twenty four percent of all non-whiting trawl trips were observed by WCGOP observers. If 35-38 vessels and 12-14 processors participated annually in the Pacific whiting shoreside fishery, about ten-twelve observers (approximately 1/3 of the WCGOP observers) would be needed to provide twenty percent coverage of the Pacific whiting shoreside fishery under Alternative 3A. Under Alternative 4A, approximately three observers would be need to provide twenty percent coverage of the processing facilities. If this occurred, a reduction of coverage in the non-whiting groundfish fisheries would be expected in the major whiting port groups, as observer coverage were shifted to cover vessels and processors in the Pacific whiting shoreside fishery. The affected port groups include: Neah Bay, Astoria, Newport, Coos Bay, Crescent City, and Eureka.

For 2005 (Table 4.2.1), the level of WCGOP coverage for non-whiting catch in each of the major Pacific whiting ports ranged from 21 to 28 percent. The shifts in coverage in the California ports of Crescent City and Eureka, would be from April to June, while the shifts in coverage in Neah Bay, Astoria, Newport, Coos Bay would be from mid-June to Mid August. Given the potential impacts on the collection of discard data in the non-whiting trawl fisheries, reducing coverage in the non-whiting trawl fisheries could have serious implications for overfished species management. Reducing observer coverage could be expected to decrease the accuracy of overfished species encounter estimates. If accuracy were decreased, it could have both biological and economic impacts. A negative biological impact could occur if the overfished species catch estimates were lower than the actual amount of overfished species mortality and fishing opportunities are subsequently liberalized. An economic impact could occur if the catch were overestimated and the amount of overfished species mortality and a subsequent regulation is put in place were overly restrictive on fishery participants.

Table 4.2.1 WCGOP Observed Landings of Non-whiting Limited Entry Trawl Trips by Port, 2005, Excluding Scottish Seine. (NMFS September 2006)

	All Trawl Trips		Observed Trawl Trips				
Port Group	Landed catch (mt)	Percent of coastwide catch	Landings observed (mt)	Percent of coastwide catch observed	Percent of weight landed in port group observed	Number of trips sampled	Percent of all trips in port group
Bellingham	2,169	12%	420	2%	19%	21	4%
Neah Bay	630	3%	131	1%	21%	66	13%
Astoria	6,035	32%	1,593	8%	26%	127	26%
Newport	1,761	9%	420	2%	24%	53	11%
Coos Bay	2,255	12%	630	3%	28%	67	14%
Crescent City	1,065	6%	224	1%	21%	24	5%
Eureka	1,675	9%	348	2%	21%	40	8%
Fort Bragg	1,549	8%	296	2%	19%	31	6%
San Francisco	532	3%	88	0.5%	16%	15	3%
Monterey	773	4%	178	1%	23%	39	8%
Morrow Bay	360	2%	110	1%	31%	12	2%
ALL PORTS	18,804	100%	4,437	24%	24%	495	100%

Table 4.2.2. WCGOP Observed Landings of Non-whiting Limited Entry Trawl Trips by Major Port and Cumulative Limit Periods, 2005 (NMFS September 2006)

	March-April		May-June		July-August	
Port Group	Number of sampled trips	Percent of all trips sampled	Number of sampled trips	Percent of all trips sampled	Number of sampled trips	Percent of all trips sampled
Bellingham	2	2%	5	5%	8	6%
Neah Bay	28	25%	17	16%	17	13%
Astoria	16	14%	44	41%	28	21%
Newport	20	18%	4	4%	13	10%
Coos Bay	4	4%	13	12%	16	12%
Crescent City	8	7%	6	6%	3	2%
Eureka	12	11%	13	12%	10	8%

Under Alternative 3B, third-party observers would monitor catch retention of all fishing trips. Unlike EMS cameras, which turn on when the gear is initially set and turn off when the vessel returns to port, the observers would focus on the hauls as they are being dumped into the holds. If discarding from the holds occurred outside the time that the haul was dumped, observers may or may not observe such events. The density and buoyancy of individual target and incidental species taken in the Pacific whiting fishery varies. Because of differences in density and buoyancy, catch stored in refrigerated salt water tanks may become stratified in the tanks with the motion of the vessel. More buoyant species, such as rockfishes, could float to the top of the tanks and be removed from the tank openings.

Under Alternative 3B, Pacific whiting shoreside processors would be required by regulation to procure the services of a third-party observer from a NMFS permitted observer provider. Like Alternative 3A, the data collected by observers would be aggregated and analyzed after the fishery is completed to determine the accuracy of fish ticket data. This is in contrast to catch monitors (Alternative 4B), compliance monitors (Alternative 5), weighmasters or enforcement technicians who oversee processing activities to ensure that the landed catch is sorted and weighed to the defined standards and to verify the values reported on fish tickets. Overseeing processing, sorting and weighing activities ensures data quality when fish ticket data are summed during the season to determine total landed catch or in the case of a full or maximized retention program, total catch.

Observer coverage levels could vary from partial coverage (less than all deliveries) to full coverage (all deliveries). If coverage levels are too low, comparisons between observer sample data and fish ticket data from unsampled trips could have a high degree of error due to between trip differences. A low level of observer coverage could result in substantial differences between the actual catch, catch estimates derived from verification data, and catch reported on fish tickets. Such difference or sampling resulting from sample error could reduce the value of the verification data. When the sampling objective is fish ticket verification of incidental catch that occurs as rare events or rare species, a very large proportion of each randomly selected delivery must be sampled for accurate verification. The overall number of deliveries that can be sampled by an individual observer is limited by factors such as: the number of deliveries received in a day, the time each delivery takes to be sorted and weighed, the process of how the catch is sorted, and how the weighing process occurs. Due to the lack of information on the individual Pacific whiting shoreside processors and the factors that affect the number of deliveries that an individual observer could sample in a day as well as the amount of an individual delivery that could be effectively monitored, the coverage level achieved by a single observer cannot be estimated at this time. Similarly, the number of observers needed to provide full coverage at each facility cannot be estimated at this time. Without money being specifically appropriated for the implementation of an EMS monitoring program in the Pacific whiting shoreside fishery, NMFS would need to use existing WCGOP funds to lease the EMS physical equipment and to pay for data analysis and summary, under Alternative 4A . Given the need to use WCGOP base funds for observer coverage in non-whiting groundfish fisheries, this would reduce the ability to provide observer coverage in the non-whiting groundfish fisheries. NMFS believes that full EMS coverage is necessary to effectively deter and monitor discarding at sea. Reducing monitoring coverage would likely not meet the ESA Biological Opinion monitoring requirements and may result in bycatch and discard concerns of non-whiting.

At the processing facility, Alternative 4A and Alternative 3A are the same in that WCGOP observers would be used to sample catch at the processing facilities for fish ticket verification. Observer coverage on shore would be twenty percent or less of all trips. With less than a twenty percent coverage of all Pacific whiting trips being monitored, a comparison of sampled trip fish tickets and unsampled trip fish tickets for verification purposes could have limited value due to a high degree of error from between trip differences. An analysis for fish ticket verification could not be done inseason. Therefore, the accuracy of fish ticket data used to manage the fishery inseason would be most similar to Alternatives 1 and 2. As more constraints are placed on the fishery, constraints that could result in the fishery being closed before the Pacific whiting allocation is reached (i.e. bycatch limits). As the value of the Pacific whiting fishery catch relative to other opportunities increases, the incentives to underestimate the weight of constraining species increases. Delayed verification of fish ticket data increases the risk that some reported catch is underestimated. If catch is underestimated, the risk of exceeding a fishery specification is increased. Exceeding a fishery specification is of greatest concern for the most sensitive overfished species.

The quality of catch accounting on shore is affected by the level and type of at-sea monitoring. For example, under Alternative 4B, vessels would pay directly for EMS services to monitor catch retention of all fishing trips. EMS cameras turn on when the gear is first set and turn off when the vessel returned to port. An EMS aboard each vessels captures areas fished, fishing activity, and visual images of fishing activity, providing managers a comprehensive picture of fishing behavior of an individual vessel. Because of the ongoing monitoring, EMS is expected to deter any egregious discarding and assure that catch is retained until landing, providing an improved opportunity for improved catch accounting on shore over Alternatives 1, 3A, ad 4A, but similar to Alternatives 2, 3B, and 5.

Under Alternative 4B, Pacific whiting shoreside processors would be required by regulation to procure the services of a third-party catch monitor from a NMFS-permitted or NMFS-approved service provider. Catch monitors would be trained in techniques that could be used for the verification of fish ticket data and in species identification, but would not be trained in biological data collection. Under Alternative 4B, port biologists or industry samplers (Oregon) would continue to collect length and age structure data.

Catch monitor coverage levels could vary from partial coverage to full coverage. However, as coverage levels get lower, unverified fish ticket values would be expected to have a higher degree of error. Because the objective is fish ticket verification, a catch monitor would oversee the sorting and weighing of all the incidental catch in as many deliveries as possible to accurately verify the catch weights of incidental catch. The number of deliveries that can be monitored by an individual catch monitor is limited by factors such as: the number of deliveries received in a day, the time each delivery takes to be sorted and weighed, the process of how the catch is sorted, and the weighing process. As noted above, due to the lack of information for the individual processors on the factors that affect the time required for catch monitoring, the number of deliveries an individual catch monitor could oversee each day cannot be estimated at this time. This will be analyzed over time once sufficient data from processors are available.

Monitoring rates (to confirm accuracy of fish ticket, not to collect biological data) for Pacific whiting shorebased processors should be in proportion to the amount of fish processed and the daily operating hours. Ideally, a monitor would be present during the entire delivery to ensure that all incidental catch makes it to the point of weighing. This includes monitoring the primary sorting stations and confirming the weight of the catch includes species that may have been missed in the initial sorting, and confirming that all catch is recorded accurately. Depending on a processor's capacity and efficiency, and the size of vessel deliveries, a full offload could take a few hours to the majority of the day. To provide accurate fish ticket verification, a large proportion of all deliveries would need to be monitored. To accurately monitor rare occurring species, an large proportions of individual deliveries would also need to be sampled. When allocations for rare occurring species are set at the fishery level (all Pacific whiting sectors,) it is likely that most deliveries would need to be monitored for accurate verification. When allocations for rare occurring species are set at the sector level (Pacific whiting shoreside sector,) it is likely that all deliveries would need to be monitored for accurate verification. However, until further data can be gathered on processors, an analysis of trade-offs at different coverage levels can not be adequately analyzed.

If each processing facility were required to have one catch monitor, it is reasonable to expect that individual to monitor operations up to twelve hours per day. In addition to monitoring processing operations, the catch monitor may be required to prepare and submit data on the delivery. Unlike observers (Alternatives 3A and 3B), data collected by catch monitors (Alternative 4B) could be used to verify the weighing and sorting of catch and could be available inseason for monitoring overall catch of incidental species in the fishery. If catch reporting issues are identified during the season, catch monitor data could be used inseason to modify values used to

monitor the attainment of fishery specifications, and reduce the risk of a fishery specification being exceeded. Given the lack of information, it is reasonable to expect that each processor should at a minimum be required to have one catch monitor until further data can be collected and adequate monitoring levels for the fishery can be analyzed.

Alternative 5 is similar to Alternative 4B in that EMS would be used to monitor catch retention of all fishing trips. EMS cameras turn on when the gear is first set and turn off when the vessel returns to port. However, Alternative 5B goes an added step by specifically including the ability to place WCGOP observers on vessels if needed to address issues that are identified with EMS and cannot otherwise be resolved. At this time groundfish regulations at 660.314 (c) already allows for the placement of WCGOP under all of the alternatives. Therefore, Alternative 5 and 4B are also similar in the allowance to place a WCGOP observer on Pacific whiting shoreside vessels. Because full EMS coverage reduces the likelihood of catch being discarded at sea, the opportunity to conduct accurate shoreside catch accounting of all species is improved over Alternatives 1, 3A, ad 4A, but similar to Alternatives 2, 3B, and 4B.

The greatest difference between Alternatives 5 and 4B is in how the catch is monitored at the processing facilities and the addition of inseason bycatch reports and high bycatch area reports . Under Alternative 5, catch monitors are defined as compliance monitors. Like Alternative 4B, compliance monitors would be paid for by the processors through a third party and their duties would be to collect data to verify fish ticket values and to verify information collected by plant monitors. The compliance monitors would provide information to NMFS. Plant employees who have basic training in biological data collection and species identification and who collect biological information on the catch would be used as plant monitors. These individuals would be responsible for observing vessel offload, conducting bycatch species composition, enumerating and storing prohibited species, retrieving salmon snouts and coded wire tags, transporting prohibited species for food bank donation, and collecting biological information for Pacific whiting and for predominant bycatch species. The plant monitors are similar to the samplers used in Oregon under Alternative 2. Similar Alternative 2, the quality of fish length data collected by plant samplers/industry samplers who were provided with basic training, would likely be adequate to provide much need length data for stock assessment purposes (Builder 2000). However, the accuracy of other types of catch data used for management of the fishery has not been fully evaluated. As noted under Alternative 2, SHOP conducted an analysis of 2005 data that compared species composition and fish ticket values found that the most frequently occurring data discrepancy was a mismatch between composition samples and fish tickets were in the total weight of rockfish species, including yellowtail rockfish, widow rockfish, yelloweye rockfish, canary rockfish, darkblotched rockfish, and POP (Nottage and Parker 2006). Similar discrepancies were observed in an informal 2004 analysis (Steve Parker, pers. com.) The need to further develop plant samplers species identification skills were identified as an area need to improve the data quality (Nottage and Parker 2006) . Incomplete labeling of salmon held for sampling by the processing facilities also resulted in data quality issues. Studies similar to Builder (2000) found that the feasability of having processors obtaining data on fish lengths was easier than obtaining data on fish age or species compositions (Gallucci et.al., 1996). Selecting fish from mixed market categories requires fish identification skills, which can be difficult, - even for a trained port sampler or observer. Age composition sampling by collecting otoliths, opercle bone, or fin rays is also difficult and requires knowledge of fish anatomy and proper storage and documentation techniques.

Additional bycatch reports would be required under Alternative 5. The additional bycatch reports may aid vessels in avoiding high bycatch areas. These reports would be submitted inseason and provide fishing location information that is otherwise not available. This may result in reduces impacts on Chinook salmon and overfished species. In addition to electronic fish ticket reports, processors would be required to submit daily reports. Because electronic fish

ticket data must be submitted within 24 hours of the time the catch was landed rather than daily, electronic fish ticket data for some deliveries may not be submitted until almost two days after the catch was landed and would be available to managers shortly thereafter. The daily report required under Alternative 5 would provide more rapid reporting on those groundfish species (Pacific whiting, canary, widow and darkblotched rockfish) that NMFS is authorized to take automatic action on to prevent fishery specifications from being exceeded.

4.2.2 Non-groundfish species, prohibited species, and protected species

Non-groundfish species interactions: There are no direct impacts on non-groundfish species as a result of the alternative actions. The monitoring requirements under Alternative 3B, 4B and 5 are expected to improve the quality and timeliness of data used for inseason management of the Pacific whiting shoreside fishery over the Status Quo Alternative.

Salmonids: The potential effects of inaccurate catch accounting on salmon were discussed above. The monitoring requirements under Alternative 3B, 4B and 5 are expected to improve the quality and timeliness of data used for inseason management of the Pacific whiting shoreside fishery over status quo.

Marine Mammals: The alternative actions are not likely to affect the incidental mortality levels of marine mammals over what has been considered in previous NEPA analyses.

Seabirds: The alternative actions are not likely to affect the incidental mortality levels of seabirds over what has been considered in previous NEPA analyses.

Sea Turtles: The alternative actions are not likely to affect the incidental mortality levels of sea turtles over what has been considered in previous NEPA analyses.

Endangered Species: The potential effects of inaccurate catch accounting on salmon were discussed above. The monitoring requirements under Alternative 3B, 4B and 5 are expected to improve the quality and timeliness of data used for inseason management of the Pacific whiting shoreside fishery over status quo.

4.3 Effects on the Socioeconomic Environment

This section of the EA looks at impacts, positive and negative, on the socio-economic environment. Basic information regarding the people and the fisheries that are projected to be affected by the management alternatives was presented in Chapter 3. The following section differs in that it discusses what is projected to happen to the affected people and fisheries as well as what social changes are expected to occur, and, how changes are expected to affect fishing communities. The primary socioeconomic considerations when establishing a monitoring program for the Pacific whiting shoreside fishery are: changes in the cost of participation for processors, changes in revenue, changes in how the fishery is managed, the changes in cost to management, and changes in communities.

4.3.1 Changes in the Cost of Participation

Federal permits and endorsements: Under all of the alternatives, vessels participating in the Pacific whiting shoreside fishery must be registered to a limited entry permit with a trawl endorsement. In 2006, the cost to renew a limited entry permit with a trawl endorsement was $152.00. Under Alternatives 1 and 2, the costs for limited entry trawl permits with trawl endorsements are expected to remain relatively unchanged, with only minor upward adjustments being made when administrative costs increase. Under Alternative 2, vessels would continue to

apply for annual EFPs. At this time, there is no charge to the vessel owners or operators to obtain an EFP. The costs associated with obtaining an EFP includes the time for vessel owners and operators to: complete a request for an EFP; submit vessel documentation; and attend mandatory pre-season meetings, which may require travel in addition to participation time.

In addition to the limited entry permits with trawl endorsement, Alternatives 3A, 3B, 4A, 4B and 5 would also require Pacific whiting endorsements. The primary purpose of the endorsement would be to indicate the vessel's intent to fish in the Pacific whiting shoreside fishery. Pacific whiting endorsements would be issued to all qualified vessels that requested the endorsement and would be issued after the annual renewal process, but prior to the start of the Pacific whiting shoreside fishery. The costs to NMFS for issuing the federal permitting and endorsement responsibilities under Alternatives 3A, 3B, 4A, and 4B are expected to be similar to the current costs of NMFS administering the 2006 EFP was about $12,000 or about $300 per permit. These costs include NMFS review, database programming, and administrative costs. Under Alternative 5, the cost to the vessel to obtain a limited entry permit and whiting endorsement are the same costs identified for Alternatives 3A, 3B, 4A, and 4B plus the costs to participate in mandatory pre-season meetings and the cost of reporting on high bycatch areas. Similar to Alternative 2, the cost to attend mandatory pre-season meetings is the time needed to participate as well as the cost of travel, which will vary between individuals. To obtain a whiting endorsement, vessels owners/permit holders would need to agree to providing high bycatch area reports as necessary.

Reporting requirements: Under each of the alternatives, processors in the states of Washington and California would continue to complete and submit the required paper fish tickets on forms as required by the state of landing. In the State of Oregon, processors would either complete paper fish ticket forms provided by the state, or computer generated tickets providing they contain all data fields specified in state law. State requirements for fish ticket submissions would not be changed under any of the proposed alternatives.

On April 9, 2007 (72 FR 17469) NMFS published a proposed rule to establish catch accounting requirements for persons who receive, buy, or accept Pacific whiting (whiting) deliveries of 4,000 pounds (lb) (1.18 mt) or more from vessels using mid-water trawl gear during the primary whiting season. A final rule was published on May XX 2007, (72 FR XXXXX) with the requirements becoming effective on June XX, 2007. The rulemaking included requirements for processors/first receivers to have and use a NMFS-approved electronic fish ticket program (or other NMFS-approved software) and to send daily catch reports to the PSMFC. The electronic fish tickets are used to collect information similar to the information currently required in state fish receiving tickets or landing receipts (state fish tickets). The daily reports will be used to track catch allocations, bycatch limits and prohibited species catch. First receivers provide the computer hardware, operational software (Microsoft Office with Access 2003 or later if PSMFC software is used), and internet access necessary to support the electronic fish ticket program and daily e-mail transmissions. For companies that have developed their own software programs that meet the reporting requirements, provisions were included to allow the software to be NMFS-approved if the software meets specific requirements specified by PSMFC. Electronic fish tickets must be submitted within 24 hours from the date the catch is received.

The electronic fish ticket reporting requirements that are currently in place would remain in place under Alternatives 2, 3A, 3B, 4A , 4B and 5. Under Alternative 5, an additional daily report would be required by email or fax. The daily report would specify the catch weight of whiting and bycatch limits species and the number of Chinook salmon. Because electronic fish ticket data must be submitted within 24 hours of the time the catch was landed, rather than daily, electronic fish ticket data for some deliveries may not be submitted until almost two days after the catch was landed and available to managers shortly thereafter. The report required under

Alternative 5 would provide more rapid reporting on those groundfish species (Pacific whiting, canary, widow and darkblotched rockfish) that NMFS is authorized to take automatic action on, however it also increases the reporting burden on processors/first receivers.

There are approximately 1,200 discrete Pacific whiting primary season deliveries each year, with approximately 400 of the deliveries occurring in Washington and California and the remaining 800 occurring in Oregon. The NMFS-approved electronic fish tickets contain the same types of information as is required to be submitted on state fish tickets. In the States of California and Washington, current state law requires that state fish tickets be reported on standard paper forms provided by the states. In Oregon, the information required to be reported on a state fish ticket is specified in state law and may be submitted either on a paper fish ticket provided by the state or on a computer-generated ticket. Entering the required information into the NMFS-approved electronic fish ticket is expected to take eight minutes per ticket, including the time necessary to check transcription errors. The time required to access the internet and send the data files is two minutes per ticket. The burden on processors in Washington and California to submit electronic fish tickets is estimated to be ten minutes per electronic fish ticket submission, and includes the time to enter the data and the time to submit the data. A total cumulative of 67 hours would be required annually for all processor/first receivers in Washington and California to submit electronic fish tickets. For processors in the State of Oregon, the additional burden is only the time it takes to send the electronic fish ticket (two minutes per submission), since the state laws already requires that the information be gathered and allows the submission of a printed and signed electronic formats. For processors in the State of Oregon, a total of 27 hours is expected to be required annually for the submission of electronic fish tickets.

In total, Pacific whiting processors in all three states are estimated to take 93 hours annually to prepare and submit electronic fish tickets under Alternatives 2, 3A, 3B, 4A , 4B and 5. Each additional daily catch reports required under Alternative 5 is estimated to take five minutes to prepare and two minutes to send. For fourteen processors/first receivers over a 60 day season, it would require an additional 98 hours of time to prepare and send the daily reports, plus the time to send the electronic fish ticket. The total hours for all reporting under Alternative 5 is 191 hours per year for all processors/first receiver (14 hour per respondent under Alternative 5 as compared to seven hours per respondent under Alternatives 2, 3A, 3B, 4A, and 4B).

Table 4.3.1.3. Total Annual Burden Hours for the Submission of Reports

Electronic Fish Tickets	**Total Annual Responses**	**Time per Response**	**Total Time (Hrs)**
Alternatives 2, 3A, 3B, 4A ,and 4B -Electronic fish tickets			
Transcribe information to electronic fish ticket	400	8 minutes	53
Send electronic fish ticket via email	1200	2 minutes	40
TOTAL:			93
Alternative 5 - Electronic fish tickets and daily catch report			
Transcribe information to electronic fish ticket	400	8 minutes	53
Send electronic fish ticket via email	1200	2 minutes	40
Time to prepare report	840	5 minutes	70
Send daily catch report via email or fax	840	2 minutes	28
TOTAL:			191

Software for electronic logbooks has not been developed specifically for the Pacific whiting fishery. However, general fishery logbook software is available for some Vessel Monitoring

Systems (VMSs). When electronic vessel logbook software that is suitable to document effort data and for reporting discard events in the Pacific whiting fishery becomes available, it could be implemented through a subsequent rulemaking under Alternatives 3A, 3B, 4A, 4B and 5. The specific details of an electronic vessel logbook, or the costs to the individual vessel, is unknown at this time.

Accuracy of fish ticket weights is an important component of the Pacific whiting shoreside monitoring program. Under Status Quo, all catch is delivered in unsorted deliveries and fish ticket weights are summed to determine the total catch of each species or species group. This is in contrast to the mothership and catcher processor sectors of the Pacific whiting fishery, where catch is sub-sampled and sample weights are extrapolated to the individual haul and summed to derive total catch estimates. Using fish ticket weights for total catch in a maximized retention program or full retention fishery is considered to be a census because all catch is weighed. In general, a census is considered to be most accurate because the understanding of total catch is not dependent on how well the samples represent what was actually caught. However, data quality is paramount to the accuracy of any census. We assume that the weights reported on fish tickets in the Pacific whiting fishery are relatively accurate; however, accuracy of total catch could be significantly affected by inaccurate weights or scale readings, improperly sorted catch, and, recording errors .

The level of accuracy in fish ticket weights needed to manage OYs, allocations, harvest guidelines, and bycatch limits in the Pacific whiting shoreside fishery varies by species. In general, large volume species, such as Pacific whiting, that are managed to the nearest metric ton have much more tolerance for error in weight estimates than species such as canary rockfish, which is managed to the nearest 10^{th} of a metric ton. On the other hand, prohibited species, such as salmon, crab and Pacific halibut are reported and managed by number rather than weight. Therefore, the need for accurate scale readings for these species is not as important in the Pacific whiting fishery.

Methods used to derive fish tickets values can vary in accuracy. For most shoreside facilities, Pacific whiting deliveries are sorted and the catch is weighed on commercial scales that vary in type and performance. As described in Section 3.3.2, each state has laws and regulations that pertain to the use of scales and scale performance used by businesses for commercial purposes. Each state has an agency (county or state) that oversees weights and measures standards and conducts or oversees scale performance testing for commercial scales. Commercial scale requirements and how those requirements apply to seafood processors and fish tickets differs substantially between states.

Under Alternatives 1 and 2, each processor is required to meet the existing state requirements described in Section 3.3.2 of this EA and as they apply to seafood processors. Currently, only the State of Oregon specifies the methods that can be used to derive fish ticket weights for each species received (only sablefish is specified for all three states). In Oregon, fish ticket weights may be determined using: actual round weights based on certified scale measurements; actual round weights measured using a hopper scale; or weights converted to round weight by multiplying the appropriate conversion weight. The State of Washington requires all commercial scales to: be tested and have a NTEP certificate of compliance if installed after 1997, be installed according to manufactures requirements, have security seals, be registered

with the Washington State Department of Licensing, be maintained, and be suitable for intended use. However, Washington State Code does not specifically require that fish tickets be completed with weights derived from a scale that is in compliance with weights and measures regulations. The State of California has very broad-reaching and detailed requirements for scales used for commercial purposes. However, at the time this document was prepared it was unclear if California code excludes seafood processors from the requirements. Fish ticket weights submitted to the State of California must use accurate weights, for groundfish species the weights are not required to be derived from scales.

Provisions would be added under Alternatives 3A, 3B, 4A, 4B or 5 that would reinforce in Federal regulation the need for processors to be in compliance with existing state standards and requirements as they apply under Status Quo; require that actual weights derived from scales be used on fish tickets; and that the weights used on fish tickets be derived from scales appropriate to the amount being weighed. Having Federal scale performance and testing requirements concur with state requirements may improve the degree to which state requirements are followed by processors.

Monitoring Pacific whiting shoreside vessels at-sea: Currently observer programs in the Pacific coast groundfish fishery use two types of funding mechanisms: Federally funded observers and third-party or pay-as-you go observers. The WCGOP is federally funded and currently provides observer coverage in the limited entry and open access non-whiting fisheries. Federal funds are used to run the program infrastructure (training, debriefing, and data management) and to hire, equip, insure, and transport observers. Observers are employed by the PSMFC, through a Federal contract. The third-party or pay-as-you-go funding approach is currently used in the mothership and catcher processor sectors of the Pacific whiting fishery. In the Federally regulated third-party system used in the Pacific whiting fishery, participants are responsible for: making arrangements with a NMFS-permitted observer provider; having an observer available for their vessels; and, paying the observer providers directly for the observer costs. The NMFS-permitted observer providers collect the fees directly from the vessels, recruit qualified individuals, provide insurance and benefits to the observers, deploy the observers, and assure that the observer data is delivered to NMFS. Federal funds are used to run the program infrastructure (training, debriefing, and data management) and to equip the observers.

Under Alternative 3A, NMFS would use Federal funds to provide at-sea observers for monitoring Pacific whiting shoreside vessels. However, all existing Federal funds for observers are currently being used to run the existing WCGOP. Therefore, under Alternative 3A WCGOP observers would be used to provide coverage for the Pacific whiting shoreside fishery. Selection of vessels for observer coverage would likely be similar to that described under Alternative 1, where the WCGOP would include the Pacific whiting vessels in the same coverage pool as all non-whiting trawl fisheries. In the non-whiting or bottom trawl fisheries, vessels are randomly selected from the pool of all trawl vessels. Because existing resources are limited, using WCGOP observers to provide coverage for Pacific whiting shoreside vessels would reduce the coverage levels in the non-whiting trawl fisheries below recent coverage levels during the summer months.

In July 2006, the WCGOP had 23 observers working year round and approximately twenty additional observers from March through October (NMFS July 2006). WCGOP coverage levels in the non-whiting groundfish fisheries for 2005 are shown in Tables 4.4.1 and 4.4.2. The WCGOP uses a stratified random selection process to select vessels for observer coverage. Vessel must carry an observer on all trips during the cumulative period. This approach allows for representative coverage of a fishery throughout its geographic range. The number of fisheries covered varies by year and with funding. Limited entry trawl has the highest priority for coverage.

While there would be no direct salary cost to industry for WCGOP observers under Alternative 3A, vessels would need to make coverage arrangements and provide food and accommodations for the observers. In addition, some vessels may choose to purchase additional insurance during the observer's time on board their vessel. The average daily cost for meals for an observer is $15/day (NPFMC 2005). Because a selected vessel would be required to carry the observer throughout the whiting season, it is estimated to cost each selected vessel approximately $900 per season for observer meals, assuming a 60 day season. Information necessary to estimate the value of accommodations is not available. The burden on an individual vessels is expected to vary between vessels with the cost being highest for those vessel where crew are displaced because there is lack of extra bunk space. If WCGOP targeted a twenty percent observer coverage[6] level for the Pacific whiting shoreside fishery, the cost to the fleet is estimated to be approximately $6,840 per year (assumes 38 vessels per year). When compared to the revenue from whiting in 2006 (Table 3.3. 1.1) this is 0.05 percent of the exvessel value of the fishery. If WCGOP targeted a 100 percent observer coverage observer level for the Pacific whiting shoreside fishery, the cost to the fleet is estimated to be approximately $34,200 per year (assumes 38 vessels per year). When compared to the revenue from whiting in 2006 (Table 3.3. 1.1) this is 0.27 percent of the exvessel value of the fishery. To attain 100 percent coverage, the WCGOP would have to dedicate 75 percent of its observer resources to the Pacific whiting shoreside fishery during the summer months, severely reducing the coverage in other groundfish fleets.

Under Alternative 3B, vessel owners or operators would be required by regulation to procure the services of an observer from a NMFS permitted observer provider. NMFS believes that full observer coverage (projected to be one observer per vessel on all fishing days) would be required to adequately monitor compliance with the maximized retention requirements. The average daily cost for a third-party observer is $330/day including food, but not including travel (NPFMC 2005). In addition, some vessels may choose to purchase additional insurance during

[6] This document does not analyze using existing Federally funded WCGOP observers at coverage levels that are greater than coverage levels in the non-whiting trawl fisheries to monitor maximized retention at sea. The sampling priorities for WCGOP observers deployed to trawl vessels are to collect data that are used for total catch estimates of each groundfish species or species group over the entire fishing year, and to collect fishery dependent biological data that are otherwise not available on shore. To require greater observer coverage would have a direct effect on the ability of the WCGOP to monitor catch in other fisheries and to meet Magnuson-Stevens Act mandates. In addition, a maximized retention program with less than 100 percent of the hauls being monitored at sea is not considered viable. See section 2.3 for further discussion.

the observer's time on board their vessel. Information necessary to estimate the value of accommodations is not available. The burden on an individual vessel is expected to vary between vessels, with the cost being highest for those vessel where crew are displaced because of a lack of extra bunk space. Because a vessel would be required to carry the observer throughout the whiting season, the estimated cost for a vessel to carry an observer is $24,750 per season, assuming a 60 day season, 15 days for training and debriefing, and no additional insurance. The cost to the fleet is estimated to be approximately $940,500 (assumes 38 vessels per year and a 60 day season). When compared to the revenue from whiting in 2006 (Table 3.3. 1.1,) this is 7.52 percent of the exvessel value of the fishery.

Under Alternative 5, vessels would be required to carry a WCGOP observer if needed. The need for an observer would be determined by NMFS on a case-by-case basis. Similar to Alternative 3A, there would be no direct salary cost to industry for WCGOP; however, vessels would need to make coverage arrangements and provide food and accommodations for the observers. In addition, some vessels may choose to purchase additional insurance during the observer's time on board their vessel. The average daily cost for meals for an observer is $15/day (NPFMC 2005). If a vessel was required to carry the observer throughout the whiting season, it is estimated to cost each vessel approximately $900 for meals for the observer, assuming a 60 day season. Under existing regulations, NMFS already has the authority to place observers on any Pacific whiting shoreside vessels when it is determined to be necessary. The cost to carry a WCGOP observer under Alternative 5 is therefore similar to Alternatives 3A, 3B, 4A, and 4B.

Under Alternative 4A, 4B, and 5, EMS coverage requirements would be specified in Federal regulation. EMS would be installed on vessels in the Pacific whiting shoreside fishery to monitor compliance with maximized retention regulations. EMS has been successfully used to document retention and discard of catch in the Pacific whiting shoreside fishery since 2004. As described in Section 3.3.2, EMS is a data collection tool that uses a software operating system connected to an assortment of electronic components, including video recorders, to create a data collection of vessel activities. The EMS is designed to independently monitor vessel fishing activities and provide accurate, timely, and verifiable data. Because EMS would be used as a compliance monitoring tool, NMFS believes it is necessary for 100 percent of the Pacific whiting trips to be monitored.

The cost of EMS can be broken into two major components: the cost of the physical system and the cost of data analysis, summary and release. As has been the case under EFPs (Alternative 2), under each of the alternatives that considers EMS (Alternatives 4A, 4B and 5), NMFS would continue to be responsible for the costs associated with the data including, analysis, summary and release. The costs associated with the physical system include: the cost to lease the EMS unit (includes installation, maintenance, data downloads, and removal), the time to have the EMS unit installed and removed, and the time for data to be removed.

Because no money has been specifically appropriated for the implementation of an EMS monitoring program in the Pacific whiting shoreside fishery, under Alternative 4A, NMFS would use existing WCGOP funds to lease the EMS physical equipment as well for data analysis and EMS summary. Given the need to use WCGOP funds for observer coverage in non-whiting

groundfish fisheries, this would impact the ability to provide observer coverage in the non-whiting groundfish fisheries. Supporting the entire EMS program would reduce both WCGOP funding and staffing resources focused on the non-whiting fisheries by 7-10 percent.

As noted above, NMFS believes that full at-sea coverage of Pacific whiting shoreside vessels is necessary to effectively deter discarding at sea. Reducing EMS coverage would likely result in more restrictive management due to bycatch concerns, especially give the ESA Biological Opinion monitoring requirements, than is currently in place for the fishery.

Under Alternatives 4B and 5, vessels would be responsible for costs associated with the EMS physical system. Full coverage would be required on all Pacific whiting fishing trips and vessels would be required to lease EMS services from a NMFS-permitted service provider. One company, Archipelago Marine Research, Ltd., which has extensive experience with using EMS to monitor fishing fleets in British Columbia, was selected through an open bid process to provide EMS services for the Pacific whiting shorside fishery EFPs during the 2004-2007 seasons. During the 2004-2006 seasons, the costs of the EMS physical systems for approximately 30 vessels over a 60 day fishing season ranged from $160,000 to $180,000. When implemented, regulations specifying the qualification criteria for EMS permitted service providers may lead to other companies developing suitable EMS. If this occurs, the competition may lead to reduced costs.

When distributed across the fleet, the fleet could choose to approach the cost of EMS in a number of ways including: a flat fee per vessel, a percentage of each vessel's landings, a combination of a lower flat fee with a percentage of landings, etc. Regardless, the cost on a per vessel basis is expected to decrease if the participating vessels approached a provider of qualified EMS as a group rather than as individual vessels. For example, a group could negotiate a group price that could be paid up front and if the overall maintenance of the systems cost less than estimated, some cost could be refunded to the group on a pro-rated basis at the end of the season. As discussed above, the cost to the individual vessel for the physical system under Alternatives 4B and 5B could vary depending on the approach that the fleet chooses. As a rough guide, if a flat fee per vessel scenario were used during the 2004-2005 seasons, the per vessel cost would have ranged from 5,333 to $6,000 ($160,000/30 vessels- $180,000/30 vessels). When compared to the revenue from whiting in 2006 (Table 3.3. 1.1) this is 1.28-1.44 percent of the exvessel value of the fishery.

In addition to the direct costs of EMS vessels, under Alternatives 4A, 4B or 5, vessels would be required to provide additional crew and skipper time to aid in the installation and removal of the EMS system. The estimated time is on a per vessel basis and assumes the vessel crew is readily available to turn hydraulic and electrical systems on and off during installations and/or repairs, the vessel is prepared for sensor installation (pressure fitting for hydraulic sensor installed), it is a typical EMS set-up, the system repair is due to normal wear and tear, downloads are done intermittently throughout the season and coaxial cables are capped and left in place. It takes two to six hours per vessels to install an EMS. During the season, on average, two to ten hours per vessel are needed to repair an EMS repair, during which crew may be needed to help troubleshoot the EMS integration with vessel electrical and hydraulic systems. Access to the

vessel to download the collected data is also needed. While the data download takes two to four hours per season per vessel, crew only has to provide access to the location of the EMS data box and does not have to be available during the entire download. Lastly, to remove the EMS at season's end takes one to two hours per vessel, during which time the crew must provide access to contract staff.

Monitoring Pacific whiting shoreside processors/first receivers: Each of the alternatives considers using individuals who collect catch data at the Pacific whiting shoreside processing facility. These individuals include: port biologists, plant monitors/industry monitors/industry samplers, federal observers, third-party observers, data quality monitors and data compliance monitors.

Port samplers are biological aides who are employed by the states or PSMFC and trained in interviewing fishermen, species identification, recordkeeping, and summarizing basic field data. Under Alternatives 1, 2, 3A, 3B, 4A and 4B, existing port samplers would continue to have a data collection role, though the role of the port sampler varies somewhat between the alternatives and between states. The continued use of port samplers would not result in added costs to fishery participants over the Status Quo Alternative. However, minor increases may be needed by individual states to maintain adequate biological sampling.

Plant monitors/industry monitors/industry samplers (industry samplers) are individuals directly employed by the processors who have basic training in biological data collection and species identification and who collect basic biological information on the catch and catch composition. Under the Status Quo Alternative (Alternative 2), the State would continue to hire, train, and pay for port biologists to: collect fish ticket data; complete landing summaries, and collect biological data; and verify salmon counts. Additional port samplers may also be funded by the PSMFC. In the State of Oregon, industry samplers would continue to be used to take species composition data, and to collect biological data from groundfish. The average annual cost to the individual processor for providing an industry sampler increased from $4,649 per season in 2000 to $5,400 per season in 2005 (Table 4.3.1.4). Under Alternative 2, the projected cost per processor is $5,400 per season for a processor in the state of Oregon. The cost to the industry under Alternative 2 is $27,000, since as industry samplers would continue to be used in Oregon while port biologists would collect similar data in Washington and California.

Under Alternative 5, dockside monitoring at Pacific whiting shoreside facilities would be conducted by two different types of individual, data compliance monitors and industry monitors/industry samplers. Industry samplers under Alternative 5 would collect data at processors/first receivers in all three states. Prior to the season, industry samplers receive basic training in biological data collection and species identification. These individuals would be responsible for observing vessel offload, conducting bycatch species composition, enumerating and storing prohibited species, retrieving salmon snouts and other coded wire tag, transporting prohibited species for food bank donation, and collecting biological information for Pacific whiting and for predominant bycatch species. Using costs identified under Alternative 2, the cost per processor would be approximately $5,400 per season. The cost to the fleet under Alternative 5, assuming 14 processors/first receivers annually, is $75,600.

Table 4.3.1.4 Annual costs for industry samplers by Pacific whiting processors in Oregon, 2000 - 2005. (data from Nottage and Parker 2005)

Year	Annual cost paid directly by industry for samplers a/ ($)	Number of Processors in Oregon	Days in season	Cost per processor ($)	Cost per day per processor ($)
2000	32,544	7	93	4,649	50
2001	35,770	7	68	5,110	75
2002	29,808	6	33	4,968	151
2003	29,808	6	30	4,968	166
2004	27,000	5	61	5,400	89
2005	27,000	5	65	5,400	83
a/ During 2006 processor samplers were roughly paid an average of $11.25 per hour					

Observers are biological technicians, educated in the natural sciences, trained in species identification and biological sampling. They collect catch and effort data used to estimate total catch. Alternatives 3A (WCGOP observers) and 3B (third-party observers) consider using observers to collect data that could be used for verification of fish tickets or used to evaluate the accuracy of fish tickets after the season. While there would be no direct salary cost to industry for WCGOP observers under Alternative 3A, processors would need to make coverage arrangements for the observers and provide adequate accommodations for sampling, including access to the catch and a dedicated sampling station. The cost to provide the necessary accommodations is expected to vary between processors. To provide 100 percent coverage (one observer per processor), 14 observers would be needed during the summer months. When combined with WCGOP observers deployed on vessels, having this number of individuals dedicated to the Pacific whiting shoreside fishery would require dedication 50 to 100 percent of all WCGOP resources.

Under Alternative 3B, processors would be required by regulation to procure the services of an observer from a NMFS- permitted observer provider. One observer would be required at each Pacific whiting processing facility. The average daily cost for a third-party observer is $315/day not including food, accommodations or travel (NPFMC 2005). Because a processor would be required to have one observer throughout the whiting season the estimated cost per processor for an observer is $23,626 per season ($18,226 greater than the Status Quo Alternative), assuming a 60 day season, with 15 days for training and debriefing. The cost to all processors is estimated to be approximately $330,750 (assumes 14 processors per year). When compared to the revenue from whiting in 2006 (Table 3.3. 1.1) this is 2.64 percent of the exvessel value of the fishery.

Under Alternative 4A, NMFS would use Federally appropriated funds to monitor Pacific whiting deliveries at the shoreside processing facilities. At this time, there are no Federal funds

specifically appropriated for catch monitors for Pacific whiting shoreside processors. Therefore, a Federally funded program would use observers as catch monitors unless other funds became available. Therefore, the costs to fisher participants for Alternative 4A is the same as Alternative 3A.

Alternative 4B considers using data quality monitors. Data quality monitors are third party employees paid for by industry and trained by NMFS in techniques used for the verification of fish ticket data. These individuals would be trained in: species identification; observation and sub-sampling techniques relative to the verification of fish ticket data; the types and use of commercial scales; documentation procedures for compliance purposes; and recordkeeping. NMFS would define verification methods and would coordinate or conduct the training of these individuals. One data quality monitor would be required at each Pacific whiting processing facility receiver. Processors would be required by regulation to procure the services of a data quality monitor from NMFS-approved provider, such as PSMFC. The average daily cost for data compliance monitor is estimated to be between $200 and $300 per day including travel, benefits and supplies (Dave Colpo PSMFC pers. com). Because a processor would be required to have the data quality monitor throughout the Pacific whiting season, the estimated cost per processor is between $12,000 and $18,000 per season, assuming a 60 day season. The cost to all processors is estimated to be approximately $168,000 and $252,000 (assumes 14 processor per year). When compared to the revenue from whiting in 2006 (Table 3.3. 1.1) this is 1.34 percent of the exvessel value of the fishery.

Alternative 5 considers using data compliance monitors along with industry samplers. Data compliance monitors are standards inspectors that are employed by independent third parties. These individuals are trained in the types and use of commercial scales, species identification, recordkeeping, and non-compliance. Data compliance monitors observe weighing and sorting activities as well as the activities of industry samplers. One data quality monitor would be required at Pacific whiting processing facility/first receiver. Processor would be required by regulation to procure the services of a data quality monitor from NMFS-approved provider, such as PSMFC. The average daily cost for data compliance monitor is similar to the cost described above for data quality monitor under Alternative 4B.

Overages: Overages are the amounts of fish harvested by a vessel in excess of the applicable trip limit. Overages include non-whiting groundfish catch and prohibited species that cannot be sold by the vessel. Under Alternative 1, there are no allowances for landing overages. Therefore, all overage fish would need to be discarded at sea. The cost of Alternative 1 to the industry is the added cost to sort the catch at sea and the reduced value of the whiting catch if sorting reduces its quality. Most Pacific whiting shoreside fishers prefer to quickly and efficiently handle the catch and place it into the refrigerated salt water tanks as quickly as possible so they can return to port for offloading. Under a primary season structure, vessels that are quick and efficient are able to harvest more catch before the allocation is reached than vessels that take more time to handle the catch. Adequately sorting catch at sea is expected to require many hours of deck sorting, where the crew stays on deck to look through the catch before it flow into the holds. It is reasonable to expect that holding whiting on deck in the codend for hours could decrease the quality and value of the catch. However, in 2006, a single

shoreside vessel with history in the whiting fishery found a profitable way to partially process headed and Gutted Pacific whiting at sea. The vessel used a smaller net and tows of short duration to maintain quality. Head and gut machines were used at sea and the product immediately placed in thick slurry of ice. Because fish that are headed and gutted with no further processing (such as freezing) are not considered to be a processed product, the vessel's activities does not result in its activity being that of a catcher/processor. The ex-vessel price of the partially processed catch was approximately four times than whiting landed whole in unsorted EFP landings.

Under the EFP structure (Status Quo), vessels have been allowed to land the unsorted catch providing that they abandon the catch in excess of trip limits and prohibited species catch to the state of landing. The processors are allowed to process the marketable catch excluding salmon and Pacific halibut, but they must pay the state of landing fair market value for the catch. Fair market value is defined differently by each state. Prohibited species catch must be donated to a nonprofit food bank. Under Status Quo (Alternative 2), each state would be responsible for the distribution, tracking, sales of marketable overage fish. How overages are handled would likely vary between states. Salmon and Pacific halibut must be donated to a legitimate hunger relief agency. Port biologists and industry samplers transport donated catch to the hunger relief agencies. Because Alternative, 3A, 4A, and 5A would continue to require catch to be abandoned to the state of landing under the same structure that is in place with the Status Quo Alternative, there is no expected change for industry participants.

Under Alternatives 3B, 4B, and 5B, Federal regulations would prohibit the sale of overage fish and prohibited species. Overage fish and prohibited species could be donated to a hunger relief organization; however, many hunger relief organizations do not accept whole fish. Therefore, processors would need to partially process the catch or dispose of it in another manner, such as donating the catch for rendering. Under Alternative 3B, processors would be responsible for transporting donation catch. Under Alternatives 4B and 5B, industry samplers would transport donation catch. The cost of transporting the catch would be the processor's responsibility.

Under Alternatives 2, 3A, 3B, 4A, 4B and 5 there is a cost associated with port biologists and industry samplers transporting donated catch to hunger relief agencies. Under Alternatives 3A, 4A, and 5A there is a cost to the states process payment received from catch that was abandoned. However, the cost to process overage payments is offset by the revenue from the sale of the marketable catch. At this time data necessary to estimate the value of overage catch or the cost of transporting the catch to hunger relief agencies is not available.

Impact on participants in the directed Chinook fishery: There are no direct short-term consequences or implications for the directed Chinook fisheries under the Status Quo Alternative (Alternative 2). The consequences or implications under Alternatives 3B, 4B, and 5 are expected to be similar to the Status Quo Alternative. The groundfish and salmon fisheries are subject to separate regulations and ESA-related standards. When the groundfish fishery exceeds the consultation standard, consultation is reinitiated to examine why the standard was exceeded and changes that NMFS believes are necessary and appropriate to bring the fishery back in line are implemented. For the long term, and in a more general sense, if the status of one

or more ESA-listed species continues to deteriorate, all activities are subject to review and further constraint. As salmon fisheries become increasingly restricted, other activities, including the groundfish fisheries, will be subject to further scrutiny, and could be subject to further constraint.

The Pacific whiting shoreside fishery needs to have an adequate monitoring and catch reporting system in place to track the incidental take of Chinook salmon as required in the ESA Section 7 Biological Opinion for Chinook salmon catch in the Pacific whiting fishery. The whiting fishery must be closely monitored to provide reasonable assurance of continued compliance with efforts to reduce bycatch. Under Alternative 1, Chinook catch in the whiting fishery would not be adequately monitored as specified under the ESA Biological Opinion . Under Alternatives 3A and 4A, it si likely that the level of monitoring is not adequate, therefore the Biological Opinion would need to be reviewed.

4.3.2 Changes in Fishery Revenue

There is no direct change in revenue from Alternatives 3A, 3B, 4A, 4B and 5 over Status Quo (Alternative 2). Indirect impacts could occur if catch monitoring and accounting difficulties resulted in the Pacific whiting shoreside fishery no longer being managed under a bycatch limit management strategy. In March of every year, the PFMC recommends harvest specifications for the Pacific whiting fishery that NMFS adopts into regulation. If it's determined that the bycatch limits of overfished species cannot be adequately managed, it may be necessary to take a more conservative approach when establishing the Pacific whiting shore-based allocation. A more conservative approach would be to restrict overall Pacific whiting harvest based on projected bycatch of overfished species, as is done in the bottom trawl fishery. In 2006, had the Council recommended that the whiting allocation be restricted by overfished species bycatch like the bottom trawl fishery, the Pacific whiting OY would have been constrained by a projected catch of 4.7 mt of canary rockfish. This would have resulted in a U.S. Pacific whiting OY of 234,331 mt as compared to the OY of 267,662 mt that was adopted (based on the 2006 GMT whiting fishery bycatch model). The shore-based allocation would have been 83,929 mt rather than 97,718 mt, 13,789 mt less than what was available to the fishery under the bycatch limit management approach.

Table 4.3.2.1 Change in Whiting revenue when OY is constrained by projected overfished species catch. (based on the 2006 GMT whiting fishery bycatch model)

US Whiting	Change in Exvessel	Bycatch Implications					
OY	Revenue	Canary	Darkblotched	Lingcod	POP	Widow	Yelloweye
300,000	$34,819,768	7.8	18.3	3.1	7.1	143.7	0.0
250,000	$28,977,525	6.5	15.0	2.6	5.9	118.4	0.0
200,000	$23,135,282	5.2	11.9	2.1	4.7	94.0	0.0
150,000	$17,293,039	4.0	8.6	1.5	3.5	68.7	0.0
100,000	$11,450,796	2.7	5.6	1.0	2.3	45.2	0.0

Table 4.3.2.2 Change in Whiting revenue by sector when OY is constrained by projected overfished species catch. (based on the 2006 GMT whiting fishery bycatch model)

US Whiting			Bycatch Implications					
OY	Sector	Exvessel Rev	Canary	Darkblotched	Lingcod	POP	Widow	Yelloweye
300,000	Tribal	$4,089,570	1.6	0.0	0.2	0.6	6.0	-
	Mothership	$7,375,248	3.8	5.3	0.7	1.1	32.6	0.0
	CP	$10,448,267	0.8	7.1	0.4	3.3	56.7	0.0
	Shoreside	$12,906,683	1.6	5.9	1.9	2.0	48.3	0.0
	Total	$34,819,768	7.8	18.3	3.1	7.1	143.7	0.0
250,000	Tribal	$3,797,458	1.5	0.0	0.2	0.6	5.6	-
	Mothership	$6,043,216	3.1	4.3	0.6	0.9	26.7	0.0
	CP	$8,561,223	0.7	5.8	0.3	2.7	46.5	0.0
	Shoreside	$10,575,628	1.3	4.8	1.5	1.6	39.6	0.0
	Total	$28,977,525	6.5	15.0	2.6	5.9	118.4	0.0
200,000	Tribal	$3,213,234	1.2	0.0	0.1	0.5	4.8	-
	Mothership	$4,781,292	2.5	3.4	0.5	0.7	21.2	0.0
	CP	$6,773,497	0.5	4.6	0.2	2.2	36.8	0.0
	Shoreside	$8,367,260	1.0	3.8	1.2	1.3	31.3	0.0
	Total	$23,135,282	5.2	11.9	2.1	4.7	94.0	0.0
150,000	Tribal	$2,921,122	1.1	0.0	0.1	0.5	4.3	-
	Mothership	$3,449,260	1.8	2.5	0.3	0.5	15.3	0.0
	CP	$4,886,452	0.4	3.3	0.2	1.6	26.5	0.0
	Shoreside	$6,036,205	0.7	2.8	0.9	0.9	22.6	0.0
	Total	$17,293,039	4.0	8.6	1.5	3.5	68.7	0.0
100,000	Tribal	$2,044,785	0.8	0.0	0.1	0.3	3.0	-
	Mothership	$2,257,443	1.2	1.6	0.2	0.3	10.0	0.0
	CP	$3,198,044	0.2	2.2	0.1	1.0	17.4	0.0
	Shoreside	$3,950,525	0.5	1.8	0.6	0.6	14.8	0.0
	Total	$11,450,796	2.7	5.6	1.0	2.3	45.2	0.0

4.3.3 Changes in Management of the Fishery

The ability to manage overfished species bycatch limits in the Pacific whiting fishery is impaired when the catch is sorted at sea prior to being delivered to the shoreside processor. When the catch is sorted at sea, the overfished species in excess of the trip limits are discarded. Therefore, the catch of species being managed with bycatch limits are not be captured on the fish tickets. Each of the alternatives other than the no-action Alternative, contains a provision that would define 4,000 lb as the amount per trip that defines targeting Pacific whiting or a Pacific whiting delivery. Prior to 2007, 10,000 lb of Pacific whiting per trip was used in the EFPs for defining targeted Pacific whiting trips and deliveries. Reducing the amount used to identify whiting deliveries is necessary to prevent vessels from targeting Pacific whiting and avoiding monitoring by landing less than 10,000 lb. This is particularly a concern under Alternatives 3B, 4B and 5 where vessels would be required to pay directly for monitoring costs.

Table 4.3.3.1. shows the number of deliveries that would be affected if the criteria for defining a Pacific whiting delivery by 10,000 lb and 4,000 lb per delivery and Table 4.3.3.2 shows the total

weight of whiting represented by each category of deliveries. Between 2002 and 2006, only one vessel would be excluded because it did not make a landing in excess of 10,000 lb in 2002.

Table 4.3.3.1. Number of Midwater Trawl Pacific Whiting Deliveries by Year and Weight Group (PacFIN database, February 2007)

Year	Number <4000 lb	Percent <4000 lb	Number 4,000 lb-10,000 lb	Number 4,000 lb-10,000 lb	Percent >10,000 lb	Number 4,000 lb-10,000 lb	Total deliveries
2002	234	18%	299	22%	797	60%	1,330
2003	286	20%	279	20%	835	60%	1,400
2004	272	12%	521	23%	1458	65%	2,251
2005	216	9%	471	20%	1659	71%	2,346
2006	168	8%	338	15%	1684	77%	2,190

Table 4.3.3.2. Total Weight in Metric Tons of Pacific Whiting in Midwater Trawls Deliveries by Year and Weight Group (PacFIN database, February 2007)

Year	Mt Whiting <4,000 lb	Percent <4,000 lb	Mt Whiting 4,000 lb-10,000 lb	Percent 4,000 lb-10,000 lb	Mt Whiting >10,000 lb	Percent >10,000 lb	Total deliveries
2002	202	0.4%	891	2%	44,586	98%	45,679
2003	234	0.5%	799	2%	50,187	98%	51,220
2004	280	0.3%	1,560	2%	87,790	98%	89,630
2005	185	0.2%	1,486	2%	95,904	98%	97,575
2006	151	0.2%	1,057	1%	91,457	99%	92,665

Table 4.3.3.3. Total Weight in Metric Tons of All Species in Pacific Whiting in Midwater Trawls Deliveries by Year and Weight Group (PacFIN database, February 2007)

Year	Mt all species <4,000 lb	Percent <4,000 lb	Mt all species 4,000 lb-10,000 lb	Percent 4,000 lb-10,000 lb	Mt all species >10,000 lb	Percent >10,000 lb	Total deliveries
2002	378	0.8%	1,028	2%	48,923	97%	50,329
2003	377	0.7%	844	2%	50,309	98%	51,530
2004	637	0.7%	1,690	2%	87,871	97%	90,197
2005	552	0.6%	1,704	2%	96,204	98%	98,460
2006	356	0.4%	1,113	1%	91,552	98%	93,022

4.3.4 Changes in Cost to Management

Under the Status Quo Alternative, the states would continue to sponsor and oversee EFP activities and NMFS would continue to issue annual EFPs. The cost of EFPs to NMFS are primarily the labor associated with: notifying the public that an EFP application has been received and that NMFS intends to issue the permits; drafting the terms and conditions of the permit; coordinating with the states; reviewing individual permit applications and working with applicants; and database updates. In addition, there are costs associated with purchasing supplies and mailing the EFPs. The estimated cost to NMFS for issuing the 2006 Pacific whiting shoreside EFPs is $13,000. The cost of the Status Quo Alternative to the states primarily include the labor for: preseason meetings, compiling individual permit applications, preparation of processor agreements and obtaining signatures. In addition, there costs associated with computers, supplies, and travel. The estimated cost to the states for issuing the 2006 Pacific whiting shoreside EFPs is approximately $2,000 (includes preparation, data entry, and assisting in permit issuance).

Under a Federal monitoring program (Alternatives 3A, 3B, 4A, 4B and 5) the task of inseason monitoring becomes solely a duty of NMFS, and is no longer shared with the states as has been the case under EFPs. The cost of inseason management to state agencies under the Status Quo Alternative are mainly the labor costs associated with: port biologist sampling, industry sampler training (Oregon only); collecting, compiling and analyzing inseason catch data; inseason reporting to NMFS; and preparation of post season summary reports. Under the Alternatives 3A, 3B, 4A, 4B and 5, NMFS would use existing electronic fish ticket data, VMS data, web sites and enforcement resources to monitor harvest in the fishery and to provide inseason reports. Existing resources would be used to the extent possible. However, existing federal staff may be needed to monitor, compile, and analyze inseason information from these systems, troubleshoot various issues, and develop inseason reports. With a shoreside season that ranges from April to August and with the expectation of the development of year-end reports, it is estimated that these activities will require a 0.5 GS 11 level FTE which roughly equates to in terms of salary and

benefits to about $40,000. The cost of reporting on high bycatch areas under Alternatives 2 and 5, vary greatly from year to year. During a year when there are few high bycatch events the cost is absorbed as part of every day responsibilities for the shoreside data analyst. During other years when high rates of chinook salmon or rockfish bycatch are encountered the high bycatch reporting task could take 0.25 FTE ($1,500) per month to as much as $12,000 if a lot of post season analysis is needed (pers. com. Saelens ODFW, 5/21/2007).

Under Alternative 3A, the cost of observers to NMFS remains unchanged as existing resources would be used. Under Alternative 3B, the cost to train, equip, and debrief an additional 52 observers (38 for vessels and 14 for processing facilities) for the Pacific whiting shoreside fishery is borne by NMFS, as well as the cost to process and analyze the additional data is estimated to be $190,000. The largest cost is due to the initial purchase of observer gear, including at-sea safety equipment. Once purchased, the cost would be reduce in subsequent years. Under Alternative 4A, the cost to train, equip, and debrief an additional 14 observers for Pacific whiting processing facilities is borne by NMFS, as well as the cost to process and analyze the additional data is estimated to be $23,000.

Under Alternatives 4B and 5, the cost of training, equipping and debriefing catch monitors (Alternative 4B), compliance monitors and industry samplers (Alternative 5) is borne by NMFS. Under Alternative 4B the cost to train, equip, and debrief 14 catch monitors for the Pacific whiting shoreside fishery is projected to be similar to those of observers in Alternative 4A; about $23,000. Under Alternative 4A the cost to train, equip, and debrief 14 compliance monitors and 14 industry samplers for Pacific whiting processing facilities is also similar to that of observers; about $23,000.

Under Alternatives 4B and 5 there are costs associated with permitting EMS service providers. The number of future providers is unknown at this time. To implement and oversee an EMS provider program over a three year period is estimated to cost NMFS $10,000, approximately $3,000 annually. These are costs based on an assumption that five businesses will apply for permits in the first year and one application will be received annually in each of the following years. The costs include assembling the application packages for review, having a five person review board undertake the review, and the development and maintenance of an EMS provider website.

4.3.5. Pacific Whiting Communities

Changes occurring under each of the alternatives are not likely to have an effect on Pacific whiting fishing communities over the Status Quo Alternative, given the minimal goods and service needed to support this alternative. Under the No Action Alternative (Alternative 1,) as well as 3A, and 4A, there is a potential for a more conservative management approach to be used if data are not adequate to support a bycatch limit approach. If this were to occur, it is likely that fewer Pacific whiting would be available to the processors and vessels home-porting in communities than would be available under Alternatives 2, 3B, 4B or 5 and this would reduce economic activity in those communities. A reduction in economic activity would translate into a reduced demand for support business that resides in those communities. Demand for

fishing-related services such as fabrication, net manufacture, and mechanical services would tend to be diminished because of less whiting available, less fishing effort needed to catch the available whiting, and less revenue being generated because of that reduced quantity.

Fishing communities along the west coast were recently categorized according to their level of resiliency and their level of dependence on fishing (see PFMC Amendment 16-4). In this analysis, all coastal communities engaged in the shorebased whiting fishery are identified as being dependent on groundfish fishing with the exception of Ilwaco, Washington. Communities engaged in the shorebased whiting industry tend to be larger than other coastal communities and their resiliency tends to be higher than smaller coastal communities. However, shorebased whiting communities suffer from many of the characteristics of rural cities including relatively high unemployment and poverty rates, and less industrial diversification of their economy than urban areas. This means that, while communities engaged in the shorebased whiting fishery may be more resilient to negative economic impacts than other coastal communities, they still suffer from many of the same issues as less resilient communities and are likely to suffer in a similar fashion from negative economic impacts. This means that the No Action alternative is likely to cause economic harm to communities engaged in the shorebased whiting fishery.

4.4. Cumulative effects

[Insert text after preferred alternative is selected]

5.0 CONSISTENCY WITH THE FMP AND OTHER APPLICABLE LAWS

5.1 Consistency with the FMP

The socio-economic framework in the Pacific Coast Groundfish FMP requires that proposed management measures and viable alternatives be reviewed and consideration be given to the following criteria: a) how the action is expected to promote achievement of the goals and objectives of the FMP; b) likely impacts on other management measures; c) biological impacts; d) and economic impacts, particularly the cost to the fishing industry; and e) accomplishment of one of a list of criteria defined in Section 6.2.3 of the FMP.

Alternatives 3A, 3B, 4A, 4B and 5 are likely to accomplish Objective 2 , of section 6.2.3 of the FMP by providing information to avoid exceeding a quota, harvest guideline or allocation. Alternatives 3B, 4B and 5 are consistent with the following conservation goals of the FMP:

> *Goal 1- Conservation*: Objective 1-maintain an information flow on the status of the fishery and the fishery resource which allows for informed management decisions as the fishery occurs.

Alternatives 3A and 4A would require WCGOP resources to be shifted from other groundfish fisheries to provide for the collection of management data on the Pacific whiting shoreside fishery. The use of WCGOP funds to provide observer coverage in the various non-whiting groundfish fisheries is driven by the need for basic total catch and bycatch data in those fisheries. To require greater observer coverage would have a direct effect on the ability of the WCGOP to monitor other fisheries and to meet the Magnuson-Stevens Act mandates.

Alternatives 3A, 3B, 4A, 4B and 5 are consistent with the following utilization goal of the FMP:

> *Goal 3- Utilization*: Objective 10-strive to reduce the economic incentives and regulatory measures that lead to wastage of fish. Also, develop management measures that minimize bycatch to the extent practicable and, to the extent that bycatch cannot be avoided, minimize the mortality of such bycatch. In addition, promote and support monitoring programs to improve estimates of total fishing-related mortality and bycatch, as well as those to improve information necessary to determine the extent to which it is practicable to reduce bycatch and bycatch mortality.

5.2 Magnuson-Stevens Conservation and Management Act

The Magnuson-Stevens Act provides parameters and guidance for Federal fisheries management, requiring that the Councils and NMFS adhere to a broad array of policy ideals. Overarching principles for fisheries management are found in the Act's National Standards. In crafting fisheries management regimes, the Councils and NMFS must balance their recommendations to meet these different national standards.

National Standard 1 requires that conservation and management measures shall prevent overfishing while achieving on a continuing basis, the optimum yield from each fishery for the United States fishing industry. The alternative action is for a catch accounting program. Information provided under Alternative 3B, 4B and 5 reduce the risk of overfishing by providing information that could be used to reduce the likelihood of overfishing while allowing for the harvests of healthy stocks.

National Standard 2 requires the use of the best available scientific information. Alternative 3B, 4B, and 5 improves the quality of the data in the Pacific whiting shoreside fishery.

National Standard 3 requires, to the extent practicable, that an individual stock of fish be managed as a unit throughout its range, and interrelated stocks of fish shall be managed as a unit or in close coordination. This standard is not affected by the alternative actions.

National Standard 4 requires that conservation and management measures not discriminate between residents of different States. The alternative actions would not discriminate between residents of different States.

National Standard 5 addresses efficiency in the utilization of fishery resources. Alternatives 2, 3A, 3B, 4A, 4B and 5 provide for the efficient prosecution of the Pacific whiting shoreside fishery.

National Standard 6 requires that conservation and management measures take into account and allow for variations among, and contingencies in, fisheries, fishery resources, and catches. The rule considers variations in the fishery such as a single vessel that is sorting at sea while meeting the monitoring needs.

National Standard 7 requires that conservation and management measures minimize costs and avoid unnecessary duplication. The alternative actions are consistent with this standard.

National Standard 8 provides protection to fishing communities by requiring that conservation and management measures be consistent with the conservation requirements of this Act (including the prevention of overfishing and rebuilding of overfished stocks), take into account the importance of fishery resources to fishing communities in order to (A) provide for the sustained participation of such communities, and (B) to the extent practicable, minimize adverse economic impacts on such communities. The alternative actions are consistent with this standard.

National Standard 9 requires that conservation and management measures minimize to the extent practicable, bycatch and minimize the mortality of bycatch. NMFS is required to "promote and support monitoring programs to improve estimates of total fishing-related mortality and bycatch, as well as those to improve information necessary to determine the extent to which it is practicable to reduce bycatch and bycatch mortality. Alternatives 3A, 3B, 4A, 4B and 5 are likely to accomplish this standard. Alternatives 3A and 4A would require WCGOP resources to be shifted from other groundfish fisheries to provide

for the collection of management data on the Pacific whiting shoreside fishery. The use of WCGOP funds to provide observer coverage in the various non-whiting groundfish fisheries is driven by the need for basic total catch and bycatch data in those fisheries. To require greater observer coverage would have a direct effect on the ability of the WCGOP to monitor other fisheries and to meet the Magnuson-Stevens Act mandates.

National Standard 10 Conservation and Management measures shall, to the extent practicable, promote the safety of human life at sea. Alternatives 2, 3A, 3B, 4A, 4B and 5 allow catch to be dumped directly into the holds. Dumping catch directly into the holds rather than requiring catch to be first sorted reduce the amount of time crew are on deck and exposed to hazardous conditions.

Essential Fish Habitat This action is for a catch accounting and monitoring system at the Pacific whiting shoreside fishery and will not affect fishing in EFH designated areas. Therefore, the potential effects of the alternative actions are not expected to have a "no adverse effect" on EFH, to have a positive effect resulting from reduced fishing effort in critical areas, or to have a positive effect if used to support regulations to restrict fishing in areas to protect habitat. No EFH consultation is warranted for this action.

5.3 Endangered Species Act

NMFS issued Biological Opinions under the ESA on August 10, 1990, November 26, 1991, August 28, 1992, September 27, 1993, May 14, 1996, and December 15, 1999 pertaining to the effects of the Pacific Coast groundfish FMP fisheries on Chinook salmon (Puget Sound, Snake River spring/summer, Snake River fall, upper Columbia River spring, lower Columbia River, upper Willamette River, Sacramento River winter, Central Valley spring, California coastal), coho salmon (Central California coastal, southern Oregon/northern California coastal), chum salmon (Hood Canal summer, Columbia River), sockeye salmon (Snake River, Ozette Lake), and steelhead (upper, middle and lower Columbia River, Snake River Basin, upper Willamette River, central California coast, California Central Valley, south-central California, northern California, southern California). These biological opinions have concluded that implementation of the FMP for the Pacific Coast groundfish fishery was not expected to jeopardize the continued existence of any endangered or threatened species under the jurisdiction of NMFS, or result in the destruction or adverse modification of critical habitat.

NMFS reinitiated a formal Section 7 consultation under the ESA in 2005 for both the Pacific whiting midwater trawl fishery and the groundfish bottom trawl fishery. The December 19, 1999 Biological Opinion had defined an 11,000 Chinook incidental take threshold for the Pacific whiting fishery. During the 2005 Pacific whiting season, more than 11,000 Chinook were taken, triggering reinitiation. NMFS prepared a Supplemental Biological Opinion dated March 11, 2006, which addressed salmon take in both the Pacific whiting midwater trawl and groundfish bottom trawl fisheries. In that Supplemental Biological Opinion, NMFS concluded that catch rates of salmon in the 2005 Pacific whiting fishery were consistent with expectations considered during prior consultations. Chinook bycatch has averaged about 7,300 fish over the last 15 years and has only occasionally exceeded the reinitiation trigger of 11,000. Since 1999, annual

Chinook bycatch has averaged about 8,450 fish. The Chinook ESUs most likely affected by the Pacific whiting fishery have generally improved in status since the 1999 Section 7 consultation. Although these species remain at risk, as indicated by their ESA listing, NMFS concluded that the higher observed bycatch in 2005 does not require a reconsideration of its prior "no jeopardy" conclusion with respect to the fishery. For the groundfish bottom trawl fishery, NMFS concluded that incidental take in the groundfish fisheries is within the overall limits articulated in the Incidental Take Statement of the 1999 Biological Opinion. The groundfish bottom trawl limit from that opinion was 9,000 fish annually. NMFS will continue to monitor and collect data to analyze take levels. NMFS also reaffirmed its prior determination that implementation of the Groundfish FMP is not likely to jeopardize the continued existence of any of the affected ESUs.

Lower Columbia River coho (70 FR 37160, June 28, 2005) and the Southern Distinct Population Segment (DPS) of green sturgeon (71 FR 17757, April 7, 2006) were recently listed as threatened under the ESA. As a consequence, NMFS has reinitiated its Section 7 consultation on the Council's Groundfish FMP. Green sturgeon have been caught with midwater trawl gear in the commercial non-tribal Pacific whiting fishery, however it is unlikely that the green sturgeon caught were from the ESA-listed southern DPS (south of the Eel River, California, 40˚40' N. lat.), as all documented catches were north of 44˚49' N. lat. After reviewing the available information, NMFS concluded that, in keeping with Section 7(a)(2) of the ESA, allowing the fishery to continue under this action would not result in any irreversible or irretrievable commitment of resources that would have the effect of foreclosing the formulation or implementation of any reasonable and prudent alternative measures.

The fishery as managed under proposed alternatives does not affect endangered/threatened species listed under the ESA or their habitat in any way that would alter the conclusions referenced above.

5.4 Marine Mammal Protection Act

Under the MMPA, marine mammals whose abundance falls below the optimum sustainable population level (usually regarded as 60 percent of carrying capacity or maximum population size) can be listed as "depleted". Populations listed as threatened or endangered under the ESA are automatically depleted under the terms of the MMPA. Currently, the Stellar sea lion population off the West Coast is listed as threatened under the ESA and the fur seal population is listed as depleted under the MMPA. Incidental takes of these species in the Pacific Coast fisheries are well under their annual Potential Biological Removals. The alternative action is not likely to affect the incidental mortality levels of species protected under the MMPA. The West Coast groundfish fisheries are considered Category III fisheries, where the annual mortality and serious injury of a stock by the fishery is less than or equal to one percent of the PBR level.

5.5 Coastal Zone Management Act

Section 307(c)(1) of the Federal Coastal Zone Management Act (CZMA) of 1972 requires all Federal activities that directly affect the coastal zone be consistent with approved state coastal zone management programs to the maximum extent practicable.

The proposed action is consistent to the maximum extent practicable with applicable State coastal zone management programs. This determination has been submitted to the responsible state agencies for review under Section 307(c)(1) of the CZMA by forwarding a copy of this EA to each of the relevant state agencies.

5.6 Paperwork Reduction Act

This proposed rule contains a collection-of-information requirement subject to review and approval by OMB under the Paperwork Reduction Act. This requirement has been submitted to OMB for approval.

[insert summary of PRA burden]

5.7 Executive Order 12866

This action is not significant under E.O. 12866. This action will not have a cumulative effect on the economy of $100 million or more, nor will it result in a major increase in costs to consumers, industries, government agencies, or geographical regions. No significant adverse impacts are anticipated on competition, employment, investments, productivity, innovation, or competitiveness of U.S.-based enterprises.

5.8 Executive Order 13175

Executive Order 13175 is intended to ensure regular and meaningful consultation and collaboration with tribal officials in the development of Federal policies that have tribal implications, to strengthen the United States government-to-government relationships with Indian tribes, and to reduce the imposition of unfunded mandates upon Indian tribes.

The Secretary of Commerce recognizes the sovereign status and co-manager role of Indian tribes over shared Federal and tribal fishery resources. At Section 302(b)(5) of the Magnuson-Stevens Act, a seat on the Council is to be reserved for a representative of an Indian tribe with Federally recognized fishing rights from California, Oregon, Washington, or Idaho.

The U.S. government formally recognizes that the four Washington Coastal Tribes (Makah, Quileute, Hoh, and Quinault) have treaty rights to fish for groundfish. In general terms, the quantification of those rights is 50 percent of the harvestable surplus of groundfish available in the tribes' usual and accustomed (U and A) fishing areas (described at 50 CFR 660.324). Each of the treaty tribes has the discretion to administer their fisheries and to establish their own policies to achieve program objectives. This action does not alter the treaty allocation of whiting, nor does it affect the prosecution of the tribal fishery.

5.9 Migratory Bird Treaty Act and Executive Order 13186

The Migratory Bird Treaty Act of 1918 was designed to end the commercial trade of migratory birds and their feathers that, by the early years of the 20th century, had diminished populations

of many native bird species. The Act states that it is unlawful to take, kill, or possess migratory birds and their parts (including eggs, nests, and feathers) and is a shared agreement between the United States, Canada, Japan, Mexico, and Russia to protect a common migratory bird resource. The Migratory Bird Treaty Act prohibits the directed take of seabirds, but the incidental take of seabirds does occur. The alternative action is not likely to affect the incidental take of seabirds protected by the Migratory Bird Treaty Act. Executive Order 13186 (Responsibilities of Federal Agencies to Protect Migratory Birds) is intended to ensure that each Federal agency taking actions that have, or are likely to have, a measurable negative effect on migratory bird populations develops and implements a Memorandum of Understanding (MOU) with the U.S. Fish and Wildlife Service that shall promote the conservation of migratory bird populations. Currently, NMFS is developing an MOU with the U.S. Fish and Wildlife Service. The alternative actions are for a catch accounting and monitoring progam and are not likely to have a measurable effect, if any, on migratory bird populations.

5.10 Executive Order 12898 (Environmental Justice) and 13132 (Federalism)

There is no specific guidance on application of E.O. 12898 to fishery management actions. The E.O. states that environmental justice should be part of an agency's mission "by identifying and addressing disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority or low-income populations." The alternative actions does not target low income or minority communities; they would affect all populations segments equally. These recommendations would not have federalism implications subject to E.O. 13132.

6.0 REGULATORY IMPACT REVIEW AND REGULATORY FLEXIBILITY ANALYSIS

In order to comply with Executive Order (EO) 12866 and the Regulatory Flexibility Act (RFA), this document also serves as a Regulatory Impact Review (RIR). The RIR and Initial Regulatory Flexibility Analysis (IRFA) have many aspects in common with each other and with EAs. Much of the information required for the RIR and IRFA analyses has been provided above in the EA. The following table, Table 6.0.1., identifies where previous discussions in the EA relevant to the IRFA/RIR may be found in this document.

Table 6.0.1. Regulatory Impact Review and Regulatory Flexibility Analysis

RIR Elements of Analysis	Corresponding Sections in EA	IRFA Elements of Analysis	Corresponding Sections in EA
Description of management objectives	1.3	Description of why actions are being considered	1.2, 1.3
Description of the Fishery	1.4, 3.0	Statement of the objectives of, and legal basis for actions	1.0, 1.1, 1.2, 1.3
Statement of the Problem	1.3	Description of projected reporting, recordkeeping and other compliance requirements of the proposed action	2.0
Description of each selected alternative	2.0	Identification of all relevant Federal rules	5.0, 6.0
An economic analysis of the expected effects of each selected alternative relative to status quo	4.3		

6.1 Regulatory Impact Review

EO 12866, Regulatory Planning and Review, was signed on September 30, 1993, and established guidelines for promulgating new regulations and reviewing existing regulations. The EO covers a variety of regulatory policy considerations and establishes procedural requirements for analysis of the benefits and costs of regulatory actions. The RIR provides a review of the changes in net economic benefits to society associated with proposed regulatory actions. The analysis also provides a review of the problems and policy objectives prompting the regulatory proposals and an evaluation of the alternative action that could be used to solve the problems.

The RIR analysis and the environmental analysis required by NEPA have many common elements, including a description of the management objectives, description of the fishery, statement of the problem, description of the alternatives and economic analysis, and have, therefore, been combined in this document. See Table 6.1. above for a reference of where to find the RIR elements in this EA.

The RIR is designed to determine whether the proposed action could be considered a "significant regulatory action" according to E.O. 12866. E.O. 12866 test requirements used to assess whether or not an action would be a "significant regulatory action", and identifies the expected outcomes of the proposed management alternatives. These tests are whether the action would: 1) have a annual effect on the economy of $100 million or more or adversely affect in a material way the economy, a sector of the economy, productivity, competition, jobs, the environment, public health or safety, or state, local, or tribal governments or communities; 2) create a serious inconsistency or otherwise interfere with action taken or planned by another agency; 3) materially alter the budgetary impact of entitlement, grants, user fees, or loan programs or the rights and obligations of recipients thereof; or 4) raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in this executive Order. Based on results of the economic analysis contained in Section 4.3, this action is not expected to be significant under E.O. 12866.

Based on the economic analysis found in Section 4.3 of this EA, the alternative action is not significant according to EO 12866. This action will not have a cumulative effect on the economy of $100 million or more, nor will it result in a major increase in costs to consumers, industries, government agencies, or geographical regions. In addition, the alternative action is not expected to: create a serious inconsistency or otherwise interfere with action taken or planned by another agency; materially alter the budgetary impact of entitlement, grants, user fees, or loan programs or the rights and obligations of recipients thereof; or raise novel legal or policy issues arising out of legal mandates.

6.2 Initial Regulatory Flexibility Analysis

The RFA, 5 U.S.C. 603 et seq., requires government agencies to assess the effects that various regulatory alternatives would have on small entities, including small businesses, and to determine ways to minimize those effects. When an agency proposes regulations, the RFA requires the agency to prepare and make available for public comment an IRFA that describes the impact on small businesses, non-profit enterprises, local governments, and other small entities. The IRFA is to aid the agency in considering all reasonable regulatory alternatives that would minimize the economic impact on affected small entities. To ensure a broad consideration of impacts on small entities, NMFS has prepared this IRFA without first making the threshold determination whether this proposed action could be certified as not having a significant economic impact on a substantial number of small entities. NMFS must determine such certification to be appropriate if established by information received in the public comment period.

[Insert IRFA]

7.0 LIST OF PREPARERS

Becky Renko, Steve Freese, Gretchen Arentzen, and Merrick Burden NMFS, Northwest Regional Office staff; and Dave Colpo, Pacific State Marine Fisheries Commission.

8.0 REFERENCES

Bailey, K. M. 1982. The early life history of the Pacific hake, *Merluccius productus*. Fish. Bull. 80:589-598.

Culver, B. January 2007. WDFW Personal Communication

Builder, T. 2000. Feasibility of Supplementary Sampling of the Commercial Groundfish Landings in Oregon Using Seafood Plnt Workers. A thesis submitted to Oregon State University.

Gallucci, V.F., B. Amjoun, J.B. Hedgepeth, and H. Lai. 1996. Sized-based methods of stock assessment of small scale fisheries. In Stock Assessment: Quantitative Methods and Applications for Small Scale Fisheries (edited by Vincent Gallucci, S.B. Saila, D.J. Gustofson, and B.J. Rothchild). CRC Lewis Publishers, Boca Raton, FL.)

Hart, J. L. 1973. Pacific Fishes of Canada. Bull. Fish. Res. Bd. Canada 180:730p.

Jesse, L. and M. Saelens. 2007.

Love, M. S. 1991. Probably more than you want to know about the fishes of the Pacific coast. Really Big Press, Santa Barbara, California. 215p.

NMFS. September 2006. Data Report and Summary Analyses of Limited Entry trawl Permits. West Coast Groundfish Observer Program. National Marine Fisheries Service, Northwest Fishery Science Center. Fishery Resource Analysis and Monitoring Division. 2725 Montlake Blvd. East. Seattle, WA.

NPFMC. May 5, 2005. Draft Environmental Assessment/Regulatory Review for Fishery management Plan Amendment to Establish a New Program for Observer Procurement and Deployment in the North Pacific. North Pacific Fishery Management Council. Anchorage, AK

NOAA. 1990. West coast of North America coastal and ocean zones strategic assessment: Data atlas. U.S. Dep. Commer. NOAA. OMA/NOS, Ocean Assessments Division, Strategic Assessment Branch. Invertebrate and Fish Volume.

Nottage , J.D., and S.J. Parker. 2006. Analysis of Landings Data for the 2005 Shoreside Hake Observation Program. Marine Resource Program, Oregon Department of Fish and Wildlife. Hatfield Marine Science Center, Newport, Oregon. 14p.

Parker, S. ODFW. personal communication.

PFMC. 1996. Environmental assessment to Amendment 10 to the Pacific Coast groundfish fishery management plan and amendment 12 to the Pacific salmon fishery management plan. Pacific Fishery Management Council. Portland, Oregon. 21p.

PFMC and NMFS. 2006. Proposed Acceptable Biological Catch and Optimum Yield Specifications and Management Measures for the 2007-2008 Pacific Coast Groundfish Fishery, and Amendment 16-4: Rebuilding Plans For Seven Depleted Pacific Coast Groundfish Species; Final Environmental Impact Statement Including Regulatory Impact Review and Initial Regulatory Flexibility Analysis. Pacific Fishery Management Council, Portland, OR. October 2006.

Randall, J. 2004. Improving Compliance in U.S. Federal Fisheries: An Enforcement Agency Perspective. Ocean Development and International Law, 35:287-317.

Saelens, M. ODFW. personal communication. 10/12/06

Weeks, H. and Hutton, L. 1998. Shoreside Hake Observation Program: 2004. Marine Finfish Program, Oregon Department of Fish and Wildlife, 2040 SE Marine Science Drive, Newport, Oregon. 21p.

Weidoff, B. and S. Parker 2004. Shoreside Hake Observation Program: 2004. Marine Resource Program, Oregon Department of Fish and Wildlife. Hatfield Marine Science Center, Newport, Oregon. 33p.

Nottage, D.J., and Parker, S.J. 2006. Analysis of landings data for the 2005 shoresdie hake observation program. Oregon Department of Fish and Wildlife. Newport, 14 p.

Ware and McFarlane 1989 Fisheries production domains in the Northeast Pacific Ocean. In Effects of Ocean Variability on Recruitment and an Evaluation of Parameters Used in Stock Assessment Models, edited by Beamish, R. J. and G. A. McFarlane. Pages 359-379. Canadian Special Publications in Fisheries and Aquatic Sciences 108.

APPENDIX A

Exempted Fishing Permit - 2007

PACIFIC COAST GROUNDFISH FISHERY
EXEMPTED FISHING PERMIT (EFP)
AUTHORITY: Title 50, Code of Federal Regulations
Sections 600.745 and 660.406, and part 660

MAXIMIZED RETENTION AND CATCH MONITORING
FORVESSELS IN THE SHORE-BASED PACIFIC WHITING FISHERY

F/V **Vessel name**

PERMIT # **07-HAK-XX**
Pacific Coast Groundfish
Limited Entry Permit #**[insert permit no.]**

The Administrator of the Northwest Region of the National Marine Fisheries Service (NMFS), acting on behalf of the Secretary of Commerce, hereby permits the fishing vessel **[insert vessel name]**, documentation number **[insert USCG documentation Number]** to engage in the exempted harvest of Pacific Coast groundfish over which the United States exercises fishery management authority under the Magnuson- Stevens Fishery Conservation and Management Act, 16 United States Code 1801 et seq. (Magnuson-Stevens Act), and implementing groundfish regulations at 50 CFR Part 660 and section 600.745, and under salmon regulations at 50 CFR 660.406. The exempted fishing must be conducted in accordance with the provisions of the Magnuson-Stevens Act and 50 CFR Parts 600 and 660, except as provided in the attached terms and conditions incorporated herein.

This permit implements a cooperative state/federal/industry observation program to monitor the bycatch of salmon and groundfish in the shore-based component of the Pacific whiting fishery. This permit is valid when signed by both the Regional Administrator and the authorized representative of the vessel owner (hereinafter referred to as the "EFP holder"). It expires 24 hours after notification by the Regional Administrator of termination of this permit, or when any of the provisions listed at E.2. are met, or on 11:59 p.m. PST December 31, 2007, whichever is earlier. It also may be terminated or modified earlier by regulatory action pursuant to 50 CFR Part 660, or by revocation, suspension, or modification pursuant to 15 CFR Part 904, or successor regulations, or by the terms and conditions of this permit.

Signature	Date Signed	Signature	Date Signed
D. Robert Lohn, Regional Administrator Northwest Region National Marine Fisheries Service		**XX**, EFP holder.	

By signing this document, the EFP holder agrees that the EFP holder, the vessel owner(s), all vessel operators, and crew members of the vessel will comply with the intent and the terms and conditions of this permit. Further, the EFP holder is responsible for seeing that conditions of this permit are understood by the vessel owner(s), the vessel operator(s) and vessel crew.

EFP Holder's Name/Address:
name, address, phone, fax XX

EXEMPTED FISHING PERMIT

MAXIMIZED RETENTION AND CATCH MONITORING
FORVESSELS IN THE SHORE-BASED PACIFIC WHITING FISHERY

TERMS AND CONDITIONS

A. PURPOSE.

The purpose of this exempted fishing permit (EFP) is to evaluate a maximized retention and monitoring program in the shore-based Pacific whiting fishery off the coasts of Washington, Oregon, and California.

The objectives of this maximized retention and monitoring program are to allow efficient prosecution of the shore-based whiting fishery, track total catch in the shore-based whiting fishery, and minimize discard to the extent practicable. If these objectives can be achieved in an efficient and enforceable manner, this maximized retention and monitoring program may be transitioned into Federal regulations. If these objectives cannot be achieved in an efficient and enforceable manner, the shore-based whiting fishery may be required to operate under the Pacific Coast groundfish trip limit management system and sort all catch at sea.

B. BACKGROUND.

A maximized retention program would reduce discards in the Pacific Coast groundfish fishery by enabling the shore-based whiting fleet to land prohibited species as well as groundfish species taken in excess of cumulative trip limits. By allowing vessels to land unsorted catch at processing plants, a maximized retention program helps ensure quality whiting products by enabling catch to be placed in refrigerated seawater tanks immediately after capture. Additionally, a maximized retention and monitoring program will improve the ability of fishery management agencies to track the catch of whiting as well as the incidental catch, including prohibited species as defined in Federal regulation at 50 CFR 660.302 and 660.370(e) (i.e., Pacific salmon, Pacific halibut, and Dungeness crab) and overfished groundfish species (i.e., widow rockfish, darkblotched rockfish, canary rockfish, Pacific ocean perch). The monitoring program supported by this EFP helps to establish a standardized reporting methodology for this fishery.

Using this EFP to target any species other than whiting is contrary to the intent of this EFP. Use of this EFP to target species other than whiting may result in federal fishery violations and early attainment of the 2007 optimum yields (OYs) for groundfish species other than whiting. Early OY attainment of groundfish species other than whiting could result in NMFS having to close the coastwide bottom trawl fishery and/or having to terminate this EFP. If the EFP were terminated, the participants in the shore-based whiting fishery would be required to sort their catch at sea and operate under groundfish trip limit management.

C. SCOPE.

1. This permit applies to all fishing activities by the permitted vessel targeting on Pacific whiting during the effective dates of the permit. **In addition to all applicable terms and conditions in this document, the EFP holder is responsible for instructing all vessel operators and crew members concerning the terms and conditions of this permit.**

2. This EFP authorizes, for limited purposes as described in this permit, the following activities which would otherwise be prohibited by 50 CFR 660.306 (a)(2) and (6) and 50 CFR 660.405 (a)(1):

   a. Retention, until offloading, of prohibited species (defined at §§660.302 and 660.370(e)) incidentally caught in a midwater trawl;

   b. Retention, until offloading, of groundfish in excess of trip limits.

3. All other provisions of 50 CFR Part 660, particularly including restrictions specified by or pursuant to 50 CFR 660.323 and 660.373, apply to fishing conducted under this permit.

D. PERMIT CONDITIONS.

1. This permit is valid only for a vessel participating under the States' observation program that is using legal midwater trawl gear to target Pacific whiting, as defined in paragraph D.3. during the primary season of the shore-based fishery.

2. All fishing trips by the permitted vessel targeting on Pacific whiting, as defined in paragraph D.3., during the effective dates must be conducted in accordance with this permit.

3. A fishing trip targeting on Pacific whiting is defined for the purposes of this permit as a fishing trip resulting in the landing of 4,000 pounds or more of Pacific whiting.

4. If a vessel lands less than 4,000 pounds of Pacific whiting from a fishing trip, then that trip will not be considered as "targeting on Pacific whiting," and therefore that trip will not be governed by this permit. Consequently, for that trip, the vessel must comply with all applicable trip limits and sorting requirements and all fish landed for such a trip will count toward any cumulative trip limits in effect.

5. All groundfish caught in excess of the trip limits set out in this EFP or otherwise implemented by Federal regulation, but required to be retained under this EFP, must be abandoned to the State of landing immediately upon offloading. No vessel can receive payment for any fish landed in excess of any cumulative trip limits in effect, whether those limits are specified in this EFP or in Federal regulation. All groundfish must appear on the State fish ticket, even groundfish with no value. For 2007, the following incidental groundfish cumulative limits are in effect with this EFP:

- Lingcod: 600 lb per calendar month
- Minor slope rockfish, including darkblotched rockfish: 1,000 lb per calendar month
- Minor shelf, shortbelly, widow and yellowtail rockfish: In trips of at least 4,000 lb of whiting, combined widow and yellowtail limit of 500 lb per trip, with a cumulative widow rockfish limit of 1,500 lb per calendar month, and with a cumulative yellowtail rockfish limit of 2,000 lb per calendar month.
- Pacific ocean perch: 600 lb per calendar month
- Pacific cod: 600 lb per calendar month
- Sablefish: 1,000 lb per calendar month

For all other groundfish species or species groups, the trip limits in Table 3 of 50 CFR apply to this fishery. For species that do not have specific midwater trawl trip limits listed in Table 3, the "multiple bottom trawl gear" trip limits apply to vessels fishing under this EFP, even though the participating vessels are required to use midwater gear to participate in this fishery. A copy of the current version of Table 3 is attached to this EFP; Table 3 may be revised as early as[May 1, 2007 for CA early EFP and July 1, 2007 for coastewide fishery.]

6. All prohibited species (defined at §660.302 and 660.370(e)) incidentally caught in a midwater trawl, and required to be retained under this EFP, must be abandoned to the State of landing immediately upon offloading.

7. Regulations governing participation in both the Pacific whiting primary season under this EFP and the bottom trawl groundfish fishery in the same cumulative limit period are found at 50 CFR 660.373(b)(3). During the groundfish cumulative limit periods both before and after the primary whiting season, vessels may use either small and/or large footrope gear, but are subject to the more restrictive trip limits for those entire cumulative limit periods. During the primary whiting season for a sector of the fishery, the limits in D.5., above, apply and are additive to the trip limits for other groundfish species for that fishing period.

E. EFFECTIVE DATES.

1. This permit is effective when signed by the NMFS Regional Administrator and the EFP holder. If the permit is signed by the NMFS Regional Administrator and the EFP holder on different dates, the effective date is the date of the EFP holder's signature.

2. This permit is only valid while the vessel is participating in the 2007 Pacific whiting primary season for the shore-based sector, as announced Federal regulations at §660.373, unless terminated at an earlier date by one of the following actions:

   a. At the request of the vessel owner, in which case the vessel must return to port, then remove and return the original EFP in person or by mail to the NMFS NWR permit office. The vessel owner is responsible for advising the EFP holder of the termination of the permit.

   b. At the request of the cooperating State, when the State observation program ends, or when the processing plant(s) designated in Appendix A are no longer included in the sampling program conducted by the State, in which case written notification

from the State to the vessel owner is required and termination occurs 24 hours after delivery of the notification or any later time specified in the notification. The vessel owner is responsible for advising the EFP holder of the termination of the permit.

c. When the Regional Administrator determines it is necessary to issue amended permits containing additional or revised restrictions, in which case termination occurs upon NMFS receipt of a signed amended permit, or seven days after the NMFS mailing date of the amended permit, whichever occurs first. The vessel owner is responsible for advising the EFP holder of the termination of the permit.

d. When the shore-based sector of the Pacific whiting fishery is closed because of the achievement or projected achievement of the Pacific whiting allocation, commercial harvest guideline, or species' harvest guideline, in which case termination occurs concurrent with the closure, in which case further written notification of the vessel owner is not required.

e. When the shore-based sector of the Pacific whiting fishery is closed because a commercial whiting fishery bycatch limit has been reached, as announced in the Federal Register, in which case further written notification of the vessel owner is not required.

3. A copy of this EFP must be carried on board the vessel while EFP fishing and whenever fish caught while fishing under the EFP are onboard the vessel.

F. FISHING RESTRICTIONS.

a. Maximized Retention. All catch, with the exception of unavoidable discards (see paragraph 2.b. below), must be brought onboard the vessel and retained until offloading.

b. Discard. For the purpose of this EFP, discard is defined as any marine organism, such as any groundfish species (including whiting), prohibited species, marine mammals, seabirds, and sea turtles, captured as a result of fishing activity and returned to the sea. **When fishing under this EFP, efforts must be made to minimize discard.** Only certain types of discard, as described below, are authorized under this EFP.

1. Size: Large individual marine organisms, such as marine mammals, seabirds, or fish species longer than 6 ft in length, may be discarded. If a large individual marine organism is discarded, the species and reason for discarding must be recorded and labeled "discard" in the logbook required by the State of landing.

2. Unavoidable Discard: Unavoidable discard, or discard that results from such things as hazardous weather conditions, unusual codend condition, school density, and net cleaning, must be minimized to the extent practicable. If unavoidable discard occurs, an estimate of the total discard amount for each species, to the extent possible, location of the tow, and reason for discarding must be recorded, and labeled "discard" in the logbook required by the State of landing.

3. Avoidable Discard: Avoidable discard, or discard that results from such events as malfunctioning net sensors and/or catching more fish than is necessary to fill the hold, must be minimized to the extent practicable. Vessels will be required to take whatever gear-related steps are necessary (e.g., shortening the codend, operational net sensors) to avoid discard by preventing overfilling of the net and/or hold.

2. Disposition of salmon. Salmon caught under this permit must be retained and abandoned to the State of landing immediately upon offloading.

3. Groundfish trip limits.

   a. Groundfish trip limits will apply to vessels operating under this permit, except that overages in trip limits will not be in violation of 50 CFR 660.306 (a)(6) so long as such overage is surrendered to the State of landing.

   b. The Regional Administrator may place limits on the overages of groundfish trip limits during the course of the exempted fishery. If such restrictions are necessary, the Regional Administrator will terminate this permit and issue an amended permit containing the additional restrictions on groundfish trip limits as determined necessary by NMFS in consultation with the states.

4. Fishing shoreward of latitude and longitude coordinates approximating the100-fathom contour

   a. In the Eureka area: This permit **does not** authorize a vessel to take and retain more than 10,000 pounds of Pacific whiting per trip shoreward of latitude and longitude coordinates approximating the 100-fathom contour in the Eureka area (43˚00' N. lat. - 40˚30' N. lat.).

   b. Coastwide: Automatic action can be taken to implement the Ocean Salmon Conservation Zone, described at 660.373(c)(3), when NMFS projects the Pacific whiting fishery may take in excess of 11,000 Chinook within a calendar year. If NMFS projects that the Pacific whiting fishery will exceed the take of 11,000 Chinook salmon, fishing shoreward of the 100 fathom depth contour could be prohibited. If this occurs, NMFS will announce the effective date by email (wcgroundfish@noaa.gov), facsimile and/or email to your state coordinators.

5. Fishing shoreward of latitude and longitude coordinates approximating the150-fathom contour to avoid incidental catch of canary rockfish If the fishery is approaching the canary rockfish bycatch limit, NMFS may chose to require all EFP participants to fish seaward of the 150-fathom depth contour as defined in the Federal groundfish regulations at § 660.393. Such action would be taken to allow the fishery to continue and to prevent early closure from a bycatch limit being reached. NMFS would announce the effective date for implementation of the 150-fathom depth contour by email (wcgroundfish@noaa.gov), facsimile and/or email to your state coordinators.

G. GEAR RESTRICTIONS.

1. Only legal midwater trawl gear described at §660.381 may be used for fishing under this EFP.

H. OBSERVER AND OTHER MONITORING REQUIREMENTS.

1. At-sea observations. If requested, a vessel must carry a state-sponsored sampler or Federal observer to collect data that can be used to evaluate data collected by the EM system identified under H.3. Any state sampler must be approved by NMFS before at-sea deployment. Regulations at 50 CFR 660.306 and 50 CFR 660.314 regarding vessel responsibilities and prohibitions apply to both state samplers and Federal observers.

2. Federal observer coverage requirements at 50 CFR 660.360 and 50 CFR 660.314 are independent of state sampler requirements. Vessels that carry a state-sponsored sampler may also be required to carry a NMFS observer. A state sampler is not a substitute for a Federal observer and a vessel carrying a state sampler is not exempt from federal observer requirements.

3. Electronic Monitoring (EM) Equipment A vessel fishing under this EFP will be required to have electronic monitoring equipment supplied by a NMFS-specified EM system provider to monitor for at-sea discarding of catch. The following are NMFS-specified EM system providers for 2007:

Howard McElderry or Morgan Dyas at Archipelago Marine Research, Ltd; tel: 888-383-4535 or 250-383¬4535.

a. A vessel intending to fish under this EFP must schedule a time with the NMFS-specified EM provider for installation of the system. The installation must be scheduled before the vessel leaves port on the first EFP fishing trip. If an EM system is not installed before the first EFP fishing trip, this EFP is invalid.

b. As necessary, the vessel operator must schedule maintenance of EM equipment and data removal by the NMFS-specified EM provider by scheduling an appointment. If the vessel operator does not schedule these services, it will be a violation of the terms and conditions of this EFP.

c. While EM equipment is aboard the vessel, the system must not be interfered with, damaged, or the power source turned off. If the EM system is interfered with, damaged, or the power source turned off, it will be a violation of the terms and conditions of this EFP.

d. The vessel operator must check status lights located on the EM system control box at least once per day to confirm that the EM system is functioning properly. If status lights indicate an EM system malfunction, the vessel must contact the NMFS-specified EM provider immediately.

e. At the end of the shore-based whiting primary season or termination of the EFP, the EFP holder must schedule removal of the EM system with the NMFS specified EM provider.

f. The requirement to have and use the EM system when participating under this EFP may be temporarily waived by NMFS. A waiver would allow reasonable time to resolve the stated problem. All such waivers shall be in writing and would be granted on a case by case basis, when it has been determined that circumstances beyond the control of the vessel prevent the installation or use of the EM system.

I. NOTIFICATION REQUIREMENTS.

a. If requested, the EFP holder must provide departure and arrival notification to the State coordinator, West Coast Groundfish Observer Program (WCGOP), or EM provider including reasonable notice of unexpected changes in fishing plans, to allow installation and maintenance of electronic video monitoring equipment, and for deployment of at-sea observers, if any. State coordinators are:

California Department of Fish and Game: Mike Fukushima, 707- 441-5797.
Oregon Department of Fish and Wildlife: Lori Jesse, 541-867-0300
Washington Department of Fish and Wildlife: Brian Culver, 360-249-4628

EM Provider: Howard McElderry or Morgan Dyas at Archipelago Marine Research, Ltd; tel: 888-383-4535 or 250-383¬4535.

2. In addition to any notifications required in paragraph 1. of this section, for landings in California the vessel operator must notify the California Department of Fish and Game coordinator listed in paragraph 1. of this section at least 12 hours before departing port to commence fishing under this permit.

J. REPORTING REQUIREMENTS. It is unlawful to fail to report catches as required while fishing pursuant to an exempted fishing permit (50 CFR 600.725(l)). Failure to maintain the required documents may result in a vessel's inability to obtain an EFP permit in the future, may be grounds for revocation, suspension, or modification of this permit as well as civil or criminal penalties under the Magnuson-Stevens Act with respect to all persons and vessels conducting activities under the EFP (See section L.)

1. Trawl Logs. Trawl logbooks must be maintained by the vessel operator as required by the applicable state law. "Exempted Fishing Trip" (or "EFP") must be written in the log for each trip conducted under this permit.

a. Estimated weight (in pounds) of all species, including, but not limited to, whiting, other groundfish, salmon, Pacific halibut, and Dungeness crab, observed in each tow must be recorded in the logbook.

b. If discard occurs, an estimate of the total discard amount for each species, to the extent possible, location of the tow, and reason for discarding must be recorded and labeled "discard" in the logbook, on the line associated with that tow, as required by the State of landing.

c. If discard occurs as a result of gear malfunction, a description of the event must be recorded in the logbook and labeled "gear malfunction" in the logbook, on the line associated with that tow.

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2. Other Reports. This permit does not relieve any person from any other state or federal reporting requirements.

3. Public Release of Information. The fishing activities carried out under this permit, which are otherwise prohibited, are for the purpose of collecting catch information. The vessel owner, operator, and EFP holder agree to the public release of any and all information obtained as a result of activities conducted under this permit, including EM Provider access to logbooks to record information during periodic EM maintenance and service.

K. LANDINGS.

1. All landings must be at processing plants that are listed in the Designated Processor List in Appendix A to this EFP. Vessel owners with vessels that participate in both the April 1 shore-based whiting fishery opening (south of 42º N. lat.) and the June 15 fishery opening (coastwide, including north of 42º N. lat.) must ensure that they get an updated Designated Processor List from the NWR Permits Office prior to June 15, 2007 in order to participate in that coastwide fishery opening.

   a. The Designated Processor List in Appendix A may be revised, by NWR Permits Office Staff after consultation with the State observation program coordinator(s). The observation program coordinators for each state are as follows:

      California Department of Fish and Game: Mike Fukushima, 707- 441-5797.
      Oregon Department of Fish and Wildlife: Lori Jesse, 541-867-0300
      Washington Department of Fish and Wildlife: Brian Culver, 360-249-4628

2. All fish caught during an exempted fishing trip must be offloaded at only one designated processing plant (i.e. the offloading of catch from one trip cannot be split between processing plants before a fish ticket has been completed). Once offloading has begun at a designated processing plant, all fish onboard the vessel must be offloaded at that plant.

L. SANCTIONS.

1. Failure of the vessel owner, operator, EFP holder, or any person to comply with the terms and conditions of this permit, a notice issued under 50 CFR Part 660 any other applicable provision of 50 CFR Parts 600 and 660, the Magnuson-Stevens Act, or any other regulations promulgated thereunder, may be grounds for revocation, suspension, or modification of this permit as well as civil or criminal penalties under the Magnuson-Stevens Act with respect to all persons and vessels conducting activities under the EFP (50 CFR 600.745(b)(8)).

2, The following provisions at 50 CFR Parts 660 are applicable to the EFP activity:

   a. 660.306 Prohibitions. In addition to the general prohibitions specified in § 600.725 of
   this chapter, it is unlawful for any person to:

      (a) General.

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(4) Fish for groundfish in violation of any terms or conditions attached to an EFP under § 600.745 of this chapter or § 660.350.

(5) Fish for groundfish using gear not authorized in this part or in violation of any terms or conditions attached to an EFP under § 660.350 or part 600 of this chapter.

(6) Take and retain, possess, or land more groundfish than specified under '' 660.370 through 660.373 or '' 660.381 through 660.385, or under an EFP issued under § 660.350 or part 600 of this chapter.

b. 660.370 Specifications and management measures.

(f) Exempted fisheries. U.S. vessels operating under an exempted fishing permit (EFP) issued under 50 CFR part 600 are also subject to restrictions in section 660.301 through 660.394, unless otherwise provided in the permit. EFPs may include the collecting of scientific samples of groundfish species that would otherwise be prohibited for retention.

M. WAIVER.

The EFP holder on his/her own behalf, and on behalf of all persons conducting activities authorized by the permit under his/her direction, waives any and all claims against the United States or the State, and its agents and employees, for any liability whatsoever for personal injury, death, or damage to property directly or indirectly due to activities under this permit.

11

APPENDIX A

MAXIMIZED RETENTION AND CATCH MONITORING
FORVESSELS IN THE SHORE-BASED PACIFIC WHITING FISHERY

Vessel Name: **[insert vessel name]** EFP#: 07-HAK-xx

1. Designated processor(s):

*[**NWR Permits Office Staff –** Please forward a copy of contact information to SFD administrative staff and request that contact information be verified for accuracy]*

EXAMPLE:

Eureka Fisheries, Inc.
P.O. Box 217
Field's Landing, CA 95537
attn: Tom Devere

ph: (707) 463-1673
fx: (707) 463-7952

2. Changes to this appendix:

Item Changed	Date Approved	Authorizing Official Name	Agency

A Maximized Retention and Monitoring Program for the Pacific Whiting Shoreside Fishery

FMP Amendment 10

Agenda Item E.3.b
Supplemental PowerPoint Presentation
June 2007

November 2006 -- Recap

- PFMC reviewed Chapters 1 & 2, considered the range of alternatives
- Recommended alternatives to be analyzed before final decision (Alts 1-4)
- Formed Shorebased Whiting Advisory Group (SWAG) to draft additional hybrid alternative (Alt 5)
- NMFS reported on whiting first-receiver reporting rule

2007 – Transition to Managing Under Federal Regulations

- Fishery prosecuted under EFPs
  - Maximized retention
  - Vessels pay for Electronic Monitoring System (EMS)
- Processor/first receiver rule
  - Pacific whiting first receivers are defined
  - Electronic fish ticket reporting
  - Catch sorting
    - Prior to transport
    - To Federal species groups
  - Accurate weights

Regulatory Development & Implementation

November 2006	Draft EA chapters 1 & 2 with range of alternatives (Alts. 1, 2, 3a, 3b, 4a, 4b)
January 2007	SWAG met to define hybrid alternative (Alt 5)
June 2007	Draft EA for final action
September 2007	Proposed rule publishes
November 2007	Report to PFMC on E-fish tickets and E-logbooks
January 2008	Final rule publishes
April 2008	Regulations effective

June 2007

- PFMC recommends final alternative
- PFMC considers related issues
  - Vessels that sort catch at sea
  - Whiting processor permits
  - Electronic logbook development

The Alternatives

Alt. 1 No Action -- Catch sorted at sea

Alt. 2 Status Quo – Maximized retention with EFPs

Alt. 3 Observers -- Maximized retention with Federal or industry funded observers

Alt. 4 EMS -- Maximized retention with Federal or industry funded EMS, & data quality monitors

Alt. 5 Hybrid -- Maximized retention with industry funded EMS, WCGOP observers as needed, industry funded data compliance monitors, & industry monitors

Management Structure

Alt. 1 – No Action	• Trip limit management for non-whiting species • Catch sorted at sea
Alt. 2 –Status Quo	• State coordinated monitoring under annual EFPs • Maximized retention
Alt 3 – Observers	• Monitoring under Federal regulation • Maximized retention
Alt.4 – EMS	Same as Alt. 3
Alt 5 - Hybrid	Same as Alt. 3

Change in Management Structure

Alt. 1 – No Action	● If fishery is constrained by overfished species, revenue is expected to decline – Based on 2006, 13,789 mt of whiting would not have been available to shoreside. ($1,823,954 @ $0.06/lb)
Alt. 2 –Status Quo	
Alt 3 – Observers	● No change if bycatch limit management continues ● May benefit shoreside participants if very high coverage results in data that is adequate for sector specific limits
Alt.4 – EMS	● Same as Alt 3
Alt 5 - Hybrid	● Same as Alt 3

Federal Permits and Endorsements

Alt. 1 – No Action	• LE permit with trawl endorsement
Alt. 2 –Status Quo	• LE permit with trawl endorsement • Voluntary EFP - 100% EMS coverage, bycatch reports, mandatory pre-season meeting
Alt 3 – Observers	• LE permit with trawl endorsement • Annual whiting endorsement – declares intent to fish
Alt.4 – EMS	• Same as Alt. 3, plus permits for EMS providers if direct pay
Alt 5 - Hybrid	•h Same as Alt. 3, plus • Permits for EMS providers • Annual whiting endorsement would have additional requirements: bycatch reports, mandatory pre-season meeting

Change in Federal Permits & Endorsements

Alt. 1 – No Action	• Reduced cost to fishers – LE renewal $152/vessel/yr (2006) • Reduced costs to the states – less $2,000/yr • Reduced costs to NMFS – less $13,000/yr
Alt. 2 –Status Quo	
Alt 3 – Observers	• Reduced cost to fishers - LE renewal $152/vessel/yr, plus time to acquire whiting endorsement • Reduced cost to states - Same Alt. 1 • Cost to NMFS for whiting endorsements, $12,000/yr (similar to Alt. 2)
Alt.4 – EMS	• Cost to fishers and states same as Alt. 3 • Increased cost to NMFS for whiting endorsements, and EMS provider permits, $15,000/yr
Alt 5 - Hybrid	• Costs to fishers -same as Alt. 2 • Reduced costs to the states – same Alt. 1 • Increased costs to NMFS – same as Alt. 4

Recordkeeping and Reporting

Alt. 1 – No Action	• State requirements for paper fish tickets and trawl logbooks • Processor reporting requirements effective July 2007 – NMFS/PSMFC initiate monitoring in 2007
Alt. 2 –Status Quo	Same as Alt. 1, • Plus daily whiting bycatch reports for processors • States process data reports, NMFS/PSMFC initiates in 2007
Alt 3 – Observers	Same as Alt 1, plus • When fully developed, electronic logbooks, • NMFS/PSMFC processes data reports
Alt.4 – EMS	Same as Alt. 3
Alt 5 - Hybrid	Same as Alt 3, plus • Daily whiting and bycatch reports for processors

Change in Recordkeeping & Reporting

Alt. 1 – No Action	• Reduced cost to processors, less 191 hour/yr (no daily bycatch reports), neutral cost for electronic fish tickets • Reduced cost to vessels- no high bycatch reports • Reduced cost to states – data management, less $114,560/yr (2005); high bycatch reports, less $1,500-12,000/yr • Neutral cost to NMFS for data management.
Alt. 2 –Status Quo	
Alt 3 – Observers	• Processors - same as Alt. 1 • Vessels – same as Alt. 1 • States – same as Alt.1 • Increased cost to NMFS – data management, plus $40,000
Alt.4 – EMS	• Same as Alt. 3
Alt 5 - Hybrid	• Processors - same as Alt. 2 • Vessels – same as Alt. 2 • States – same as Alt. 1 • NMFS – same as Alt. 3, plus daily and high bycatch reports, $1,500-12,000/yr

Shoreside Catcher Vessel Monitoring At Sea

Alt. 1 – No Action	• WCGOP observers quantify discards, ≤20% coverage
Alt. 2 – Status Quo	• EMS for monitoring catch retention, 100% coverage • Authority to place WCGOP observers
Alt 3 – Observers	• Observers for monitoring catch retention – 3A WCGOP observers ≤20% coverage – 3B Direct pay observers 100% coverage
Alt.4 – EMS	• EMS for monitoring maximized retention – 4A WCGOP pays coverage and data analysis – 4B Direct pay 100% coverage, NMFS pays for data analysis • Authority to place WCGOP observers
Alt 5 - Hybrid	• EMS for catch retention, 100% coverage • As needed, WCGOP placed to monitor discard events

Change in Shoreside Catcher Vessel Monitoring At Sea

Alt. 1 – No Action	● Cost to selected vessels - WCGOP observers, $900/vessel/yr, $6,840 to the fleet or 0.05% of the 2006 exvessel revenue
Alt. 2 –Status Quo	
Alt 3 – Observers	● (Option A) cost to vessels - 20% coverage same as Alt. 1; 100% coverage $34,200/yr to the fleet or 0.27% of the exvessel revenue (2006) ● (Option B) cost to vessels – $24,750/vessel/yr, $940,500 to the fleet or 7.52% of the 2006 exvessel revenue. Increased cost to NMFS- $190,000yr
Alt.4 – EMS	● (Option A) – cost to NMFS 7-10% of WCGOP budget, data analysis same as Alt 2 ● (Option B) - same as Alt. 2, $5,333-$6000/vessel/yr. Less than 2% of the 2006 exvessel revenue, Cost to NMFS same as Alt. 2,
Alt 5 - Hybrid	● Same as 4B

Monitoring Shoreside

Alt. 1 – No Action	• In WA and CA, State port samplers collect fish tickets, count salmon, & sample for composition • In OR, in addition to port samplers, industry samplers collect biological data & sample for composition
Alt. 2 –Status Quo	Same as Alt. 1, plus • States collect fish ticket data & summarize inseason
Alt 3 – Observers	• (Option 3A) WCGOP Observers • (Option 3B) NMFS trained 3rd party observers
Alt.4 – EMS	• (Option 4A) WCGOP Observers • (Option 4B) Catch Monitors; NMFS-preferred Data Quality Monitors
Alt 5 - Hybrid	• Data compliance monitors and industry monitors (plant employees)

Catch Monitors

Catch Monitors: generic term for individuals who collect independent data that can be used for verification of fish tickets or used to evaluate the accuracy of fish tickets

Observers: biological technicians, educated in the natural sciences, trained in species identification and biological sampling. They collect catch and effort data used to estimate total catch

Data Quality Monitors: 3rd party employees paid for by industry and trained in species identification and techniques used for the verification of fish ticket data.

Industry samplers: plant employees with basic training in biological data collection and species identification. Responsible for observing vessel offload, conducting bycatch species composition sampling, and collecting biological information for Pacific whiting and for bycatch species

Data compliance monitors: 3rd party employees paid for by industry and trained to collect data to verify fish ticket data and to verify information collected by plant employees.

Change in Monitoring Shoreside

Alt. 1 – No Action	• Reduced cost to processors - $5,400/processor/yr, $75,600 to all • Reduced cost to states • Neutral costs to NMFS
Alt. 2 –Status Quo	
Alt 3 – Observers	• (Option A) – – Neutral cost to NMFS, WCGOP observers – Reduced cost to states • (Option B) – – Increased costs to processors $23,626/processor/yr, $330,750 to all – Increased cost to NMFS for training $23,000/yr – Reduced cost to states
Alt.4 – EMS	• (Option A) - Cost to NMFS – same as 3A • (Option B) – – Increased cost to processors, $12,000 -$18,000/processor/yr, $168,000-252,000 to all – Increased cost to NMFS & states same as 3B
Alt 5 - Hybrid	• Increased cost to processors – same as 4B, plus $5,400/processor/yr, $75,600 for plant employees (see Alt 1) • Increased cost to NMFS – same as 3B

Overage Disposition

Alt. 1 – No Action	• No overages
Alt. 2 –Status Quo	• Reported on fish ticket • Vessels abandon – Prohibited species to food banks – Value of marketable catch remitted to state
Alt 3 – Observers	• Reported on fish ticket • 3A Vessels abandon (state) – Prohibited species to food banks – Value of marketable catch remitted to state • 3B Vessels abandon (federal) – All overages donated to food bank or for rendering
Alt.4 – EMS	Same as Alt. 3
Alt 5 - Hybrid	Same as Alt. 3

Change in Overage Disposition

Alt. 1 – No Action	• No revenue to states from overages • Reduced sorting & handling time for processors
Alt. 2 –Status Quo	
Alt 3 – Observers	• State overage program (Option A) – Same as Alt. 2 • Federal overage program (Option B) – No revenue to state from overages – Increased waste if whole fish cannot be donated
Alt.4 – EMS	Same as Alt 3
Alt 5 - Hybrid	Same as Alt. 3

Changes in Biological Effects

Indirect effects could occur if inaccurate or delayed catch data resulted in a fishery specification being exceeded.

Alt. 1 – No Action	• Increased risk for incidental species – pre-season catch projections based on historical catch data. Final catch estimates available1-2 years after the fishery – reduced WCGOP coverage in non-whiting fisheries
Alt. 2 –Status Quo	
Alt 3 – Observers	• Increased risk for incidental species (sub-option A) – Higher risk if WCGOP coverage is <20% on non-whiting vessels – If WCGOP coverage is near 100%, risk to non-whiting fisheries increases • Reduced risk over Alt 2 (sub-option B) – if 100% coverage on vessels & on shore (B)
Alt.4 – EMS	• Similar to Alt 3.
Alt 5 - Hybrid	• Similar to Alt. 3B

Related Issues

- Vessels that sort catch at sea
- Processor permits
- Electronic logbook development

Agenda Item E.3.d
Supplemental EC Report
June 2007

ENFORCEMENT CONSULTANTS REPORT ON SHORE-BASED PACIFIC WHITING MONITORING PROGRAM

The Enforcement Consultants (EC) have reviewed Agenda Item E.3.b, Attachment 3, dated June 2007, A Maximum Retention and Monitoring Program for the Pacific Whiting Shoreside Fishery and have the following comments.

The EC supports the NMFS preferred Alternative 4b found on page 2-4, table 2.1, which includes the definition of the Data Quality Monitors found on page 2-13. The third party employed Date Quality Monitors provide the best opportunity for providing the desired plant monitoring coverage and for maintaining the consistency, quality, independence, and integrity of the data. The other options lack these attributes and therefore are not adequate for meeting the monitoring and compliance objectives.

Regarding the disposition of overage fish, the EC supports the status quo option Alternative 4A detailed on page 2-14.

The EC looks forward to Council action on Amendment 10 and its anticipated promulgation into rule and regulation.

Moving to another aspect of the whiting fishery, the EC would like to encourage the Council to consider developing regulations that would move the at sea whiting fishery to a full retention fishery using electronic monitoring. Given the Council's, industry's and public's concern for by catch, we believe full retention and electronic monitoring are a necessary step in managing this fishery.

We would also recommend the Council require mandatory log books of this fishery. Because the whiting are processed prior to being landed, the landed product is exempt from state fish ticket reporting requirements. Reporting of at sea catch and processing activity is currently 3 fold: non regulated production reports, observer data, and voluntary log books. The voluntary nature of the log book makes the data contained in the log books inadequate for investigating discrepancies between the voluntary log book and observer data. This situation has compromised recent investigations into at sea whiting fishing activity and needs to be rectified.

PFMC
06/12/07

GROUNDFISH ADVISORY SUBPANEL REPORT ON SHORE-BASED WHITING MONITORING PROGRAM

The Groundfish Advisory Subpanel (GAP) heard a presentation from Ms. Yvonne deReynier on the suite of alternatives for the shoreside monitoring program. She further noted the NMFS preferred alternative (Option 4B).

The GAP appreciates the importance of catch reporting information and biological data collection for the whiting fishery. Having said that, the GAP recommends that the Council select Alternative 4 as the preferred alternative with the following adjustments:

Monitoring Shoreside Processors:

1. Utilize shoreside catch monitors, trained by NMFS to NMFS certification, who are responsible for ALL shoreside observation, species composition, fish ticket verification, and biological sampling instead of the combination of three different individuals currently outlined in Alternative 4.
2. The initial shoreside level of sampling for the catch monitors defined in number 1 above will be determined based on using the current level of program funding available for shoreside observation. Evaluation of this level of sampling will be conducted using the data collected through the program.

Requiring several different individuals to collect various amounts and types of information is duplicative and potentially cost prohibitive. If the industry is responsible for funding the shoreside processor monitoring program – then the system should be streamlined to collect the optimum amounts and types of information in the most cost-effective manner.

Fish Overages:

1. Overages will be reported on fish tickets and abandoned to the state. Prohibited species will be donated. State enforcement will track compliance (status quo).

While exploring a plan for a donation program for overage fish is admirable (and has been considered on several occasions in the past), the GAP believes that incorporating this possibility into Amendment 10 could delay the implementation of this important amendment.

PFMC
06/11/07

GROUNDFISH MANAGEMENT TEAM REPORT ON THE SHORE-BASED PACIFIC WHITING MONITORING PROGRAM

The Groundfish Management Team (GMT) urges the Council to adopt an alternative to transform the current shore-based Pacific whiting monitoring program into a federally coordinated program. The goal of Amendment 10 is to establish a regulatory standardized reporting methodology for the collection and verification of accurate and timely catch data for the Pacific whiting shoreside fishery in support of the Endangered Species Act requirements for salmon and overfished species bycatch reporting. There have been many advantages of the current exempted fishing permit (EFP) program; however these permits are not intended for long term use and the shoreside whiting fishery has been operating under an EFP for 16 years.

The GMT reviewed the alternatives presented in the draft environmental assessment (Agenda Item E.3.b, Attachment 3) and concurs with the following elements of the NMFS preferred Alternative 4:

1. NMFS coordinates and oversees the entire shore-based Pacific whiting monitoring program.

2. Federal regulations would be promulgated to support a maximized retention fishery.

3. Vessels would be required to hold a limited entry permit with a trawl endorsement.

4. Vessels would be issued a whiting endorsement that declares the intent to fish.

5. Whiting processors ("first receivers") are required to submit daily electronic fish tickets.

6. NMFS retains current authority to place West Coast Groundfish Observer Program observers aboard the shore-based catcher vessels.

7. Monitoring shore-based catcher vessels (4B)
    a. 100% EMS used to monitor maximized retention at sea
    b. Vessels fund and procure EMS service from permitted provider
    c. NMFS funds EMS analysis

8. Monitoring Shoreside Processors(4B)
    a. Data Quality Monitors, as defined on page 2-13 in Agenda Item E.3.b, Attachment 3.

9. Disposition of Overage Fish (4A)
    a. Overages reported on state fish tickets
    b. Overage fish abandoned to state
    c. Prohibited species donated
    d. State enforcement tracks compliance

The GMT also briefly discussed the need to monitor shore-based catcher vessels that choose to sort at sea. Current regulations allow vessels to target whiting inside the rockfish conservation area (RCA) during the primary season without an EFP and an electronic monitoring system if those vessels sort their catch at sea. The creation of this fishing opportunity was an unintended oversight and the ability to prosecute whiting inside the RCA unmonitored should be eliminated. Currently, this activity is a very small portion of the fishery (< 1%); however if this fishery grows, the Council will need to consider how to incorporate monitoring this segment of the fishery.

Recommendations

1. The GMT recommends adoption of the NMFS preferred alternative, as addressed above in items 1-9.
2. The GMT recommends eliminating the ability to prosecute whiting inside the RCA without proper monitoring.

PFMC
06/11/07

REPORT OF THE SHORESIDE WHITING ALTERNATIVE AD HOC WORKGROUP (SWAG) TO THE PACIFIC FISHERY MANAGEMENT COUNCIL

At its November 2006 meeting, the Council authorized an ad hoc workgroup to develop an additional, "hybrid" alternative to be analyzed and considered under the Council's action to move the shoreside whiting fishery from operation under yearly exempted fishing permits to one under federal regulations. The Council is scheduled to take final action in June 2007, to adopt its final recommendations for a maximized retention and monitoring program for the shoreside whiting fishery.

The workgroup finalized its hybrid alternative and forwarded it to NMFS on January 8, 2007. This alternative proposes a monitoring program: that uses federal observers (if needed) and an electronic monitoring system (EMS) to monitor maximized retention at sea; that uses plant monitors and data compliance monitors to monitor shoreside processing; and that requires industry funding of EMS procurement and plant/data quality monitors. Additionally, the alternative makes some changes to the administration of the monitoring program from that outlined under Alternatives 3 and 4.

The Workgroup's Charge:

The Council directed the workgroup to develop the specifics of an alternative that blends parts of Alternative 3 (maximized retention with observers) and Alternative 4 (maximized retention with EMS and catch monitors). The group was directed to complete the alternative in time for it to be analyzed and presented in the March Council meeting briefing book. This timing suggested that the alternative should be completed and forwarded to NMFS for analysis by mid-January.

While the Council also directed this workgroup to help in the development of the 2007 shoreside whiting EFP as it relates to the development of fishery's permanent monitoring program, the Council then clarified that the workgroup's priority was to develop the hybrid alternative. Given that EFPs are NMFS documents, the Northwest Region staff has begun to make the adjustments to the 2007 EFP so that it better aligns with a permanent monitoring program. The workgroup has been assured by Northwest Region staff that such changes will be made in consultation and cooperation with state agency staff, so as to achieve the intended outcome of the Council's direction to the workgroup.

The Workgroup's Membership:

The following individuals were appointed to the workgroup by the Council chairman at the November 2006 meeting:
Council Member: Rod Moore, serving as Chair;
NMFS Northwest Region: Frank Lockhart, Yvonne de Reynier, and Becky Renko;
Washington Department of Fish and Wildlife: Brian Culver;
Oregon Department of Fish and Wildlife: Mark Saelens;
California Department of Fish and Game: Susan Ashcraft;
Industry: Heather Mann, David Jincks, and Rich Carroll;
Enforcement: Dayna Matthews and Mike Cenci.

Development of the Hybrid Alternative:

The workgroup's chair directed Oregon Department of Fish and Wildlife to consult with the public and develop a strawman alternative that would serve as a starting point for the workgroup's deliberations. On January 2, the workgroup met via conference call to revise and further develop this proposed alternative. The conference call was noticed and made open to the public, with listening stations in Seattle, Newport, and Portland. The proposed alternative was made available to the public from the PFMC website prior to the conference call. All workgroup members participated in the January 2 conference call. In addition, six other agency employees and three members of the public participated.

During the conference call, the workgroup discussed and came to consensus on the formation of the hybrid alternative. A summary of the workgroup's January 2 discussion, as well as the final language of the hybrid alternative, are presented in Appendix A. The outline of the hybrid alternative is also provided in attached Table 1.

Table 1. A comparison of different monitoring programs for the shore-based whiting fishery, including Alternative 5 - Hybrid Alternative. (Page 1 of 3).

Issues	Alternative 3 (Groundfish Observers) Maximized Retention with Observers	Alternative 4 (EMS and Catch monitors) Maximized Retention with EMS and Catch Monitors	Alternative 5 (Hybrid Alternative)
Management structure	Implement Federal regulations • Maximized retention • Whiting Optimum Yield (OY) may be fully available with fleetwide bycatch limits for overfished species • With high coverage level, may be adequate to support sector bycatch limits.	Same As Alternative 3	Same As Alternative 3, plus: • Coordination of the monitoring program will be accomplished under direction of NMFS
Federal permits and endorsements	• Vessels required to have limited entry permit with trawl endorsement • Annual whiting endorsement to identify intent to fish	Same As Alternative 3	Same As Alternative 3 Plus whiting endorsement specifies vessel requirements (e.g. 100% EMS, carry at-sea observer as requested, report high bycatch areas),
Recordkeeping and reporting	• When fully developed, (as early as 2008) require electronic logbooks and fish tickets • Daily fish ticket submission requirements for bycatch limit monitoring	Same As Alternative 3	• When fully developed, (as early as 2008) require electronic logbooks and fish tickets **• Processors - Daily target species (whiting) and bycatch reporting requirements (to NMFS) for catch limit monitoring** [a/]

Table 2-1 continued (page 2 of 3).

Issues	Alternative 3 (Groundfish Observers) Maximized Retention with Observers		Alternative 4 (EMS and Catch monitors) Maximized Retention with EMS and Catch Monitors		Alternative 5 (Hybrid Alternative)
Monitoring shore-based catcher vessels at-sea	• Observers monitor maximized retention at sea and quantify discard		• EMS used to monitor maximized retention at sea		• 100% EMS used to monitor maximized retention at sea. At sea observers deployed to quantify discard events, if needed.
	3A Federally Funded	3B Industry Funded	4A Federally Funded	4B Industry Funded	**5 Combined Funding**
	• WCGOP selects vessels at random from pool of all trawl vessels • NMFS deploys observers	• Direct pay by industry [a/] • NMFS funds infrastructure • Vessels procure observer from permitted provider	Alternative 3A plus • NMFS funds EMS analysis	• Direct pay by industry b/ • Vessels procure EMS service (100% of trips) from permitted provider • NMFS funds EMS analysis	• NMFS deploys WCGOP observers, if needed • Vessels procure EMS service (100% of trips) from permitted provider • NMFS funds EMS analysis
Monitoring shoreside processors	• NMFS Observers sample deliveries at processing facility to collect data for fish ticket verification; salmon counts; and biological data; • State port sampler effort may be used elsewhere		• Monitors observe weighing and collect data for fish ticket verification; • State port samplers continue to collect biological data		• Industry plant monitors [d/] observe weighing and collect data for fish ticket verification; collect biological data; and transport prohibited species. • Data compliance monitors [e/] verify fish ticket information.
	3A Federally Funded	3B Industry Funded	4A Federally Funded	4B Industry Funded	**5 Industry Funded**
	• WCGOP observers [c/] • NMFS deploys observers	• Direct pay by industry [b/]	Same As Alternative 3A	Same As Alternative 3B	• Industry plant monitors are industry-funded and trained to NMFS specifications. • Data compliance monitors are industry funded and third party. • A proportion of the offloads are monitored at the level that assures accurate accounting of Chinook salmon and overfished species incidental catch levels. • Using current industry funding levels as a base, determine number of data compliance monitors that could be hired.

Table 2-1 continued (page 3 of 3).

	3A State system (Status Quo)	3B Federal system	4A State system (Status Quo)	4B Federal system	5A State system (Status Quo)	5B Federal system
Disposition of Overage fish	• Overages reported on fish tickets and sales abandoned or donated to charity		Same As Alternative 3		Same As Alternative 3	
	• Overage fish abandoned to state • Prohibited species donated • State enforcement tracks compliance	• Profit from sale of overage fish illegal • Donation program	Same As Alternative 3A	Same As Alternative 3B	Same As Alternative 3A	Same As Alternative 3B

a/ Processors allowed to correct daily reports (QA/QC); however, a penalty will be developed for non-compliance.
b/ The legal and policy issues for new direct pay observer programs, where industry members pay directly for observer services, have not yet been fully explored.
c/ Vessel and processor observers may or may not be the same individual and would depend on the chosen sample design.
d/ Industry Plant Monitor - industry funded (trained to NMFS specifications) personnel that observes vessel offload, conducts bycatch species composition, enumerates and stores prohibited species, retrieves salmon snouts and other coded-wire-tag (CWT) information, transports prohibited species to food share, and collects biological information for whiting and for predominate bycatch species
e/ Data Compliance Monitor – industry funded, independent third party personnel that verifies information collected by industry plant monitors and provides that information to NMFS.

Appendix 1: Summary of January 2, 2007 SWAG Meeting Discussion and Decisions

Issue: **Management Structure**
Final language: *Same as Alternative 3, plus coordination of the monitoring program will be accomplished under direction of NMFS.*
Discussion: ODFW representatives highlighted the work intensive role that they have played in the management and coordination of the shoreside whiting fishery operating in all three states. They encouraged adding language to the hybrid alternative demonstrating that such a coordination role would be taken over by NMFS.

Issue: **Federal Permits and Endorsements**
Final language: *Same as Alternative 3*
Discussion: Inclusion of an annual whiting processor permit was proposed. NMFS staff responded that this permit would not be necessary in order to land unsorted whiting catch. The workgroup agreed that adding this permit was not necessary, and all were in consensus that the hybrid alternative language would not differ from that in Alternative 3 and 4.

Issue: **Recordkeeping and Reporting**
Final language:
• *When fully developed, (as early as 2008) require electronic logbooks and fish tickets.*
• *Processors - Daily target species (whiting) and bycatch reporting requirements (to NMFS) for catch limit monitoring.*[a/]

a/ Processors allowed to correct daily reports (QA/QC); however, a penalty will be developed for non-compliance.

Discussion: Some workgroup members voiced a discomfort with requiring submission of actual fish tickets, and NMFS agreed that requiring daily reporting without specifically stating fishtickets was acceptable. Therefore, the hybrid alternative does not require processors to submit fish tickets to NMFS, as Alternatives 3 and 4 require. Rather, the hybrid alternative requires that the processor submit a summarized version. Under this alternative, regulations could state that the information to be submitted is the same as that on the fish ticket.

State representatives also highlighted that the states need to still have a mechanism to submit field-corrected data to NMFS after the information has been submitted by the processor. Though the workgroup agreed to the importance of the quality control checking, no specific language was added to the alternative.

Issue: **Monitoring Shore-based Catch Vessels At-sea**
Final language:
• *100% EMS used to monitor maximized retention at sea. At sea observers deployed to quantify discard events, if needed.*
• *NMFS deploys West Coast Groundfish Observer Program (WCGOP) observers, if needed.*
• *Vessels procure EMS service (100% of trips) from permitted provider.*
• *NMFS funds EMS analysis.*

Discussion: The workgroup agreed that EMS would be required on all vessels and would be procured by industry, but if needed this could be augmented by WCGOP at-sea observers. Members noted that such overlay is important because observers would provide a more accurate estimate of a discard event's magnitude than EMS could provide. A concern was raised that the WCGOP observers should work only as monitors and should not take samples of catch. These observers would be part of the regular WCGOP rotation pool.

With respect to funding, NMFS representatives explained the legal problem associated with introducing a split industry/federal funding in the hybrid alternative: the federal government cannot enter into a funding-sharing situation with a group of private entities. By requiring vessels to procure EMS, to be supplemented by federal observers if needed, the hybrid alternative achieves a sharing of costs without creating a funding-sharing situation.

Issue: **Monitoring Shoreside Processors**
Final language:
• *Industry plant monitors* [see Table 1 for full definition] *observe weighing and collect data for fish ticket verification; collect biological data; and transport prohibited species.*
• *Data compliance monitors* [see Table 1 for full definition] *verify fish ticket information.*
• *Industry plant monitors are industry-funded and trained to NMFS specifications.*
• *Data compliance monitors are industry funded and third party.*
• *A proportion of the offloads are monitored at the level that assures accurate accounting of Chinook salmon and overfished species incidental catch levels.*
• *Using current industry funding levels as a base, determine number of data compliance monitors that could be hired.*
Discussion: The workgroup discussed how to narrow the definition of a shoreside monitor. Two distinctly separate roles were identified for the hybrid alternative: (1) industry plant monitor and (2) data compliance monitor. With duties including observing of offloads and collecting biological data, all members felt comfortable that the industry plant monitor could be a plant employee that has been trained by NMFS or Pacific States Marine Fisheries Commission (PSMFC). NMFS representatives stated that fish tickets verification could not be performed by a plant employee, and therefore the data compliance monitor is to be industry funded and third party (such as employed by PSMFC). The workgroup called for analysis of current industry funding of plant monitoring to determine the possible number of monitors.

Issue: **Disposition of Overage Fish**
Final language: *Same as Alternative 3*
Discussion: The workgroup proposed no changes to the language in Alternatives 3 or 4.

PFMC
05/25/07

Curt Melcher

Motion for Groundfish E.3:

A Maximized Retention and Monitoring Program for the Pacific Whiting Shoreside Fishery

Adopt Alternative 4 (EMS and Catch Monitors) as presented in the draft EA (Agenda Item E.3.b, Attachment 3) Table 2.1 with the following amendments:

1. Third-party shoreside catch monitors (trained by or to NMFS specifications) responsible for all shoreside observation, species composition, fish ticket verification, biological sampling and all other duties and responsibilities defined in the EA for the combination of Data Compliance Monitors, Industry Samplers and Port Biologists.

2. The initial shoreside sampling level will be determined by using the current level of program funding for shoreside observation to hire catch monitors. Evaluation of the appropriateness of this level to be conducted using the initial data collected via the program.

3. Overages will be reported on fish ticket and abandon to the state. Prohibited species will be donated. State enforcement will track compliance (status quo).

ODFW Monitoring Program Alternatives for the Pacific Whiting Shoreside Fishery

Issues	ODFW Preferred Alternative
Management structure	• Implement Federal regulations • Maximized retention • Whiting OY may be fully available with fleetwide bycatch limits for overfished species • With high coverage level, may be adequate to support sector bycatch limits. • NMFS coordinates and oversees monitoring program
Federal permits and endorsements	• Vessels required to have limited entry permit with trawl endorsement • Annual whiting endorsement to identify intent to fish
Recordkeeping and reporting	• When fully developed, (as early as 2008) require electronic logbooks • Processors - Daily electronic fish ticket submission requirements. Required in 2007 under related action, may be revised as needed by this action
Monitoring shore-based catcher vessels at-sea	• EMS used to monitor maximized retention at sea. Full coverage of all trips • Retain current authority to place WCGOP observers • NMFS funds EMS analysis • Vessels procure EMS service from permitted provider
Monitoring shoreside processors	**• Third-party shoreside catch monitors (trained by or to NMFS specifications) and identify them to be responsible for all shoreside observation responsibilities** **• The initial shoreside sampling level will be determined by using the current level of industry funding to hire third-party catch monitors** **• Evaluation of the appropriateness of this level to be conducted using the initial data collected via the program.**
Disposition of Overage Fish	• Overages reported on fish tickets • Overage fish abandoned to state • Prohibited species donated • State enforcement tracks compliance

AMENDMENT 22: LIMITING ENTRY IN THE OPEN ACCESS GROUNDFISH FISHERY

Conversion of the current open access groundfish fishery to limited entry management has been discussed several times in Council meetings since April 1998 (71 FR 64216) and was established as a Council priority with the adoption of the Groundfish Strategic Plan in 2000. The groundfish federal limited entry program was established in 1994 and did not include all vessels and their catch histories that landed groundfish during the qualification period. Participation in the "open access" (OA) portion of the fishery was left unlimited to ensure that vessels active in state-managed fisheries and/or landing groundfish incidentally in federally-managed fisheries, would continue to have access to that resource.

Since 1994, any vessel without a federal limited entry permit has been allowed to directly target and land groundfish under OA fishery regulations and landing limits. The fleet quickly expanded and a control date for the OA fishery was set as November 5, 1999 to put fishermen on notice that the Council was considering permitting the OA fleet. In November 2003, the Council agenda included "Open Access Limitation Discussion and Planning;" however, as with many management issues needing Council attention, work on this issue has been repeatedly delayed due to other high priority issues.

In September 2006, the discussion of the OA fishery again surfaced as the Council dealt with extremely low optimum yields for overfished species and the challenge of crafting meaningful fishing seasons. The Council reviewed the original control date for the OA fishery and, because significant time had elapsed since adopting that date, therefore adopted a new control date of September 13, 2006 and agreed to proceed with the development of a groundfish fishery management plan amendment to convert the open access fishery to limited entry management. NMFS announced the new control date and the Council intent to implement limited entry in the OA groundfish fishery in the Federal Register on November 1, 2006 (71 FR 64216).

California has the greatest number of vessels participating in the OA fishery and accounts for approximately 61% of coastwide OA vessels. The Oregon fleet contributes approximately 31% of vessels making OA landings, and WA vessels contribute the remaining 8% of vessels. The OA fishery is characterized by high annual variability in the number of participating vessels, a low number of vessels that participate each and every year, and a relatively small number of vessels that harvest most of the fish. The annual variability in the number of participating vessels contributes to difficulty in accurately estimating bycatch of overfished species and results in additional difficulties in predicting effort for developing future management measures. The concern is that continued allowance of an unrestricted OA fishery may interfere with bycatch reduction goals and continue to add instability to the groundfish fishery. A draft timeline and approach for converting the groundfish OA fishery to limited entry management during the 2009-2010 management cycle is attached (Agenda Item E.4.a, Attachment 1).

To assist in the Council decision process, the California Department of Fish and Game has prepared the attached issue paper entitled: "Review and Update of Open Access Permitting Issue and Possible Range of Alternatives for Issuance of B and C Limited Entry Permits" (Agenda Item E.4.a, Attachment 2). The report is intended to characterize the historical and current open access fisheries and to identify issues that will need to be considered as the Council moves

forward in the process of converting the OA fishery to limited entry. The Council will also need to discuss how to integrate an OA permitting timeline with the timeline for the 2009-2010 specifications and management measures, and other ongoing Council initiatives (see Agenda Item E.2.a, Attachment 2).

Council Action:

1. **Approve or modify attached Plan Development and Implementation Schedule (Agenda Item E.4.a, Attachment 1).**
2. **Adopt a preliminary range of alternatives for limiting entry in the open access groundfish fishery.**
3. **Discuss and prioritize limiting entry in the open access groundfish fishery relative to other Council initiatives.**

Reference Materials:

1. Agenda Item E.4.a, Attachment 1: Proposed Open Access Groundfish Fishery Conversion to Limited Entry and Permit Implementation Schedule.
2. Agenda Item E.4.a, Attachment 2: Review and Update of Open Access Groundfish Fishery Permitting Issue and Possible Range of Alternatives for Issuance of B and C Limited Entry Permits.
3. Agenda Item E.4.a, NMFS Report: NMFS Report on National Environmental Policy Act (NEPA) Analysis Needs For a License Limitation Program for the Groundfish Open Access Fisheries.
4. Agenda Item E.4.d, Public Comment.

Agenda Order:

a. Agenda Item Overview — John DeVore
b. Scoping and Alternatives Report — Deb Wilson-Vandenberg
c. Reports and Comments of Advisory Bodies
d. Public Comment
e. **Council Action:** Initial Recommendations for Developing Alternatives

PFMC
05/25/07

Proposed Open Access Groundfish Fishery Conversion to Limited Entry and Permit Implementation Schedule

Step	Dates
Overview and Council direction re: OA permitting alternatives	June 2007
Evaluation of alternatives and preparation of first preliminary draft environmental assessment	June-September 2007
Council meeting: adopt preliminary range of alternatives and preliminary preferred alternative for public review	November 2007
Council meeting: final adoption of preferred alternative	April 2008
Implementation phase and initial permit issuance	April 2008 thru April 2009
B and C permits required	May 2009

Process notes:

The CDFG will have the lead role in this process with assistance provided by the states of Washington and Oregon, Council staff, and the National Marine Fisheries Service. Washington tribal input will be welcomed.

Advisory Body and Public input will be received at regularly scheduled Council meetings.

Agenda Item E.4.a
Attachment 2
June 2007

Review and Update of Open Access Groundfish Fishery Permitting Issue and Possible Range of Alternatives for Issuance of B and C Limited Entry Permits

by

California Department of Fish and Game

May 23, 2007

Introduction

The Pacific Fishery Management Council (Council) agreed at its September 2006 meeting to re-initiate discussions regarding conversion of the open access groundfish fishery to limited entry management. The issue has been vetted several times in Council meetings since about 1998 and was established as a high priority capacity reduction objective as part of the Council's groundfish strategic plan in 2001. A Groundfish Plan (Plan) development committee was formed in 2001 and considerable data analysis was performed and reviewed during 2001-2002. The issue is being brought forward again in part because of fishery informational needs associated with other important groundfish management issues, bycatch reduction and overfished species management in particular. However, the issue has merit for further discussion and implementation by itself because of the extreme overcapitalization that exists in the directed (targeted) component of the fishery[1], which will be explained below. Council staff work load limitations continue to be a major impediment to additional groundfish workload assignments. The California Department of Fish and Game (CDFG) has proposed to take the lead for the analysis of data and preparation of federal documents necessary for the conversion of the open access groundfish fishery to limited entry management, should the Council decide to move in that direction. The offer is in part self-serving because most of the participants in the open access fishery are California-based and such conversion would be expected to benefit California fishers and California coastal communities more so than the other coastal states. Staff members from the states of Oregon and Washington and the National Marine Fisheries Service (NMFS), Northwest and Southwest regions (NWR and SWR), had minimal opportunity to contribute to the report content and construct because of time constraints between Council meetings. Additional input is expected from these entities at the June 2007 Council meeting where the report is expected to be reviewed and discussed.

Conversion of the open access fishery to limited entry management is a Plan amendment issue, which, if undertaken in the present order of succession, would be the 22nd such action taken by the Council since the FMP was adopted in 1982. Preliminary discussions with NMFS-NWR indicate an Environmental Assessment (EA) may be appropriate for meeting National Environmental Protection Act (NEPA) requirements for the proposed action. Most of the following report sections are expected to be used in the development of a preliminary draft EA for Council review and comment at some future date.

[1] In this report a directed open access fishery landing is one in which only open access gear was used and >50% of the value of the landing was of federal groundfish.

Preface: Current Management of Open Access Fisheries and Interface with State Management Programs

It is important at the outset to briefly describe the current management of open access groundfish fisheries and to clarify the basis for the data analyses that are proposed to be used in the issuance of permits to convert those fisheries to limited entry management. A more detailed description of the open access fisheries is provided in the Draft EA entitled "Expanded Coverage of the Program to Monitor Time-Area Closures in the Pacific Coast Groundfish Fishery" (NMFS 2005).

Federal Management

The open access component of the groundfish fishery is allocated a portion of the available harvest to fishers targeting groundfish without limited entry permits, and fishers who target non-groundfish fisheries that incidentally catch groundfish (see: http://www.pcouncil.org/groundfish/gfprimer.html). The *directed* fisheries are those that harvest (1) shelf rockfish[2], primarily using hook-and-line gear; (2) sablefish, primarily using hook-and-line or pot gear; (3) nearshore species, primarily using hook-and-line or pot gear; and (4) "other" species, primarily using hook-and-line or setnet gear. Trawl gear may not be used in the directed groundfish open access fishery. Trawl gears for target species such as pink shrimp, California halibut, ridgeback prawns, and sea cucumbers are exempted from this rule and may land incidental amounts of groundfish.

Groundfish are managed through a number of measures including harvest guidelines, trip and landing limits, area restrictions, seasonal closures, and gear restrictions (such as minimum mesh size for nets and small trawl footrope requirements for landing shelf rockfish). All sectors of the groundfish fishery are constrained by the need to rebuild groundfish species that have been declared overfished. Groundfish specification and management measures are set on a biennial basis with inseason adjustments made at regularly scheduled Council meetings, when necessary, in order to keep the fisheries within species' harvest limits or rebuilding plans established for overfished species.

Federal groundfish species included in California and Oregon Nearshore Management Plans
Cabezon, *Scorpaenichthys marmoratus*
Kelp greenling, *Hexagrammos decagrammus*
Black rockfish, *Sebastes melanops*
Black and yellow rockfish, *S. chrysomelas*
Blue rockfish, *S. mystinus*
Brown rockfish, *S. auriculatus*
Calico rockfish, *S. dalli*
California scorpionfish, *Scorpaena guttata* (CA species only)
China rockfish, *S. nebulosus*
Copper rockfish, *S. caurinus*
Gopher rockfish, *S. carnatus*
Grass rockfish, *S. rastrelliger*
Kelp rockfish, *S. atrovirens*
Olive rockfish, *S. serranoides*
Quillback rockfish, *S. maliger*
Tiger rockfish, *S. nigrocinctus* (not in CA plan)
Treefish, *S. serriceps*
Vermilion rockfish, *S. miniatus* (not in CA plan)

Trip landing and frequency limits have been designated as routine for the following species or species groups all of which are potentially affected by open access fishers: black rockfish, blue rockfish, bocaccio, canary rockfish, chilipepper rockfish, cowcod, darkblotched rockfish, Pacific ocean perch, shortbelly rockfish, splitnose rockfish, widow rockfish, yelloweye rockfish, yellowtail rockfish, minor nearshore rockfish or shallow and deeper minor nearshore rockfish, shelf or minor shelf rockfish, and minor slope rockfish; DTS complex, which is composed of Dover sole, sablefish, shortspine thornyheads, and longspine thornyheads, both as a complex and for the species within the complex; arrowtooth flounder, English sole, petrale sole, Pacific

[2] There are over 40 species of shelf and slope rockfish. For a complete species listing see the Council web site at: http://www.pcouncil.org/facts/georock.pdf

sanddabs, rex sole, and the flatfish complex, which is composed of those species plus any other FMP flatfish species; Pacific whiting; lingcod; cabezon; Pacific cod; spiny dogfish; and "other fish" as a complex consisting of all groundfish species listed in the FMP and not otherwise listed as a distinct species or species group. Generally, directed open access vessels have substantial harvest opportunities for a variety of groundfish species, including but not limited to sablefish, nearshore rockfish, slope rockfish south of Point Conception, California scorpionfish, cabezon, kelp greenling, Pacific sanddab, and spiny dogfish. A relatively low harvest opportunity is provided for lingcod coastwide and certain shelf rockfish south of Point Conception (see http://www.nwr.noaa.gov/Publications/FR-Notices/2006/upload/71FR78638.pdf for final rule implementing 2007-2008 specifications and management measures and http://www.nwr.noaa.gov/Publications/FR-Notices/2007/upload/72FR13043.pdf for minor corrections). More restrictive salmon fishing opportunities in 2006 led those fishers to pursue other species, ultimately causing a noticeable increase in open access sablefish landing rates.

State Programs

The coastal states have management programs or regulations affecting fishermen and vessels that harvest federal groundfish either as target species or incidental to fishing for federal or state managed species. The state limited entry programs cover a variety of species and gear types (**Appendix A**). Nearshore species management has been addressed by the states in different ways. Washington law prohibits directed commercial fishing for groundfish in state waters, except for tribal fisheries (Makah, Quillayute, Hoh, and Quinault), which may fish for groundfish in the Usual and Accustomed fishing areas. Oregon and California have developed nearshore fishery management plans and associated limited entry programs that are aimed at capping or reducing harvest capacity in their nearshore fisheries (see **Appendix B** for more information on the states' nearshore regulations or management programs).

In developing a federal license limitation program, the coastal states, tribes, Council and NMFS must ensure that state and federal capacity reduction programs are compatible with each other and that together the programs ultimately result in less fishing pressure on both overfished and more abundant groundfish species. The Council process will provide a forum for this cooperation.

Review of Open Access Permitting Issue

Impact of Limited Entry Amendment

In 1994, NMFS implemented a limited entry program for the West Coast groundfish fisheries, which created a permitting program to restrict the number of vessels allowed to directly target groundfish. The Council had discussed and developed this limited entry program as Amendment 6 to the FMP in the early 1990s. At that time, West Coast fisheries as a whole were perceived as overcapitalized, meaning that fishing effort (number of vessels participating and fishing power of individual vessels) far exceeded potential West Coast fish and shellfish biological yields. In the Environmental Impact Statement (EIS) for Amendment 6, the Council expressed concern that vessels looking for opportunities to expand their fishing operations would begin to enter the groundfish fishery, which had only recently converted from partial foreign harvest to complete domestic harvest. To prevent this anticipated migration to the groundfish fisheries, the Council adopted the Amendment 6 limited entry program, which essentially capped the number of groundfish fishery participants to those vessels with historic participation in the groundfish fisheries.

The limited entry program did not reserve all groundfish for the limited entry fleet, which allowed for the development of the open access fisheries. Plan Amendment 6 specified that percentages of annual allowable groundfish catch that had been taken by vessels that did not qualify for limited entry permits would be set aside for an open access fishery. This fishery was left unlimited in participation to ensure that vessels participating in state-managed fisheries and landing groundfish incidentally would continue to have access to the groundfish resource. The fishery was also left unlimited to allow smaller vessels to directly target groundfish at lower landings rates than in the limited entry fishery. Since 1994, any vessel without a limited entry permit and using gear other than trawl gear has been allowed to directly target and land groundfish under open access fishery regulations and limits. Additionally, vessels using trawl gear in non-groundfish fisheries, such as shrimp and prawn fisheries, have been allowed to land groundfish taken incidentally in those fisheries under open access fishery regulations and limits. Allowable groundfish landings have been declining in recent years, primarily in response to requirements in the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) that NMFS and the fishery management councils that implement measures to rebuild overfished fish stocks. As of 2007, seven groundfish species have been declared overfished and are managed under strict rebuilding guidelines. All of these species co-occur with more abundant groundfish stocks, which mean that harvest of both the overfished stocks and their more abundant co-occurring stocks has been severely restricted to protect the overfished stocks. Despite these overall harvest restrictions, participation in the open access sectors of the groundfish fisheries remains unrestricted.

Groundfish Strategic Plan

The Council's Groundfish Strategic Plan was adopted in 2000. The Plan noted that the groundfish resource could not support the number of vessels catching and landing groundfish, which numbered over 2,000 licensed commercial fishers, and many thousands of sport fishers. To bring harvest capacity in line with resource productivity, the number of vessels in most fishery sectors needed to be reduced by at least 50%. Fishing fleet overcapitalization had been a major factor in fish stock depletions and led to economic and social crises in the industry and in coastal communities. The Plan reported that

> "...allowing an open access fishery with a total absence of limits on capacity is a serious management problem. Decreased participation in non-groundfish fisheries such as salmon, improved prices for some groundfish species like sablefish, and the development of the live rockfish fishery had transformed the open access fishery from a primarily bycatch fishery with a small directed fishery component, to a much larger fishery with many more participants relying on the fishery for large portions of their annual incomes. Reducing capacity in the fishery is fundamentally necessary to reducing overfishing, minimizing bycatch and improving the economic outlook for the West Coast fishing industry. Capacity reduction should not be seen as just another type of management measure. Capacity reduction must be a key element of any plan to ensure management effectiveness and economic viability of the west coast groundfish fishery. Without significant capacity reduction, the Council will continue to find it difficult, if not impossible, to achieve many of the conservation and economic objectives of the Groundfish FMP. Current capital utilization rates are quite low for all sectors of the commercial groundfish fishery."

The Council's Scientific and Statistical Committee (SSC) compared potential harvest capacity for the fish actually available for harvest in 2000 and calculated a measure of overcapitalization in several different fishery sectors which they called "current capital utilization rate." This

parameter was used to describe the percentage of vessels in the current fleet that could harvest the available groundfish. They sorted vessel landings data by fishery sector for each year during 1984-1992 in descending order of total annual and cumulative groundfish landings and counted down the vessel list from the more to less productive vessels to determine the number of vessels needed each year to harvest the available groundfish. They used 1984-1992 for this comparison because vessel harvest constraints were much less restrictive in those earlier years and catches from those years seemed to be a better indicator of what vessels were able to harvest. By this approach they estimated that 6%-13% of the open assess vessels could take the open access fishery groundfish allocation in 2000.

> "Excess capacity is the difference at a point in time between what a fisherman can actually produce and what could potentially be produced if all restrictions on his operation were removed. Overcapacity may be defined as the difference between the fishing firm's potential level of production (individual vessel's catch) and the target level of production (total allowable harvest) that has been established for that particular fishery" (Kirkley et al June 2002)

The Plan also recommended that the Council consider deferring management of nearshore rockfish, and other species such as cabezon, kelp greenling and California scorpionfish to the states, and that all commercial fisheries should eventually be limited through federal or state license or permit limitation programs.

Strategic Plan Implementation Oversight Committee

Following adoption of its Strategic Plan, the Council convened the Strategic Plan Oversight Committee (SPOC) to monitor the Council's progress toward the goals of the Strategic Plan. The SPOC developed a list of 15 groundfish action priorities, which included two "critical" elements (science and Council process action items) for Council consideration. The open access permitting issue was ranked seven below the two critical operational elements, buyback, trawl permit stacking, observers, groundfish process, and fixed gear stacking. A subcommittee of the SPOC was formed to look at open access capacity reduction issues, the Ad-Hoc Open Access Permitting Subcommittee (OAPS).

The OAPS first met in January 2001 and continued with a series of meetings through March 2002. These meetings ceased for the remainder of 2002 due to increased Council's workload on other higher priority issues. However, the Council reviewed its progress with Strategic Plan recommendations in November 2002 and decided at that point that it would begin development of an open access permitting program and drafted the associated analysis for such a program in 2003. The proposed FMP amendment was intended to meet the Strategic Plan goal of reducing capacity in the open access fisheries landing groundfish and to meet the Council's commitment to an open access permitting program. Considerable advisory body and public input was provided in response to meetings of the OAPS (see **Appendix C**). A brief summary of findings from the analysis of 1990-2001 open access groundfish fishery data provided to the OAPS is as follows:

Incidental Fisheries

West Coast target species and associated federal groundfish data were extracted for PFMC fisheries that targeted non-groundfish species during 1990-2001. Landings data were presented in terms of metric tons and ex-vessel value of fish in the landings. Groundfish were treated as a group and not broken down by species. Most fisheries had very small (<10 mt annual average) groundfish impact. The pink shrimp fishery had by far the greatest groundfish

landings and accounted for about 70% of the total groundfish landings by all non-target or incidental fisheries. The fisheries with the highest groundfish landings relative to the target species landings were the California halibut trawl, salmon troll (with halibut on board), Pacific halibut, California prawn trawl and California sheephead fisheries with 13% or greater groundfish landed catch compared to the target species landed catch (**Table 1**).

Directed Fisheries

Analysis of data provided by Hastie (2001) is included in this report for the directed (targeted) open access fishery during 1994-2001. Whether a trip "targeted" groundfish in his analysis was determined using a combination of gear and revenue information from the trip. Only gears that could legitimately target groundfish in open access were included, and of those, only trips were included where groundfish revenue exceeded the revenue from all other species. It showed that the most valuable species or species group in the directed open access fisheries on an average annual basis were in descending order of importance: dead rockfish ($3.4 million), sablefish ($1.5 million), live rockfish ($1.0 million), cabezon ($0.6 million) and lingcod ($0.4 million). The value of all other species combined was $0.3 million. The most abundant species in the catch based on average annual tonnage landed during 1994-2001 were (in descending order of importance): dead rockfish (2,500 tons); sablefish (600 tons) and lingcod (300 tons). All other species combined averaged 400 tons (**Table 2**).

The primary gear types used to catch the more valuable species were: dead rockfish, line gear (68%) and net gear (25%); sablefish, longline gear (70%) and pot gear (19%); live rockfish, in about equal proportions by longline and other line gear; cabezon, by other line gear (45%), longline gear (34%) and pot gear (21%); lingcod, other line gear (52%), longline gear (39%) and net gear (23%; **Table 2**).

The number of vessels that participated in the directed open access fishery during 1994-1999 declined from nearly 1,400 to about 1000. The number of vessels that harvested 80% of the directed open access groundfish catch ranged from 175-234 during 1994-1999. The number of vessels that harvested 90% of the catch ranged from 302-347 during the same time period (**Figure 1**). This same analysis based on groundfish revenues showed similar numbers of vessels (within 26%) landed 80% and 90% of the directed open access fishery revenues during 1994-1999 (Hastie 2001)

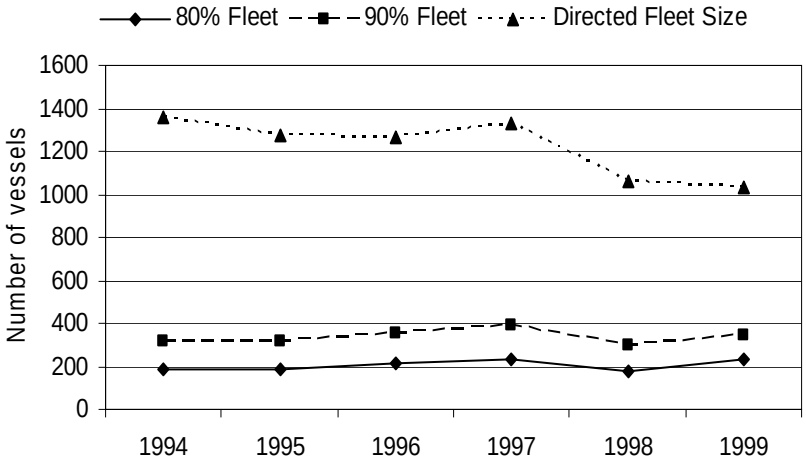


Fig 1. Number of vessels that landed specified proportions of total groundfish tonnage in the directed fishery by year, 1994-1999

Table 1. West Coast open access non-target groundfish fisheries: Annual target and non-target federal groundfish catch statistics, 1990-2001 (Hastie 2001).

	Number of Vessels		Target Species (mts)		Groundfish (mts)		Groundfish Proportion	
Fishery	**AVG**	**Range**	**AVG**	**Range**	**AVG**	**Range**	**AVG**	**Range**
Pink shrimp	97	69-127	9,766	2,876-16,850	415	94-896	4.4%	1%-8%
CA prawn trawl	41	16-60	288	37-701	24	5-53	14.3%	2%-30%
CA prawn pot	30	10-76	33	2-103	1	0-7	4.1%	0%-13%
CA halibut trawl	25	5-40	68	32-135	25	5-40	39.8%	13%-63%
Pacific halibut	149	81-210	54	30-97	12	9-23	23.6%	10%-54%
Dungeness crab (pot)	1,001	800-1,194	10,890	8,274-18,457	7	5-17	0.0%	none
Salmon Troll (w/o halibut)	1,338	969-2,254	2,206	600-4,256	51	11-149	4.5%	0%-25%
Salmon Troll (w halibut)	60	7-128	61	0-149	5	0-19	29.1%	3%-153%
Sea Cucumber	23	13-32	126	31-262	5	0-14	3.4%	0%-8%
Squid	104	67-144	49,059	2,879-89,858	1	0-1	0.0%	none
Coastal Pelagic Finfish	174	107-258	4,730	2,015-9,238	0	none	0.0%	none
CA Sheephead	172	124-245	93	52-140	12	6-16	13.4%	7%-20%
HMS Troll	530	85-973	6,240	703-11,820	2	0-5	0.0%	none
HMS Line	25	1-52	69	1-196	0	0-9	1.9%	0%-1%
HMS Pole	187	91-303	2,350	816-5,200	1	0-1	0.0%	none
HMS Gillnet	76	9-104	102	1-192	2	0-12	2.5%	0%-8%
HMS Seine	24	17-35	6,849	885-12,742	0	none	0.0%	none
CA Gillnet Complex	23	0-54	865	0-1,462	23	0-54	1.9%	0%-4%
Totals	n/a	n/a	93,849	n/a	586	n/a	0.6%	n/a

Table 2. Directed open access gear types that take the most species or species groups of federal groundfish presented as average landed catches and proportion of total landed catch for each species or species group during 1994-2001. Vessel and trip statistics are not presented because of possible gear switching by vessels within and between years (Hastie 2001).

		Dead Rock 1/		Sablefish		Live Rock 2/		Cabezon		Lingcod		All Others	
Gear code		**AVG**	**Prop.**	**AVG**	**Prop.**	**AVG**	**Prop.**	**AVG**	**Prop.**	**AVG**	**Prop.**	**AVG**	**Prop.**
	Mts	450.3	18%	434.4	70%	62.9	45%	26.0	34%	38.9	15%	138.9	58%
	$1,000s	681.8	20%	1058.4	72%	456.7	44%	201.6	35%	58.4	16%	119.8	41%
	# of ves	244.8	unk	159.3	unk	141.5	unk	111.7	unk	170.6	unk	unk	unk
	# of trips	1906.6	unk	1632.9	unk	1949.0	unk	1181.3	unk	1091.5	unk	unk	unk
Other line													
	Mts	1268.6	50%	37.5	6%	66.0	47%	35.0	45%	139.4	52%	15.2	6%
	$1,000s	1820.1	54%	79.2	5%	505.5	48%	227.8	40%	206.9	58%	59.9	21%
	# of ves	921.4	unk	70.3	unk	278.5	unk	273.0	unk	628.7	unk	unk	unk
	# of trips	8324.9	unk	276.0	unk	2643.8	unk	2038.1	unk	4349.5	unk	unk	unk
Troll													
	Mts	98.6	4%	5.8	1%	0.2	0%	0.2	0%	19.5	7%	0.7	0%
	$1,000s	110.4	3%	9.4	1%	1.7	0%	0.9	0%	23.7	7%	1.1	0%
	# of ves	97.1	unk	9.7	unk	9.8	unk	4.6	unk	56.9	unk	unk	unk
	# of trips	164.2	unk	20.3	unk	12.3	unk	5.4	unk	113.8	unk	unk	unk
Pot													
	Mts	7.1	0%	119.7	19%	6.9	5%	15.9	21%	2.9	1%	3.6	2%
	$1,000s	12.9	0%	291.5	20%	57.6	5%	143.0	25%	6.8	2%	21.4	7%
	# of ves	45.4	unk	33.3	unk	44.9	unk	36.9	unk	27.3	unk	unk	unk
	# of trips	142.4	unk	605.9	unk	289.7	unk	277.6	unk	138.9	unk	unk	unk
Net													
	Mts	643.4	25%	11.6	2%	2.2	2%	0.1	0%	61.0	23%	48.9	21%
	$1,000s	640.3	19%	10.9	1%	19.5	2%	1.1	0%	54.9	15%	59.2	20%
	# of ves	59.8	unk	20.4	unk	8.3	unk	4.4	unk	34.7	unk	unk	unk
	# of trips	431.3	unk	113.5	unk	16.0	unk	4.5	unk	213.7	unk	unk	unk
Misc.													
	Mts	81.2	3%	10.3	2%	1.0	1%	0.3	0%	4.9	2%	30.5	13%
	$1,000s	103.8	3%	13.2	1%	7.4	1%	1.2	0%	5.1	1%	29.1	10%
	# of ves	131.4	unk	15.5	unk	18.3	unk	13.0	unk	57.5	unk	unk	unk
	# of trips	292.2	unk	37.9	unk	27.8	unk	19.2	unk	100.7	unk	unk	unk
Totals													
	Mts	2549.3	100%	619.3	100%	139.2	100%	77.5	100%	266.6	100%	237.8	100%
	$1,000s	3369.1	100%	1462.7	100%	1048.4	100%	575.5	100%	355.8	100%	290.5	100%

1/ Dead rock includes all rockfish species not including fish in the Live Rock group.

2/ Differentiated based on average price per pound. Live rock sold for an average of $2.68-$4.45/lb compared to $0.72-$1.14/lb (Hastie 2001).

Hastie (2001) found that a total of 3,506 different vessels participated in the directed open access groundfish fishery during 1994-1999. Fifty percent of the vessels fished in only one year and only 155 vessels (4%) fished all six years (**Table 3**). He also found that the directed fishery vessels had widely different tonnage and revenue histories within and between years. Hastie (2001) analyzed a variety of catch history tonnage and revenue data sets and developed some example participation criteria tables that could possibly be used as a basis for converting open access directed fishery vessels to limited entry management. He developed several tables showing the effect of various qualifying criteria on directed fishery fleet size. One of his tables showed how qualifying criteria can be constructed, based either on tonnage or value of landed catch, to achieve similar fleet size objectives. In this particular example, the qualifying criteria were shown to create qualifying fleet sizes of about 220 and 139 vessels (**Table 4**). Many changes have occurred in the open access directed fishery in recent years that will probably require different considerations in the selection and analysis of qualifying criteria in order to match current open access fishing capacity to open access fishery resource availability. Reduced shelf rockfish availability and the option of deferring nearshore groundfish management to the states may require data stratification, removal of state-managed species from the data base used for qualification, and the creation of species or gear endorsements in order to balance historic species harvest opportunities with current conditions.

Table 3. Number of annual open-access vessels with targeted landings of groundfish grouped by first year and number of years of participation, 1994-99 (Hastie 2001)

	Number of years targeted GF ldgs >0, 1994-99						
1st yr w/ targeted GF ldgs >0	**1**	**2**	**3**	**4**	**5**	**6**	**Total**
1994	483	278	176	132	133	155	1,357
1995	256	125	87	47	49		565
1996	242	127	71	64			503
1997	262	109	92				463
1998	217	95					312
1999	306						306
Total	1,766	734	426	243	182	155	3,506

Based on groundwork laid by the SPOC and OAPS, NMFS staff led a joint Council/NMFS working session to identify key issues and concerns that would need to be addressed in developing a plan amendment for conversion of the open access fishery to limited entry management. Based on those discussions, the NMFS staff began initial drafting of an EIS to support deliberations on the issue. The first chapter of that document was provided to the Council at its November 2003 meeting (PFMC 2003). That draft "first step" document was used in preparation of the current report.

Table 4. Cross-qualification of open-access vessels under four alternative *tonnage-based* and four alternative *revenue-based* hypothetical qualifying criteria (Hastie 2001).

			Tonnage-based		Revenue-based			Tonnage-based		Revenue-based	
	Criterion	Total	Q1	Q3	Q5	Q7		Q2	Q4	Q6	Q8
	Total		**221**	**220**	**221**	**218**		**137**	**138**	**139**	**139**
Mt -	Q1	**221**	**221**	163	165	154		137	129	121	118
based	Q3	**220**	163	**220**	154	166		132	134	117	116
Rev. -	Q5	**221**	165	154	**221**	163		127	119	139	136
based	Q7	**218**	154	166	163	**218**		125	137	139	139
Mt -	Q2	**137**	137	132	127	125		**137**	117	107	104
based	Q4	**138**	129	134	119	137		117	**138**	106	105
Rev. -	Q6	**139**	121	117	139	139		107	106	**139**	128
based	Q8	**139**	118	116	136	139		104	105	128	**139**
% meeting alternative criterion							(Criterion)				
Mt -	Q1		**100%**	74%	75%	71%	Q2	**100%**	85%	77%	75%
based	Q3		74%	**100%**	70%	76%	Q4	85%	**100%**	76%	76%
Rev. -	Q5		75%	70%	**100%**	75%	Q6	78%	77%	**100%**	92%
based	Q7		70%	75%	74%	**100%**	Q8	76%	76%	92%	**100%**

Q1: **[** Best year (1994-99) >= 5 mt and best year (1998-99) >= 0.5 mt **]** or minimum of 1 mt in every year.
Q2: **[** Best year (1994-99) >= 10 mt and best year (1998-99) >= 0.5 mt **]** or minimum of 1 mt in every year.
Q3: **[** Minimum of 1 lb in 5 of 6 years or best year (1994-99) >= 10 mt **]** and best year (1998-99) >= 1 mt .
Q4: **[** Minimum of 1 mt in 5 of 6 years or best 2-year average (1994-99) >= 10 mt **]** and best year (1998-99) >= 0.5 mt.
Q5: **[** Best year (1994-99) >=$15K and best year (1998-99) >=$1K **]** or minimum of $1K in every year.
Q6: **[** Best year (1994-99) >=$25K and best year (1998-99) >=$2K **]** or minimum of $1K in every year.
Q7: **[** Minimum of $1K in 5 of 6 years or best year (1994-99) >= $25K **]** and best year (1998-99) >= $1K .
Q8: **[** Minimum of $5K in 5 of 6 years or best year (1994-99) >= $25K **]** and best year (1998-99) >= $2K .

Proposal to Expand Vessel Monitoring System (VMS) to Open Access Groundfish Fishery in Federal Waters

This Council regulatory recommendation proposes to require that all open access vessels start and continue to have and use vessel monitoring system (VMS) equipment once they begin fishing for groundfish within federal waters. These vessels would also be required to notify NMFS of their intent to fish in various groundfish fisheries so that their activities may be monitored relative to area management restrictions. This proposal, if adopted in final regulation, could reduce the number of open access groundfish vessels because of VMS equipment cost. However, NMFS currently has funds available to reimburse vessel owners purchasing VMS units that are required to be purchased as part of a new regulatory program. This reimbursement program is likely to either maintain the current number of open access fleet participants, or increase the universe of potential participants because of incentives for speculative VMS equipment purchases. It is not perceived that the VMS registration requirement for fishing in federal waters or fleet size reduction potential of the initiative will be sufficient for meeting the strategic plan goal of matching open access fleet size with groundfish resource availability or meeting the Council's goals for managing fishery capacity.

Update of Open Access Fishery Landings Data

West Coast commercial landings of the open access groundfish fishery were analyzed using the PacFIN database over a seven year period 2000-2006. Data on all federal groundfish from California, Oregon, and Washington were included in the analysis. Revenue values were calculated from ex-vessel price information included in commercial landings records. This review of the coastwide open access fishery examined the following: non-directed (incidental) and directed open access groundfish, with evaluation of groundfish directed fishery groups sablefish, nearshore species, shelf rockfish, slope rockfish, and other species, which included, to name a few, lingcod, thornyheads, grenadiers, and specified sharks and rays. Directed open access fisheries trips were defined as 50% or more of the vessel trip revenue attributed to groundfish consistent with Hastie (2001). Federal limited entry, tribal and research trips were excluded from the analysis. Directed open access gear was restricted to hook-and-line (excluding troll), trap and set gillnet, as these are the predominant gears in this fishery. Greater emphasis was placed in the analysis on the directed fishery because of its greater economic importance and much higher groundfish landings compared to the incidental fisheries. No attempt was made to explain the causes of the increases or decreased in landings or revenues. Rather, the focus was on giving a general overview of open access fishery revenues and landings in recent years.

Open Access Fisheries

The number of vessels that participated in open access fisheries declined from about 1,400 in 2000 to 960 in 2006 (**Figure 2**). The total value of groundfish harvested declined from about $5.9 million in 2000 to $4.8 million in 2003 then increased to $6.3 million in 2006 (**Table 5).** The weight of fish landed by open access vessels averaged about 1,400 metric tons (mts) and ranged from about 1,200 mts-1,600 mts during 2000-2006 (**Figure 3 and Table 5**).

Incidental Fisheries

Incidental fishery groundfish landings were primarily associated with landings in exempted trawl fisheries including pink shrimp, California halibut and sea cucumber. The incidental fishery component of total open access fishery revenues declined from 9% in 2000 to 3% in 2005 with an increase to 5% in 2006. The annual average for 2000-2006 was 5% of total revenues (**Table 5**).

Directed Fisheries

The number of directed fishery vessels declined from about 1,000 in 2000 to 675 in 2004 then increased to 704 and 781 in 2005 and 2006, respectively **(Figure 2**). Sablefish and nearshore species accounted for an average of 87% with an annual range of 84%-89% of directed open access fishery revenues during 2000-2006 (**Figure 4 and Table 6**). The sablefish component increased from 23% of total revenues in 2000 to 48% and 46%, respectively, of total revenues in 2005 and 2006. The nearshore revenues during the same period declined from 63% of the fishery total in 2002 to 42% in 2006. The remaining revenues were from landings of shelf and slope rockfish and other species such as lingcod, grenadiers, thornyheads, and specified sharks and rays. The turnaround in open access revenues that began in 2005 was associated with increased sablefish landings (**Figure 4 and Table 6**). The tonnage landed in directed open access fisheries averaged about 1,200 mts and ranged from 1,000 mts-1,500 mts during 2000-2006. Sablefish and nearshore species comprised most of the tonnage averaging 77% and ranging from 70% - 84% of the total weight landed during 2000-2006. There was a noticeable increase in sablefish landings in 2005 and 2006 while there was a general decline in nearshore tonnages in the more recent years (**Figure 5 and Table 6**).

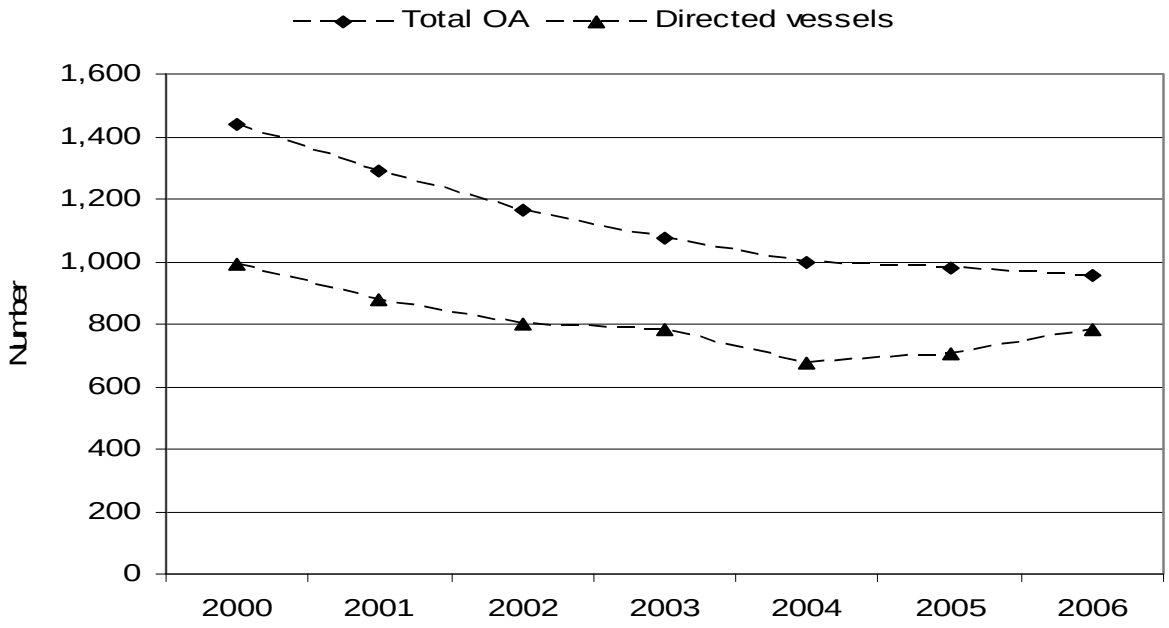


Fig 2. Number of open access vessels in total and in directed fishery, 2000-2006

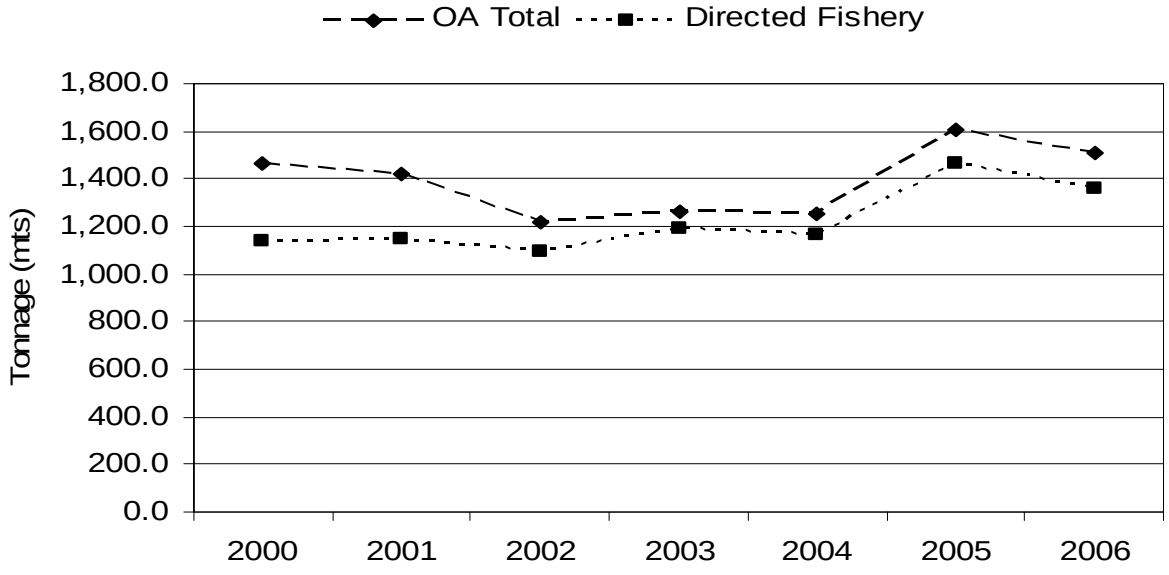


Fig 3. Tonnage landed in open access fishery in total and in directed fishery, 2000-2006

Table 5. Total open access fishery data including incidental catch revenues and proportions of total.

	Total OA			Incidental	
	No. Vsls	mts	(000s)	(000s)	Proportion of total
2000					
CA	970	1,019.2	$4,663.8		
OR	379	335.6	$983.7		
WA	88	109.1	$276.0		
TOTAL	1,437	1,463.9	$5,923.5	$506.6	8.6%
2001					
CA	785	878.5	$4,062.2		
OR	411	444.4	$1,265.5		
WA	96	98.8	$261.6		
TOTAL	1,292	1,421.7	$5,589.3	$414.8	7.4%
2002					
CA	708	778.3	$3,455.3		
OR	368	342.8	$1,414.9		
WA	86	94.9	$267.0		
TOTAL	1,162	1,215.9	$5,137.2	$201.4	3.9%
2003					
CA	635	742.4	$3,046.4		
OR	339	347.9	$1,295.6		
WA	100	171.3	$479.2		
TOTAL	1,074	1,261.6	$4,821.2	$162.4	3.4%
2004					
CA	559	746.5	$3,344.0		
OR	353	304.8	$1,144.0		
WA	88	201.8	$393.3		
TOTAL	1,000	1,253.0	$4,881.3	$221.1	4.5%
2005					
CA	503	871.7	$3,695.3		
OR	375	476.1	$1,862.4		
WA	102	258.1	$720.7		
TOTAL	980	1,605.9	$6,278.3	$215.9	3.4%
2006					
CA	519	769.4	$3,718.8		
OR	327	452.7	$1,919.6		
WA	112	290.5	$707.2		
TOTAL	958	1,512.5	$6,345.6	$283.3	4.5%
AVGS					
CA	668	829.4	$3,712.3		
OR	365	386.3	$1,412.3		
WA	96	174.9	$443.6		
TOTAL	1,129	1,390.7	$5,568.1	287	5.1%

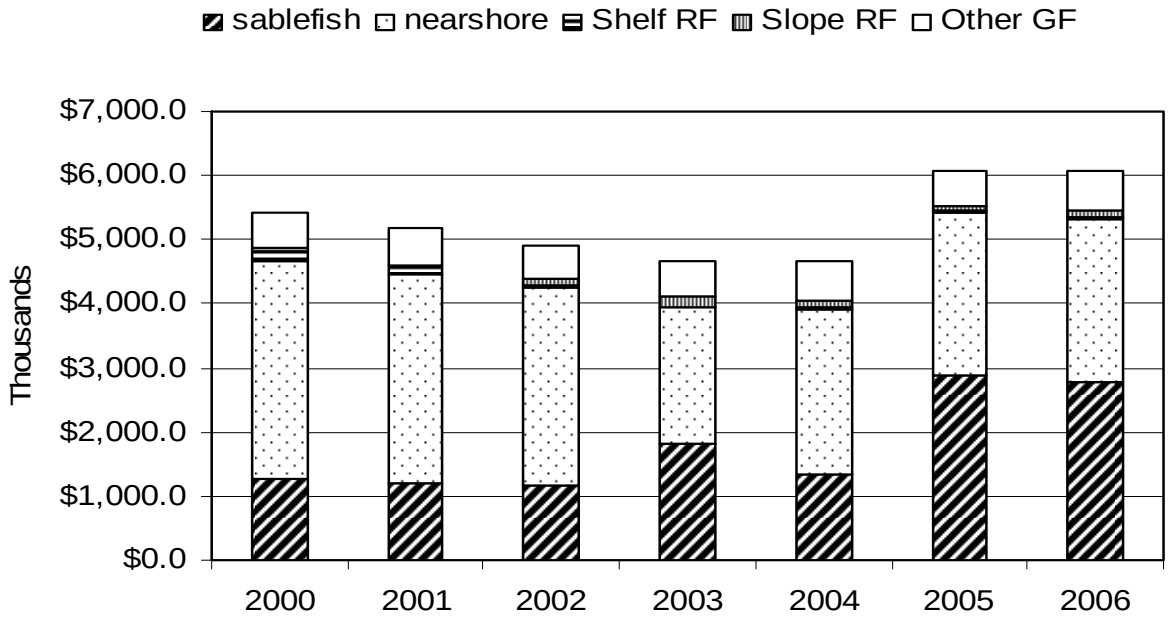


Fig 4. Directed open access fishery revenues by species and year, 2000-2006.

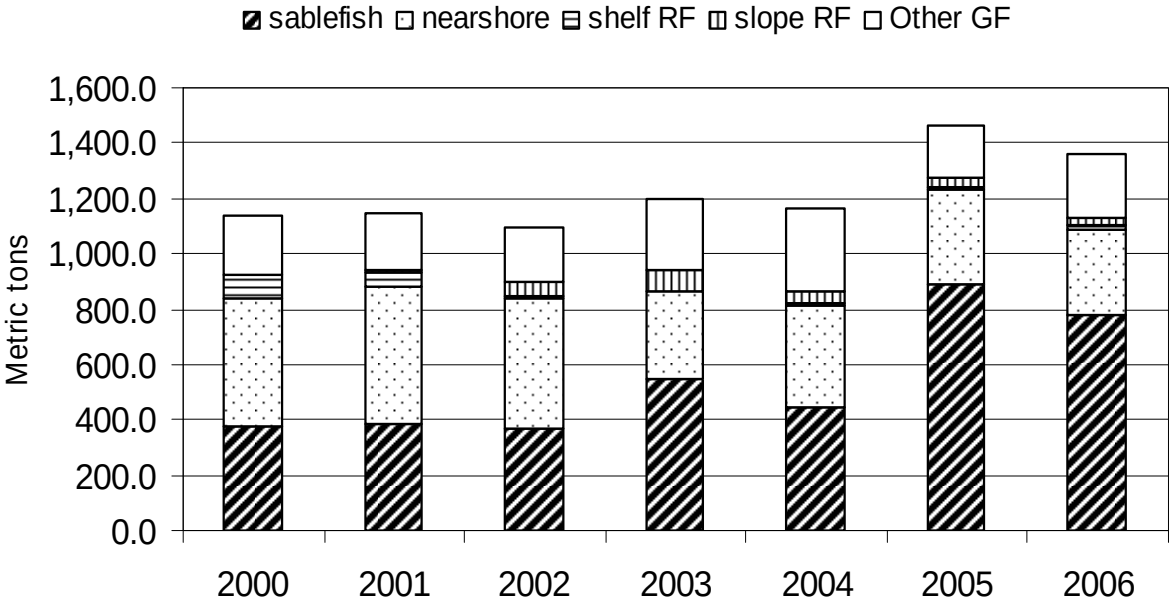


Fig 5. Tonnage landed in directed open access fishery by species and year, 2000-2006.

The majority of the landings and generated revenues were made by a relatively small number of vessels. In 2000, 80% of the directed fishery revenues were made by 238 of 972 (24%) directed fishery vessels. In that same year, 50% of the revenues were collected by 85 vessels (9%). This 80/50 percent pattern was fairly consistent throughout the seven-year period, 2000-2006 (**Figure 6 and Table 7**).

Table 6. Directed open access fishery participation and landings statistics, 2000-2006.

	Sablefish			Nearshore			Shelf RF			Slope RF			Others			Total Directed		
	No. Vsls	mts	(000s)	No. Vsls	mts	(000s)	No. Vsls	mts	(000s)	No. Vsls	mts	(000s)	No. Vsls	mts	(000s)	No. Vsls	mts	(000s)
2000																		
CA	113	284.2	$900.5	511	317.0	$2,857.8	186	78.1	$198.2	21	1.7	$5.3	N/A	182.2	$446.6	751	863.2	$4,408.4
OR	34	43.5	$158.6	146	145.7	$561.8	38	2.7	$5.3	0	0.0	$0.0	N/A	20.3	$67.7	192	212.2	$793.3
WA	32	51.4	$200.0	2	0.1	$0.1	9	0.5	$0.9	2	0.0	$0.0	N/A	10.9	$13.9	49	62.9	$215.0
TOTAL	179	379.1	$1,259.1	659	462.8	$3,419.6	233	81.3	$204.5	23	1.8	$5.3	N/A	213.3	$528.2	992	1,138.3	$5,416.7
2001																		
CA	107	263.3	$792.9	446	312.6	$2,529.3	107	49.1	$111.6	20	11.5	$25.1	N/A	162.2	$448.1	618	798.7	$3,907.0
OR	64	58.5	$197.7	419	186.4	$736.3	13	0.6	$1.2	0	0.0	$0.0	N/A	34.3	$108.3	203	279.8	$1,043.4
WA	44	60.1	$217.0	1	0.1	$0.1	7	0.2	$0.2	2	0.0	$0.0	N/A	7.1	$10.1	54	67.5	$227.5
TOTAL	215	381.9	$1,207.6	596	499.1	$3,265.6	127	49.9	$113.0	22	11.6	$25.1	N/A	203.6	$566.6	875	1,146.0	$5,177.9
2002																		
CA	120	255.7	$758.8	345	248.9	$2,013.5	70	10.7	$32.2	38	47.9	$104.5	N/A	149.2	$401.6	539	712.4	$3,310.7
OR	51	49.0	$177.4	157	220.4	$1,058.5	6	0.2	$0.4	0	0.0	$0.0	N/A	36.8	$117.5	211	306.5	$1,353.8
WA	44	64.6	$234.6	1	0.1	$0.1	0	0.0	$0.0	0	0.0	$0.0	N/A	9.6	$9.9	48	74.3	$244.6
TOTAL	215	369.3	$1,170.9	503	469.4	$3,072.1	76	10.9	$32.6	38	47.9	$104.5	N/A	195.6	$528.9	798	1,093.2	$4,909.1
2003																		
CA	119	299.1	$907.4	291	159.9	$1,472.4	40	2.1	$7.9	41	74.3	$175.2	N/A	159.0	$383.3	501	694.4	$2,946.2
OR	96	134.2	$492.1	132	159.9	$643.3	6	0.3	$0.5	0	0.0	$0.0	N/A	42.1	$122.3	216	336.4	$1,258.2
WA	64	111.6	$424.5	0	0.0	$0.0	0	0.0	$0.0	0	0.0	$0.0	N/A	51.2	$31.3	68	162.9	$455.9
TOTAL	279	544.9	$1,824.0	423	319.8	$2,115.7	46	2.4	$8.4	41	74.3	$175.2	N/A	252.3	$537.0	785	1,193.6	$4,660.3
2004																		
CA	92	281.6	$812.2	232	196.9	$1,817.2	82	10.1	$40.5	37	44.7	$108.9	N/A	162.1	$427.2	433	695.4	$3,205.9
OR	67	73.1	$223.9	114	166.8	$743.8	11	0.4	$1.2	3	0.1	$0.2	N/A	40.9	$125.7	186	281.4	$1,094.8
WA	52	91.3	$306.2	0	0.0	$0.0	1	0.1	$0.2	2	0.1	$0.2	N/A	94.8	$60.0	56	186.4	$366.6
TOTAL	211	446.0	$1,342.4	346	363.7	$2,560.9	94	10.6	$41.8	42	44.9	$109.2	N/A	297.8	$612.9	675	1,163.1	$4,667.3
2005																		
CA	101	452.6	$1,291.1	206	190.1	$1,777.4	66	8.9	$34.5	35	25.4	$68.4	N/A	133.2	$374.8	384	810.2	$3,546.2
OR	108	257.8	$916.5	114	147.6	$751.0	6	1.1	$3.2	4	0.4	$0.8	N/A	52.2	$142.7	241	459.2	$1,814.3
WA	69	181.6	$675.3	1	0.5	$0.6	2	0.2	$0.4	0	0.0	$0.0	N/A	15.0	$23.1	79	197.3	$699.4
TOTAL	278	892.0	$2,882.9	321	338.2	$2,529.0	74	10.2	$38.1	41	30.3	$74.5	N/A	196.0	$535.3	704	1,466.6	$6,059.8
2006																		
CA	137	373.3	$1,202.8	214	174.3	$1,825.3	85	14.7	$59.9	28	32.3	$80.3	N/A	111.4	$385.4	430	706.0	$3,553.7
OR	132	250.6	$983.0	113	131.5	$695.3	7	0.7	$2.4	3	0.1	$0.1	N/A	52.8	$177.5	261	435.6	$1,858.4
WA	86	155.0	$600.7	0	0.0	$0.0	0	0.0	$0.0	1	0.0	$0.0	N/A	66.0	$48.2	90	221.1	$648.9
TOTAL	355	778.9	$2,786.5	327	305.8	$2,520.6	92	15.4	$62.3	32	32.4	$80.5	N/A	230.2	$611.0	781	1,362.7	$6,060.9
AVG																		
CA	113	315.7	$952.3	321	228.5	$2,041.8	91	24.8	$69.3	31	34.0	$81.1	N/A	151.3	$409.6	522	754.3	$3,554.0
OR	79	123.8	$449.9	171	165.5	$741.4	12	0.9	$2.0	1	0.1	$0.2	N/A	39.9	$123.1	216	330.1	$1,316.6
WA	56	102.2	$379.8	1	0.1	$0.1	3	0.1	$0.2	1	0.0	$0.0	N/A	36.4	$28.1	63	138.9	$408.2
TOTAL	247	541.7	$1,781.9	454	394.1	$2,783.4	106	25.8	$71.5	34	34.7	$82.0	N/A	227.0	$560.0	801	1,223.4	$5,278.9

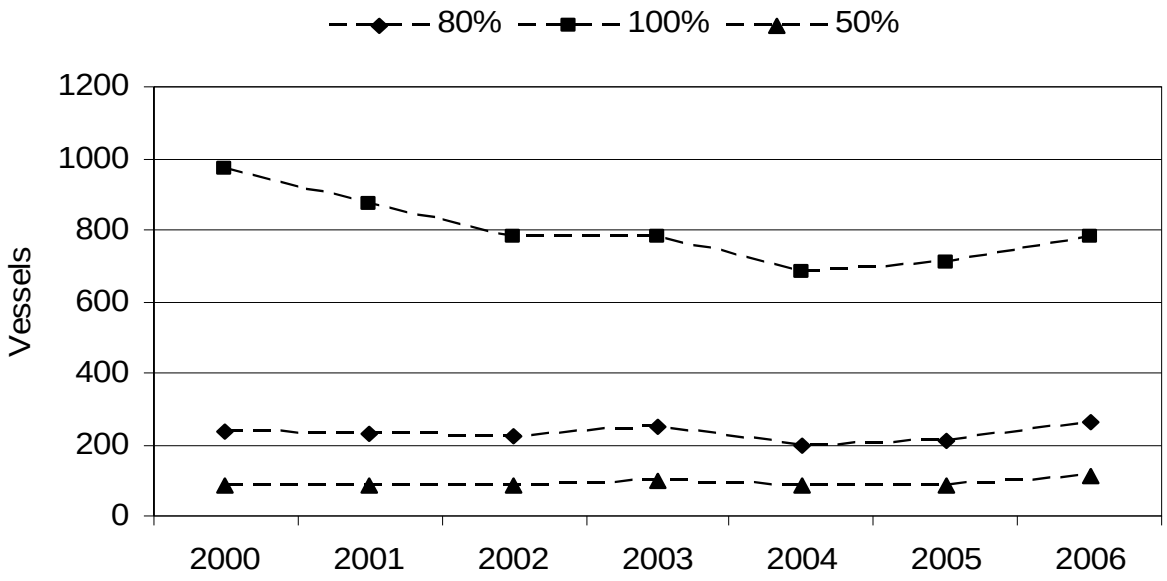


Fig 6. Number of vessels landing specified proportions of directed fishery revenues during 2000-2006

Table 7. Vessels landing specified proportions of open access groundfish revenues, 2000-2006.

	Number of Vessels	mts	000s	Number of Vessels 50%	Number of Vessels 80%
2000	972	1,138.3	$5,411.1	85	238
2001	873	1,144.7	$5,175.9	87	231
2002	782	1,093.3	$4,912.7	82	221
2003	782	1,193.3	$4,652.5	101	246
2004	682	1,160.8	$4,662.8	84	199
2005	706	1,467.9	$6,063.3	88	211
2006	783	1,363.8	$6,063.8	110	260

Changes in Directed Fishery

The previous open access fishery data analysis by Hastie (2001) and the updated analysis presented in this report used comparable criteria for designating directed and incidental open access fishery landings. Thus, vessel and species data are comparable between the two analyses. However, the rockfish category estimates used different criteria. Hastie sorted rockfish into dead and live fish categories based on price (see footnote 2/, **Table 2**). Some

nearshore rockfish were included as dead fish, particularly in the years before advent of the live fish fishery in the mid 1990s, but were relatively small in comparison to the more abundant shelf rockfish species such as widow, canary, chilipepper and yellowtail rockfish and bocaccio. The updated analysis combined nearshore rockfish with cabezon, kelp greenling and California scorpionfish to create a nearshore species category and reported shelf and slope rockfish separately.

Based on the Hastie analysis and the updated analysis, there have been several notable changes in the directed open access fishery since the A permit program was implemented in 1994. These are described below:

1. The directed open access fleet declined at an average rate per year of 3.3% from about 1,400 vessels in 1994 to about 800 vessels in 2006 **(figures 1 and 2);**
2. Total rockfish landings in the directed fishery declined from an average of about 2,700 mt per year during 1994-2001 (see above discussion and **Table 2**) to an average of about 450 mt per year during 2000-2006 (nearshore + shelf + slope rockfish, **Table 6**), a nearly 83% decrease, even with the addition of cabezon, kelp greenling and California scorpionfish;
3. Directed fishery sablefish landings declined slightly from an average of about 620 mt during 1994-2001 to about 540 mt during 2000-2006; a 13% drop (**tables 2 and 6**), and

These fishery changes may be important to the Council in deciding the window period years to use in analyzing vessel landings data for issuance of permits to open access fishery vessels.

Alternatives for Conversion of Open Access Fisheries to Limited Entry Management

Purpose and Need Statement

An important first step in the development of alternatives for permitting the open access groundfish fishery is to agree upon a Purpose and Need Statement, which forms the basis for what the Council is trying to do. The following draft verbiage was developed by the National Marine Fisheries Service, Northwest Region (2003) and has been updated for use in the proposed draft EA:

The purposes of the proposed action are to:

- For the open access fisheries, meet the Council's Strategic Plan goals of reducing capacity in the groundfish fisheries and the Council's commitment to an open access permitting program.
- Meet the FMP's Objective #2, as revised by Amendment 18 to the FMP: *Adopt harvest specifications and management measures consistent with resource stewardship responsibilities for each groundfish species or species group. Achieve a level of harvest capacity in the fishery that is diverse, stable, and profitable. This reduced capacity should lead to more effective management for many other fishery problems.*
- Ensure that federal management of the open access fisheries is compatible with state license limitation programs for nearshore and other state-managed fisheries

The needs for the proposed action include:

- All of the West Coast groundfish fisheries are overcapitalized, including the open access directed fisheries, and need to have reductions in number of participating vessels to better match harvest capacity with resource availability.

- The West Coast states have management programs for their nearshore groundfish fisheries. License limitation in these nearshore fisheries has pushed unlicensed vessels into federal waters, increasing fishing pressure there. Fishing capacity in federal waters needs to be carefully managed to ensure that capacity and/or effort in federal waters is maintained consistent with resource availability.
- Salmon fishing restrictions have resulted in effort shift to directed open access groundfish fisheries, which puts additional pressure on overfished groundfish stocks and reduces economic viability of affected groundfish fisheries.
- Management measures to protect overfished groundfish species have, in recent years, included large area closures and reduced harvest limits. Enforceability of these and other management measures would be improved by managers and enforcement officials being able to identify which vessels are permitted to participate in the groundfish fisheries.

Proposed Range of Alternatives

Considerable Council, advisory body and public discussion has taken place regarding the conversion of open access groundfish fishery participants to limited entry management since adoption of the Groundfish Strategic Plan in 2000. This section was developed based upon our review of those discussions, which are described in **Appendix C** and available for public review in Council meeting minutes. Directed and incidental fishery permits are designated as "B" and "C" permits, respectively. These labels are consistent with designation of the existing limited entry program permits as "A" permits. Note that "B" permit designation was previously used as a transitional permit term as part of the current A permit program. Duplicate use of the term should not cause significant confusion because of the considerable time lapse between now and when the A permit program was implemented in 1994. The assumptions and criteria used in developing open access fishery conversion alternatives appear in **Table 8**.

A "menu" of permitting issues and alternatives has been developed for the Council's consideration (**Table 9**). They range from status quo under which there would be no change in the current management to a B permit program that aims to substantially reduce the directed fishery fleet size in a fairly rapid manner by applying fishery participation and permit consolidation requirements. Under all alternatives the C permit would be a simple annual permit registration requirement. These and other alternatives that the Council may wish to pursue will need to be specified at the June 2007 meeting. This will allow time for analysis of the alternatives and preparation of the first draft EA by the September 2007 Council meeting. The time line for open access fishery conversion to limited entry management is very short, thus Council, advisory body and public attention to and action on this matter at the June 2007 meeting is very important.

Table 8. Basic assumptions regarding B and C permit programs

1. B permits will be assigned to vessels to be consistent with the existing Limited Entry or "A" permit program.
2. "B" permits will be issued to vessels and their *current vessel owner* that have qualifying *directed* groundfish landings and/or revenues during the adopted window period.

Table 8. Basic assumptions regarding B and C permit programs

3. "B" permits will apply to the directed taking and landing of all federal groundfish *not including nearshore rockfish, cabezon, kelp greenling and California scorpionfish,* which are protected or managed under state regulations. There would be no federal permit requirement to take this particular group of nearshore groundfish in federal waters since few of these fish occur there. Moreover, California and Oregon catch limits for these species are more restrictive than federal limits. The Council would continue to set biennial catch limits until which time management authority is transferred to the states. Exclusion of this nearshore species group is expected to affect about 72% of the recent open access groundfish vessels (NMFS 2005) and is consistent with the Council's strategic plan.

4. A major aim of the B permit program is to match fishing fleet capacity with resource availability.

5. Possession of a C permit will be required of all vessels that do not have an A or B permit to land incidental amounts of federal groundfish excluding nearshore species (which will continue to be managed under federal trip limits and/or state management programs).

6. B and C permits will be valid for fishing and landing of permitted species in the entire California, Oregon, and Washington EEZ.

7. Permits must be renewed annually and will be revocable by the NMFS; expired permits will not be renewed.

Analysis of Open Access Directed Fishery Data and the Development of B and C Permit Qualification Criteria

The analysis of historic open access fishery groundfish data will be based on the Pacific States Marine Fisheries Commission's Pacific Fisheries Informational Network (PacFIN) data base. For the purpose of issuing B permits, a directed groundfish landing is one in which an A permit vessel and specified gear types were not used and >50% of the value of the landing was of groundfish taken in the PFMC management area (excluding state internal and international waters) as reported on a state landing receipt and transmitted to the PacFIN data base. The specified gear types for exclusion in the analysis are drift gillnet, dip net, seine, trawl, shrimp trawl, prawn trap, roundhaul, and dredge (Burden 2005).

A variety of participation criteria will be developed for use in qualifying vessels for B permits. The proposed procedure to follow in the analysis of window period landings and revenue data applies a combination of the following participation standards: 1) recent year participation; 2) long-term directed fishery participation; 3) ability to contribute substantial landings; and 4) ability to contribute to coastal communities. The rationales for applying these standards and the analytical objectives for the associated data extractions are explained in **Table 10**.

Data will also be displayed for vessels that had incidental groundfish landings during the window period for possible use in issuing limited entry C permits.

Table 9. Recommended alternatives for B and C permit programs

Issue	**Alternative 1** – Status Quo, no licensing for either B or C fisheries	**Alternative 2** – License limitation for directed (B) fisheries; straight registration for incidental (C) fisheries. *Comment*: Relatively liberal initial issuance criteria accompanied by restrictive measures to reduce capacity		**Alternative 3** – License limitation for directed (B) fisheries; straight registration for incidental (C) fisheries. *Comment*: Immediately reduce participation with relatively restrictive initial issuance criteria and depend on fishery participation thereafter to retain permit
(1) Initial B permitted fleet size	N/A	1000 vessels, the Year 2000 directed fishery fleet size with nearshore included; about 340 with nearshore removed (Strategic Plan year)		430 vessels, the number of directed fishery vessels that fished for at least 3 years during the 6 year period 1994 – 1999 with nearshore included; about 150 (34%) with nearshore removed (A permit start year and first OA control date year)
(2) B Fleet Capacity Goal	N/A	50% of Year 2000 fleet size, approximately 500 vessels with nearshore included; about 170 with nearshore removed (General Strategic Plan goal)	20% of Year 2000 fleet size, approximately 200 vessels with nearshore included; about 70 with nearshore removed (SSC capacity analysis goal)	20% of Year 2000 fleet size, approximately 200 vessels with nearshore included; about 70 with nearshore removed. (Fleet would be already reduced by at least 50% from Year 2000 fleet size at the start of program)
(3) B Fleet qualifying window period and landings levels	N/A	**Council should request analysis of open access landings data from either April 1998 – September 2006 (the first Council meeting when permitting was formally discussed through to the most recent control date) or January 1994 – September 2006 (the period beginning when the limited entry program was established and ending with the most recent control date). Once analyses of landings are provided, Council recommendations on qualifying criteria would be based on initial fleet size goals.		

Table 9. Recommended alternatives for B and C permit programs

Issue	**Alternative 1** – Status Quo, no licensing for either B or C fisheries	**Alternative 2** – License limitation for directed (B) fisheries; straight registration for incidental (C) fisheries. *Comment*: Relatively liberal initial issuance criteria accompanied by restrictive measures to reduce capacity		**Alternative 3** – License limitation for directed (B) fisheries; straight registration for incidental (C) fisheries. *Comment*: Immediately reduce participation with relatively restrictive initial issuance criteria and depend on fishery participation thereafter to retain permit
(4) B Fleet consolidation requirements	N/A	After first year of program and every year thereafter, no permits will be issued to vessels with no groundfish landings in the previous year. After fifth year of program, participants must combine two permits in order to continue to fish in sixth year of program. 1/ Provision will be updated annually to keep within goal.	After first year of program and every year thereafter, no permits will be issued to vessels with no groundfish landings in the previous year. Also, after first *and* fifth years of program, participants must combine two permits to be issued a permit to fish in subsequent years. 2/ Provision will be updated annually to keep within goal.	After first year of program and every year thereafter, no permits will be issued to vessels with no groundfish landings in the previous year. 3/ Provision will be updated annually to keep within goal.
(5) B permit endorsements	N/A	**Similar to A permits, B permits would be length endorsed and gear endorsed. A vessel could meet qualifying criteria for B permit with landings made by multiple gear types (from the group hook-and-line, pot, setnet,) but then resultant permit would be endorsed for all of the gears used to qualify for permit.**		
(6) C permit requirements	N/A	C permits would be available to any vessel with a state fisheries permit, would be applied for and issued on an annual basis, and would not be transferable.		
(7) Integration of A & B programs	N/A	A and B permit holders may obtain the other permit type for use on the same vessel, but may use only one permit type in any year unless the vessel is lost, stolen, or rendered permanently inoperable.		A and B permit holders may not obtain the other permit type for use on the same vessel, but may obtain the other permit type if their permitted vessel is lost, stolen, or rendered permanently inoperable.

1/ At 5% natural attrition rate/ yr this alternative would result in a 387 vessels at the start of year 6 compared to a goal of 500 vessels with nearshore included.

2/ At 5% natural attrition rate/ yr this alternative would result in a 153 vessels at the start of year 6 compared to a goal of 200 vessels with nearshore included.

3/ At 5% natural attrition rate/ yr this alternative would result in a 333 vessels at the start of year 6 compared to a goal of 200 vessels with nearshore included.

Table10. Proposed participation standards and analytical approach for developing B permit qualification criteria 1/

Standard	Rationale	Action
1: Recent year participation	Vessel owner Is recently dependent on fishery	Determine the number of recently active vessels and their tonnage frequencies
2: Long-term directed fishery participation	Shows historic dependence on the fishery	Show vessel participation and tonnage frequencies for all window period years
3: Ability to contribute substantial landings	Shows vessel ability to harvest fish	Show vessel participation and tonnage frequencies for all window period years
4: Ability to contribute to coastal communities	Standard may be needed to offset possible skewed effect of high volume, low value species landings by some vessels	Show annual revenue frequencies for all vessels during window period

1/ Analyses will be done applying all four standards as follows: 1) all groundfish, 2) major or key groundfish species, 3) ecosystem groups, 4) all gear types, and 5) individual gear types or gear groups. The aim will be to create sets of qualifying criteria that will meet the Council's goal for initial issuance of B permits.

Other Issues and Concerns

Other areas of possible concern that were considered for inclusion in the alternatives presented above, but not made part of this document are listed in **Table 11**. The Council may wish to consider and expand upon one or more of these issues as part of the draft EA. Some of these issues are more complicated than others. Sablefish stacking and possible integration with the A permit program, for example, would be a major undertaking, while researching the citizenship of vessel owners would be relatively easy (but have very small effect). It will be important at the June 2007 meeting that the Council identifies those "additional" issues that have not been specifically addressed in this report for analysis and presentation at the September 2007 Council meeting. However, those issues identified as having a heavy or very heavy workload associated with them may not be possible to accomplish within the timeframe that the Council is considering for completion of the plan amendment process and program implementation.

Another area that may need to be explored more as part of this initiative is the consistency of state regulations with actions affecting open access vessels that impact federally managed groundfish (**Table 11**). It is imperative that this process does not set up a system that allows for the creation of another open access expansion situation. It is possible/likely that existing state limited entry programs for the same species and that impact federal groundfish treat fishers differently or have different management objectives, which is cause for concern in terms of consistency with the National Standards and the groundfish plan. The Council may need to consider as part of this initiative a review of the pertinent state limited entry programs relative to their potential for regulatory change that could result in increased impacts on federally managed groundfish. A contingency plan may be needed to ensure that any such changes will not reverse the effect of the proposed groundfish plan amendment. Also, the federal permit capacity goal may need to be flexible in the event state permits are reduced.

Table 11. Possible additional Plan amendment issues.

Issue	Added Workload	Comment
(1) Grounds for permit appeals	Moderate	Mostly administrative/policy in nature
(2) Permit stacking alternatives (within or between A and B permit holders) in order to increase trip limit allowances	Very Heavy	Considerable additional analysis required
(3) Sablefish tiering and possible integration with A permit sablefish program	Very heavy	Considerable additional analysis required
(4) Permit transferability conditions prior to attainment of B permit capacity goal	Moderate	Mostly administrative/policy in nature
(5) Fish allocations between B permit gear types (as there is for A permit sablefish between trawl and fixed gear)	Heavy	Considerable additional analysis required
(6) Specific fish allocations between B and C permit fisheries	Very Heavy	Considerable additional analysis required
(7) Sub-area endorsements; e.g., 36 ° N. Lat for sablefish and 40 ° 10 ' N. Lat for other species	Heavy	Considerable additional analysis required
(8) Consistency of State with Federal regulations	Moderate	Mostly administrative/policy in nature, but may be important

References

Burden, Merrick. 2005. Estimating directed open access landings in Pacific Coast groundfish fisheries. National Marine Fisheries Service, Northwest Region, Seattle WA. 14p.

California Code of Regulations, Title 14 (Natural Resources), Section 150 (Nearshore Fishery Restricted Access Program) as viewed from http://www.dfg.ca.gov/mrd/regulations.html on May 2, 2003.

California Department of Fish and Game. August 2002. Nearshore Fishery Management Plan. 213 p., plus appendixes. California Fish & Game Code, Division 6 (Fish,) Part 1.7, Chapter 5, Sections 7050 and 7070-7074, and Part 2, Chapter 2, Sections 8585-8589.7 as viewed from http://www.dfg.ca.gov/mrd/regulations.html on May 1, 2003.

Daspit, W. and J. Bishop, Pacific Fisheries Information Network (PacFIN) retrieval dated May 19, 2003, Pacific States Marine Fisheries Commission, Gladstone, Oregon (www.psmfc.org).

Fisheries and Agriculture Organization. February 1999 adopted and November 2000 endorsed. International Plan of Action for the Management of Fishing Capacity, as viewed at http://www.fao.org/fi/ipa/capace.asp on April 23, 2003.

Ford, Kevin. 2003. National Marine Fisheries Service, Northwest Region Fisheries Permits Office. May 13, 2003, personal communication.

Hastie, James. 2001. Analysis of Open Access Fisheries – provided as Exhibit C.9, Attachment 2(a) at the June 2001 meeting of the Pacific Fishery Management Council. *Note*: Most of the tables in this report were combined with text describing the open access fisheries and presented to the Pacific Fishery Management Council as Informational Report 1, Open Access Fishery Report, June 2002 entitled; Pacific Coast Groundfish, Open Access Fishery Report by Jamie Goen and Dr. Jim Hastie, Working Draft, May 29, 2002, Northwest Marine Fisheries Service, Northwest Region and Northwest Fisheries Science Center, Seattle, Washington 98115.

Kirkley, J., et al. June 28, 2002. The Estimated Vessel Buyback Program Costs to Eliminate Overcapacity in Five Federally Managed Fisheries – A Preliminary Report from the Division of Fisheries Statistics and Economics, NMFS.

NOAA Fisheries. February 10, 2002. Advance Notice of Proposed Rulemaking to Establish a Control Date. 65 FR 6577-6578.

NMFS. 2005. Expanded coverage of the program to monitor time-area closures in the Pacific Coast groundfish fishery. Draft Environmental Assessment, Regulatory Impact Review & Regulatory Flexibility Analysis. Northwest Region, Seattle WA 98115. 157p.

Oregon Department of Fish and Wildlife. October 11, 2002. An Interim Management Plan for Oregon's Nearshore Commercial Fisheries. 108 p. As viewed at http://hmsc.oregonstate.edu/odfw/nsgroundfish/index.html on April 30, 2003.

PFMC Economic Subcommittee. March 16, 2000. Draft Report for Review – Overcapitalization in the West Coast Groundfish Fishery: Background, Issues, Solutions. 116 p.

PFMC. October 2000. Pacific Fishery Management Council Groundfish Fishery Strategic Plan – Transition to Sustainability. 80 p.

PFMC. 2003. Exhibit D.15, Attachment 1- Purpose and Need, November 2003.

Washington Administrative Code (WAC), Chapters 220-20 and 200-44. As viewed at http://www.leg.wa.gov/wac/, Title 220, Department of Fish and Wildlife, on April 28, 2003.

APPENDIX A. State Limited Entry Program Information and General Assessment of Groundfish Interactions.

Permit Type by State	Date Implemented	Number of Permits	Groundfish Impact?
CALIFORNIA			
Deeper Nearshore Species Fishery Permit	2002	?	Y
Drift gill Net (Shark and Swordfish)	1981	?	M
Dungeness Crab Vessel	1995	?	M
General Gill/Trammel Net	1980	?	Y
Herring Gill Net	1976	?	?
Herring Stamp	1997	?	N
Lobster Operator	1977	?	M
Market Squid	2005	?	M
Market Squid Brail	2005	?	M
Market Squid Light Boat	2005	?	N
Nearshore Fishery Permit	2003	?	Y
Nearshore Fishery Trap Endorsement	2003	?	Y
Nearshore Fishery Bycatch Permit	2003	?	Y
Northern Pink Shrimp Trawl Vessel	2001	?	Y
Salmon Vessel	1983	?	Y
Sea Cucumber Diving	1983	?	N
Sea Cucumber Trawl	1997	?	Y
Sea Urchin Diving	1974	?	N
Southern Rock Crab Trap	2005	?	?
Spot Prawn Trap Vessel (tier 1, tier 2, tier 3)	2000	?	M
OREGON		?	
Black/Blue Rockfish Permit	2004	?	Pending OR response
Black/Blue Rockfish with a Nearshore Endorsement	2004	?	
Coast-wide Bay Clam Dive Permit	?	?	
Columbia River Gillnet Salmon Permit	1979	?	
Sardine Permit	2007	?	
Scallop Vessel Permit	1981	?	
Sea Urchin Permit	1987	?	
Ocean Dungeness Crab Permit	1995	?	
Ocean Pink Shrimp Vessel Permit	1979	?	
Ocean Troll Salmon Vessel Permit	1979	?	
South-coast Bay Clam Dive Permit	?	?	
Yaquina Bay Roe-Herring Permit	1991	?	
WASHINGTON		?	
Salmon Licenses:		?	Pending WA response
Grays' Harbor-Columbia River Gill Net	1991	?	
Puget Sound Gill Net	1991	?	
Purse Seine	1991	?	
Reefnet	1991	?	
Salmon Delivery	1991	?	
Single Salmon Delivery	?	?	
Troll	1991	?	

Permit Type by State	Date Implemented	Number of Permits	Groundfish Impact?
Willapa Bay-Columbia River Gill Net	1991	?	
Herring Licenses:		?	
Dip Bag Net	1994	?	
Drag Seine	1994	?	
Gill Net	1994	?	
Lampara	1994	?	
Purse Seine	1994	?	
Shellfish Licenses:		?	
Dungeness Crab (coastal)	1995	?	
Dungeness Crab (Puget Sound)	1994	?	
Ocean Pink Shrimp Delivery	1994	?	
Ocean Pink Shrimp Single Delivery	?	?	
Shrimp Pot Puget Sound	2000	?	
Shrimp Trawl Puget Sound Fishery	1994	?	
Other limited Licenses:		?	
Sea Cucumber Dive	1994	?	
Sea Urchin Dive	1994	?	
Whiting (Puget Sound)	1994	?	

APPENDIX B Description of Coastal States' Nearshore Fishery Management and Limited Entry Programs (**PRELIMINARY)**

Washington Nearshore Fishery Management

The open access fishery in Washington is substantially smaller than California and Oregon due to several actions taken to prohibit the take of nearshore species. In 1995, the Washington Department of Fish & Wildlife prohibited the directed non-trawl harvest of groundfish in coastal state waters. This was primarily in response to a developing hook-and-line fishery that was in direct competition with the coastal recreational fishery for black rockfish. Trawling (with a maximum footrope diameter of 5 inches) remained open to allow targeting of sand sole and starry flounder, but subsequent analyses demonstrated unacceptable levels of rockfish bycatch and as a result, trawling in coastal state waters was prohibited beginning in 2000. The Fish and Wildlife Commission also took action at this time to prohibit the live fish groundfish fishery. Groundfish allowance is restricted in the salmon troll fishery to incidental yellowtail rockfish only if any fishing occurs within the non-trawl RCA (shoreward of 100 fm). There are also small amounts of open access groundfish landed by pink shrimp trawlers without limited entry groundfish trawl permits. Washington's current directed groundfish open access fishery is limited to the sablefish DTL fishery. Members of the four groundfish treaty tribes operating off Washington (Makah, Quileute, Hoh, and Quinault) may fish for groundfish within their Usual and Accustomed fishing areas. These areas include both state and federal waters. A tribal vessel's participation in the groundfish fisheries is at the discretion of that vessel owner's tribe and tribal participation in groundfish fisheries would not be managed by this action.

Oregon Nearshore Permit History

The Oregon Fish and Wildlife Commission (OFWC) adopted an Interim Management Plan for Oregon's Nearshore Commercial Fishery at their October 11, 2002 meeting. The action taken was an interim measure pending the development of a comprehensive Oregon Nearshore Fisheries Management Plan. The primary intent of the interim plan was to protect nearshore groundfish populations, which are primarily reef fish, from over harvest.

Since 1997, the nearshore commercial fishery continued to grow due to the development of high value-added live-fish markets. This interim plan was adopted in recognition of this increased harvest trend and in anticipation of further growth of the nearshore commercial fishery due to increasing restrictions and area closures for other commercial fisheries.

In 2000, The Oregon Fish and Wildlife Commission directed staff to develop a plan to take precautionary measures to limit the growth of nearshore commercial and recreational fisheries and to protect the nearshore resource, because little is known about the status of nearshore fishery stocks. The adoption of the Oregon Commercial Nearshore Interim Management Plan was the first step in the development of a comprehensive plan for Oregon's nearshore fisheries, while fishery managers gather information needed to determine optimum harvest levels for a sustainable resource. The plan adopted by the Oregon Fish and Wildlife Commission went into effect on January 1, 2003 and focused on 21 species of nearshore fish (includes vermilion rockfish and tiger rockfish) that live predominantly in the Oregon territorial sea.

The Oregon interim plan was a result of multiple public meetings and reflects several suggestions received at those meetings. The issues directly addressed under the Oregon Commercial Nearshore Interim Management Plan are:

- The number of commercial participants who will be permitted to target and land selected nearshore species
- The qualification criteria for nearshore commercial permits
- The areas of fishing commercial nearshore operations
- Legal gears in the commercial nearshore fishery
- Reporting requirements for the commercial participants

The adopted interim plan addressed several goals and objectives for managing Oregon's commercial nearshore fisheries:

- Sustain biological resources at optimal levels
- Minimize the number of commercial nearshore vessels fishing off central and northern coastal waters in areas of high recreational use
- Allow the continuation of the black rockfish open access fishery
- Precautionary reduction in Oregon nearshore rockfish commercial effort by at least 50%
- Develop a cap on landed levels of nearshore species for commercial fisheries

Following the OFWC action, the Oregon Legislature established a separate commercial black rockfish limited entry program for the nearshore fishery during the 2003 legislative session (Oregon Revised Statutes 508.945-508.960). This Legislative action also included the adoption into state law, provisions that were similar to the earlier OFWC administrative rule action to limit permits for nearshore species as described above. The nearshore limited entry was incorporated as an “endorsement” on the black rockfish/blue rockfish limited entry permit for those who qualified earlier under the OFWC action. Implementation of the law began on January 1, 2004.

The Legislatively adopted limited entry plan defined qualification criteria for initial permit issuance and permit renewal criteria for black rockfish/blue rockfish permits. The permits were associated with the vessel and were initially issued to applicants owning a vessel that landed a minimum of 750 pounds of nontrawl caught black rockfish, blue rockfish, or nearshore fish defined under the OFWC plan in any one calendar year between January 1, 1995 and July 1, 2001. Additionally, vessels that had received a nearshore endorsement issued by the OFWC in 2003 were granted a nearshore endorsement in legislation.

Under the new law, Oregon limited entry permits for the commercial harvest of black rockfish and blue rockfish were issued to 142 of the 214 vessels that qualified. Seventy two of the 214 vessels that qualified for the commercial black rockfish and blue rockfish limited entry permit failed to purchase the permit; some fishers were no longer fishing commercially. Nearshore endorsements (for nearshore rockfish other than black rockfish and blue rockfish, cabezon, and greenling) were granted to 73 of the 142 vessels that had been issued permits for the black rockfish and blue rockfish limited entry program. In addition, state landing caps and cumulative trip limits (more restrictive than federal trip limits) for black rockfish and blue rockfish, other nearshore rockfish, cabezon, and greenling were enacted following the implementation of the limited entry program.

Initial target goals of not less than 80 black rockfish/blue rockfish permits without nearshore endorsements and 50 black rockfish/blue rockfish permits with nearshore endorsements were established by the OFWC. This level of effort was consistent with the goal of reducing the 2002 fleet size by approximately 50% (note: 142 vessels landed nearshore fish in 2002;

approximately 100 of those vessels had at least one landing of which nearshore fish comprised 50% or more of the landing signifying targeting of nearshore fish). The final Legislative limited entry plan provides for a lottery of black rockfish/blue rockfish permits and nearshore endorsements at the time the permit number reaches the above mentioned thresholds, if determined warranted by the OFWC. The target participation goals will be evaluated prior to developing a federal limited entry program.

Oregon has conversed with the affected industries and communities through public meetings and has made changes to the commercial nearshore fishery capacity goals since the original program was implemented.

Changes to the commercial nearshore fishery capacity goals include:

- Oregon landing caps have been implemented. These are more restrictive than the Federal limits for the species included in the state nearshore species list
- Cumulative commercial trip limits are now set more restrictive than Federal levels
- Season length is set by the OFWC in December for the following year (In-season adjustments to the cumulative trip limits are implemented by rule by the OFWC to sustain the fishery through the desired season duration without exceeding the landing caps)
- Gear restrictions: pot gear prohibited (except as permitted by the state commercial nearshore limited entry permit endorsement) and dive gear prohibited. Additional in-season gear restrictions considered
- **Commercial Black Rockfish Zones**

  Oregon landings of black rockfish with all commercial gear except trawl are limited to 200 pounds per vessel per trip in the following areas (defined by latitude in Oregon regulations):

  - Tillamook Head to Cape Lookout
  - Cascade Head to Cape Perpetua
  - From a point approximately 8-1/2 miles north of the Coos bay north jetty to a point about 4-1/2 miles south of the Bandon south jetty
  - Mack Arch to Oregon-California border

- Size limits:
  - China, Copper, Grass, & Quillback Rockfish —12 inches
  - Greenling—12 inches
  - Cabezon—16 inches

- Logbooks required. Logbooks were implemented in 2003 by the OFWC, and legislatively mandated in 2004.
- Rockfish Conservation Area - Federal regulation compliance

ODFW is implementing the *Oregon Nearshore Strategy* and, as part of implementation, is currently developing a comprehensive Nearshore Fisheries Management Plan (NFMP) for the state of Oregon. The NFMP is to serve as a guide and plan of action for the state's management of nearshore commercial and recreational fisheries. The first phase of the NFMP

has been focused on developing a management framework and is scheduled to be completed by summer 2007. The second phase of the NFMP will be a revision of the Interim Management Plan focused on developing a Fishery Management Strategy for the commercial black rockfish/blue rockfish/nearshore groundfish limited entry fishery. Beginning in summer 2007, ODFW will be undergoing a public process to review and revise the commercial black rockfish/blue rockfish/nearshore groundfish limited entry fishery, with an anticipated completion date of December 2007. This may result in revisions to the details of the nearshore commercial fishery harvest and season requirements.

Status of Oregon Black rockfish/Blue Rockfish permits and Nearshore endorsements:

	2003	2004	2005	2006	2007
# of B/B permits with NS endorse issued	73	73	73	72	71
# of B/B permits with NS endorse USED	73	73	72	71	
# of B/B permits without NS endorse issued		69	62	60	56
# of B/B permits without NS endorse USED		62	60	56	

References:

1. Oregon Revised Statutes 508.945 through 508.960

2. Marine Nearshore Groundfish Project – Summary of Interim Management Plan for Oregon's Nearshore Commercial Fishery (Interim Management Plan adopted by OFWC 10/11/02) http://www.dfw.state.or.us/MRP/publications/northshore_comm_fisheries.pdf (http://www.dfw.state.or.us/MRP/nsgroundfish/plan_summary.asp)

3. Fact Sheet, Oregon Department of Fish and Wildlife – New Commercial Black Rockfish/Blue Rockfish Nearshore Fishery Limited Entry Permit (final 12/10/03 (corrected 6/1/04)) (http://www.dfw.state.or.us/MRP/regulations/commercial_fishing/blackrf/blackblue_factsheet121003.pdf)

4. ODFW. 2005. *Oregon Nearshore Strategy*. Salem: Oregon Department of Fish and Wildlife. http://www.dfw.state.or.us/MRP/nearshore/document.asp.

5. ODFW--*Oregon Nearshore Fisheries Management Plan*. (in prep.).
Newport: Oregon Department of Fish and Wildlife, Marine Resources Program.

California Nearshore Permit History

California's nearshore fishery has undergone many changes over the last decade. In 1999, commercial licensing changed with the requirement that a nearshore permit be required by any person landing the following nearshore species: black-and-yellow, gopher, kelp, China, and grass rockfishes, CA scorpionfish, kelp and rock greenlings, CA sheephead, and cabezon. This licensing requirement was set as the initial step in a permitting program and did not restrict participation. This process was followed by the "Nearshore Fishery Permit Moratorium; Renewal; Restricted Access" in 2002 which made it possible to renew the previously issued permit but disallowed any new entry/permitting. This regulation stated that the moratorium would expire on March 31, 2002 unless extended by the Fish and Game Commission (Commission). In addition, a December 31, 1999 control date was established for the purpose of developing a restricted access nearshore fishery. Only those possessing a valid Nearshore Fishery Permit as of the control date would be considered in a future restricted access nearshore fishery.

In 2002, the newly adopted CDFG Nearshore Fishery Management Plan (FMP) identified the need to restrict the nearshore fishery due to overcapitalization. During the FMP scoping process many aspects of the fishery were considered to ensure that a successful restricted access program was developed. The Commission submitted a policy report to the CDFG in which it voiced the credence of developing and utilizing a restricted access program as a fishery management tool. As a result, in 2003 California implemented a Restricted Access Fishery Permit Program.

Beginning in 2003, the moratorium was reconstructed into what is now the current "Nearshore Fishery Restricted Access Program". This full restricted access program was implemented for the shallow nearshore species to promote the ecological and economic sustainability of the fishery to be consistent with the Marine Life Management Act and Fish & Game Commission policies. The purpose was to reduce the number of participants and move closer to a statewide capacity goal set by the Commission at 61 participants. Transferable and non-transferable "Nearshore Fishery Permits" were issued based on historical fishery participation and were regional:

1. North Coast Region: OR/CA border to 40° 10'
2. North-Central Coast Region: 40° 10' to Año Nuevo
3. South-Central Coast Region: Año Nuevo to Point Conception
4. South Coast Region: Point Conception to CA/Mexico border

One of the requirements of the restricted access policy was establishment of a capacity goal. The nearshore plan analysis determined that 61 vessels would reduce the fishing fleet to reduce over-capitalization and increase sustainability. Title 14 of the California Code of Regulations (CCR) Section 150.01 states, "Until the number of permits in a regional management area equals or falls below the capacity goal for that regional management area a permit may only be transferred if one additional transferable permit for the same regional management area is surrendered to the department for cancellation at the same time the application for the transfer is submitted to the department" This strategy has allowed for the yearly decrease in the number of permittees at a total rate of 13% since implementation in 2003.

Table B-1. Regional capacity goals as defined in CCR, Title 14, section 150.

Shallow Nearshore Fishery Permit Regions	Capacity Goal
North Coast	14
North-Central Coast	9
South-Central Coast	20
South Coast	18
Non-transferable for all regions	0
Total	61

Also in 2003, a non-transferable statewide "Deeper Nearshore Species Fishery Permit" was first required to take black, blue, brown, calico, copper, olive, quillback, and treefish rockfishes. This permit, like the nearshore permit, also prevented further expansion of the fishery. The following table documents the issuance level of the nearshore and the deeper permits before and since the restricted access implementation. Additionally it documents the number of permittees that have utilized the permit to land the appropriate species group.

As part of the nearshore restricted access permit program, a Nearshore Fishery Bycatch Permit was provided. This program allowed permittees with vessels using trawl or entangling nets to take and possess small amounts of shallow nearshore species as bycatch. Bycatch permits are non-transferable and allow permittees to take 25 pounds of nearshore species per trip in the south-central region and 50 pounds of nearshore species per trip in the south region. Permit holders are subject to all state and federal cumulative trip limits as defined in regulations.

Table B-2. Total number of permits issued and actual number or permits used

	1999	2000	2001	2002	2003	2004	2005	2006
# of NS permits issued	1,128	1,060	753	504	-------	-------	-------	-------
# of shallow issued	-------	-------	-----	-------	227	208	202	195
# of deeper issued	-------	-------	-----	-------	292	275	257	247
# permits USED	-------	-------	-----	-------	S- 167 D-182	S-158 D-184	S- 145 D-173	S-149 D-173

APPENDIX C. Public Scoping Summary (NEEDS ADDITIONAL WORK)

Public Scoping

The Council has been conducting scoping on the issue of requiring permitting in the open access fisheries since January 2001. Both the scoping activities and public issues and concerns regarding this action that were conducted or expressed prior to the preparation of the draft EIS and those associated with the development of this EA are described herein.

JANUARY 2001
The Open Access Permitting Subcommittee (OAPS) of the Strategic Plan Oversight Committee (SPOC) had its first meeting via teleconference on January 18, 2001. The OAPS initially identified two fishery strategies wherein open access vessels were directly targeting groundfish: directed hook-and-line fisheries and directed setnet fisheries. Additionally, the OAPS identified the following gear types as being used to take groundfish incidentally in the open access fisheries: exempted trawl gear (non-groundfish trawl gear), salmon troll, halibut longline, non-directed setnet fisheries. The OAPS also noted that several of these fisheries are geographically distinct, which should be taken into account when developing initial permitting and allocation strategies. Finally, the OAPS recommended that the Council form a policy group to explore developing a restricted access program for the open access fisheries.

APRIL-MAY 2001
At the April 2001 Council meeting, the Council provided guidance for the SPOC on capacity reduction issues, but only briefly discussed license limitation in the open access fisheries. The OAPS met in April 2001 and the SPOC in May 2001, with both groups providing minutes to the Council at the Council's June 2001 meeting. At this meeting, the OAPS discussed setting a priority for introducing permitting for the directed fisheries for groundfish, with permitting for the incidental fisheries being a lower priority. The OAPS also reviewed Dr. James Hastie's "Analysis of Open Access Fishery," an analysis of groundfish landings data, which provides a profile of groundfish catches occurring in the open access fisheries (Hastie 2001). Following this review of Hastie's fleet profile, the OAPS composed six questions that it felt the Council should consider before embarking on a permitting program for the directed open access fisheries. OAPS recommendations from this meeting were reviewed by the SPOC at its May 2001 meeting, but the SPOC made no recommendations on this issue other than that the OAPS material should be provided to the Council and public at the June 2001 Council meeting.

JUNE 2001
At the June 2001 Council meeting, the Council discussed the results of the meetings of the OAPS and the SPOC and the various priority actions in the Strategic Plan. During Council discussions, members of the Council recommended that the Council proceed first with developing a directed groundfish permit for those vessels currently in the open access fisheries that target groundfish directly, and then look at fisheries that take groundfish incidentally. Council members further commented that one of the most important issues in considering a license limitation program for the open access fisheries is allocation between the different fisheries. There was some concern from Council members that this program might take too much time in an already overburdened schedule. The Council's Groundfish Advisory Subpanel (GAP) also commented on this issue at this meeting, noting that limiting access in the open access fisheries will take a lot of time and effort and that the states are already proceeding with license limitation in their nearshore fisheries. However, both of the open access fishery representatives on the GAP were in favor of proceeding with license limitation for the open access fisheries.

JULY - AUGUST 2001

The OAPS met on July 31, 2001 to discuss the Council's recommendations from their June meeting. At that meeting, the OAPS reviewed Dr. Hastie's analysis of historical fishing activities within the open access fleets, discussed whether the states could help with developing this program by providing state-level profiles of their open access fisheries, discussed whether it would be more or less complicated to include fisheries that incidentally take groundfish in the whole-fleet profile discussed whether the program should include an allocation between directed and incidental open access groundfish fisheries, and provided outlines of nearshore groundfish management off each of the three states. The SPOC met on August 30, 2001, and discussed all of the Strategic Plan's priorities, including license limitation in the open access fisheries and the July OAPS meeting. The SPOC made the following recommendations for the Council's consideration at its September meeting: Council staff's Executive Director to provide a report on funds available for Strategic Plan implementation at the Council's October/November meeting; a meeting of the OAPS should be held after the October/November meeting; Dr. Hastie should continue development of an historical analysis of participation and catch in open access fisheries; the SPOC will re-consider whether to develop an incidental groundfish permit (for nontargeting open access fisheries) after the historical analysis is complete.

SEPTEMBER 2001

The Council discussed the results of the OAPS and SPOC meetings held over the summer, but did not address open access license limitation beyond recommending that the OAPS hold another meeting after the October/November Council meeting. The Council's GAP commented only that work on this issue should be delayed until after the October/November Council meeting.

JANUARY 2002

The OAPS met January 30-31, 2002 and reviewed the FMP's goals for the original limited entry fishery, modifying it for license limitation in the open access fisheries so that it reads, "The primary objective of the limited entry program will be to match harvest capacity in the West coast groundfish fishery with the productivity of the resource." The OAPS also detailed objectives for a new license limitation program: to allow sustainable prosecution of fisheries for non-groundfish species without groundfish waste; and to set qualification criteria for a license limitation program high enough to reduce the number of vessels being licensed, then to bring both the current open access harvest allocations and the newly licensed vessels into the limited entry program. The OAPS also provided further data requests to NOAA Fisheries analysts for dividing historical open access landings data by fishery, geographic area, and gear type.

MARCH 2002

At its March 2002 meeting, the Council discussed Strategic Plan implementation, including license limitation in the open access fisheries. The OAPS report to the March Council meeting was intended to be a draft report, with the final available at the April 2002 Council meeting.

APRIL 2002

During its April 2002 meeting, the Council again discussed Strategic Plan implementation, with a more full report from the OAPS January meeting. At this meeting, a Council member recommended including a qualification criteria option proposed by a member of the public: that open access vessels be allowed to join the limited entry fishery based on landings made by gears other than the three limited entry gears (trawl, fishpot, longline) during the limited entry qualifying period of 1984-1988. At this meeting, the GAP commented only that the issues and alternatives associated with open access license limitation had not been fleshed out well enough for a comprehensive analysis on the effects of a new license limitation program.

NOVEMBER 2002
At its November 2002 meeting, the second anniversary of the Council's adoption of the Strategic Plan, the Council reviewed all of its Strategic Plan priorities. On the issue of open access license limitation, the Council recommended that an open access permitting development team meet to develop options for a moratorium permit for directed open access groundfish fisheries. Permits would be based on minimum historic participation, non-transferable, renewable, interim until a formal limited entry program were developed. At this meeting, the Council's Groundfish Management Team (GMT) commented that converting the directed open access fishery to a limited entry fishery has been a priority of the GMT for many years; however, the GMT also noted that there were ongoing state efforts to limit commercial groundfish fisheries participation. With state license limitation programs in place, only groundfish occurring outside of the three-mile state boundary, primarily sablefish and southern slope rockfish, would remain directed open access fisheries. Finally, the GMT noted that converting open access vessels to a permitted fleet would offer other management benefits, particularly because it would allow managers and enforcement agencies to better identify fleet participants for vessel monitoring system and observer program coverage. The GAP noted the state license limitation efforts could reduce open access directed groundfish fisheries participation coastwide and recommended that the Council continue regular meetings of its OAPS.

March 2003
No discussion of OA permitting (except under workload priorities).
(http://www.pcouncil.org/minutes/2003/0303min.pdf).

April 2003
No discussion. (http://www.pcouncil.org/minutes/2003/0403min.pdf). Other groundfish issues appear to have a higher priority (especially Amendment 16, Rebuilding Plans, and VMS)

June 2003
No discussion or mention under agendum B.15. Long-term Management Strategies. (http://www.pcouncil.org/minutes/2003/0603min.pdf).

September 2003
Under agendum B.7.c. Council Member Robinson reported he will have comments on open access at the November meeting. Vojkovich noted resolving the open access problem is imperative in CA. McIsaac said this item is moving up in the priorities and suggested taking the open access agenda item update and turning it into a planning session. (http://www.pcouncil.org/minutes/2003/0903min.pdf).

NOVEMBER 2003
Agendum D.15 addressed Open Access Limitation Discussion and Planning. Council staff presented the overview. Council Member Brown noted we still need to define the "directed" open access fishery. Council Member Vojkovich suggested working on the issue over the winter and to have a phone call in January (agendum I.4.). NMFS staff presented an initial start at NEPA document (see: http://www.pcouncil.org/bb/2003/1103/exd15.pdf). Open Access Limitation update was proposed for April and June 2004 meetings (http://www.pcouncil.org/bb/2003/1103/exi4.pdf). Council members expressed concern about continuation of unrestricted participation in the open access fishery and displacement of open access effort onto the shelf with implementation of the state nearshore limited entry system. There are several ways to approach the problem. One would be to move forward with a moratorium permit. .It was also agreed it was premature to discuss a new control date at this point and the issue need to be addressed in terms of staff workload.

March 2004
No discussion (http://www.pcouncil.org/minutes/2004/0304min.pdf

APRIL 2004
The Council discussed elevating the OA permitting issue but noted there were still other high priority issues to deal with, such as inseason management policies

June 2004
No discussion (http://www.pcouncil.org/minutes/2004/0604min.pdf).

September 2004
Under B.8.d. Vojkovich asks if its NMFS policy for handling fishing capacity had funds with it to support the OA permitting initiative. It is noted under C.11.d that identification of open access vessels is not possible in the VMS system. (http://www.pcouncil.org/minutes/2004/0904min.pdf).

November 2004
No discussion (http://www.pcouncil.org/minutes/2004/1104min.pdf).

March 2005
No discussion (http://www.pcouncil.org/minutes/2005/0305min.pdf).

APRIL 2005
The Council discussed whether the open access VMS requirement would reasonably address the need for permitting the OA fisheries. It was noted that most vessels that target groundfish operate in state waters which would be exempt from the VMS requirement. The Council considered adopting a control date for the longline spiny dogfish fishery which led to a discussion about the need for OA fishery permitting, which is a much larger than the spiny dogfish situation.

JUNE 2005
No discussion. (http://www.pcouncil.org/minutes/2005/0605min.pdf

SEPTEMBER 2005
Motion was passed to look at fishery impacts from expanded fishing on spiny dogfish by longliners under open access landing limits. Support was expressed to find time to work on OA permitting.

NOVEMBER 2005
The Council discussion regarding regulatory streamlining led to OA permitting issue and that it may be useful to begin documenting the steps that would be involved and develop a concrete plan, which would be like the groundfish harvest specifications planning schedule, but more fleshed out. Thus it could be a candidate for this regulatory streamlining exercise. The Council also discussed OA permitting in the context of groundfish work planning, by catch reduction and the need to identify OA vessels and estimate their catches.

MARCH 2006
OA Permitting suggested for June 2006 meeting.
http://www.pcouncil.org/bb/2006/0306/agb5a_supp_att1.pdf

APRIL 2006

OA Permitting issue moved from June to September 2006 meeting:
http://www.pcouncil.org/bb/2006/0406/agb5a_supp_att1.pdf

JUNE 2006
Council member Moore stated that the open access limitation issue needs to be done to be able to complete IQ and intersector allocation issues.

SEPTEMBER 2006
The Council and NMFS discussed the effectiveness of the November 1999 open access permitting control date. Legal Council noted that control dates are public notices of possible Council action and have no regulatory effect. Also, control dates do not preclude the use of earlier catch histories for issuing permits. The Council moved to set a new control date of September 13, 2006 to give people notice that landings after that date may not apply to catch history used to qualify for an OA limited entry permit. Council member Vojkovich, California, offered staff to undertake the plan amendment analysis and paperwork because a full-time Council member staff position would be needed to do the work. The GMT reported that they are in favor of reducing the size of the OA fleet and that a federal permit is recommended. The GAP prioritized open access limitation behind trawl individual quotas, intersector allocation and Amendment 15. The ECs reported that VMS will not identify all open access participants because VMS only applies in federal waters. The Council members expressed a wish for a simple program but noted public input will likely be substantial which could complicate the matter. The Council expressed support to get the process started in 2007. NMFS noted the observer program would be more effective with all sectors under a federal permit. Legal Council noted a NEPA analysis would be required, but it may not need to be an environmental impact statement.

March 2007
Open Access Limitation issue tentatively placed on June 2007 agenda, described as "Next Steps." (http://www.pcouncil.org/bb/2007/0307/Ag_D1.pdf).

April 2007
CDFG Report (Agendum C.1.a, supplemental CDFG report) submitted requesting June 2007 agenda item for Open Access Permitting. Issue is on June 2007 agenda for "Direct Development of Alternatives." (http://www.pcouncil.org/bb/2007/0407/C.1a_CDFG_sup.pdf).

Public Issues and Concerns Raised Through Public Scoping

APRIL - MAY 2001
The Council held a discussion and public comment session at its April 2001 meeting for the activities of the SPOC, which included discussions of license limitation for the open access fisheries. Public comment during that session included: an offer by a non-profit organization to create a fleet effort profile of where fishing activities take place; concern expressed that reduction of the groundfish fleet as a whole would require allocation between different users; observation that, under the Strategic Plan, all sectors of the fleet are to be reduced by 50%; comment that Council's current advisory committee structure might not be the most useful for moving the Council forward through SPOC priorities. Public comment at the May 2001 SPOC meeting was limited to a request that OAPS materials be provided to the Council's advisory bodies and the public prior to the June Council meeting.

JUNE 2001
During the public comment session at the Council's June 2001 meeting, public comment addressed open access fisheries license limitation: participation in the open access fisheries be not merely capped, but be reduced by 50%, as recommended in the Strategic Plan; if effort is only capped in the open access fisheries, not reduced, groundfish trip limits will remain at such low levels that groundfish will not provide reasonable income levels for participants; people come and go in open access fisheries all the time, many part-timers get involved who then fail; a license limitation program will be politically challenging for the Council and the fishing communities, but it is essential nevertheless; permits should be issued to vessels, rather than to persons as is done in the California nearshore plan; qualification criteria should be sufficiently high enough to cut the fleet down to about 300-350 boats, with consideration for the years before the control date, 1994-1999, perhaps some combination of annual or cumulative landings levels along with participation in at least 4 out of 6 years, or similar; salmon fishermen do encounter groundfish and they would like to continue to have access to groundfish, regardless of how the open access license limitation program comes out, perhaps by limiting groundfish take by allowing so many pounds of groundfish per pounds of salmon taken.

JULY - AUGUST 2001
Public comment at the OPAS meeting in July 2001: why is the OPAS considering accommodating directed groundfish fishing in the open access fisheries when those vessels never qualified for the original limited entry permit? Allocation of open access groundfish harvest levels between the directed and incidental open access sectors will result in lower landings limits for all and result increases in discards. Latent capacity will result from this program because Council will be permitting vessels that never had much of a participation level, and then you'll have to figure out how to get those vessels out of the fishery. Members of the public attending the August 2001 SPOC meeting did not comment on open access license limitation issues.

SEPTEMBER 2001 - MARCH 2002
At the September 2001 Council meeting, the public did not have specific recommendations on license limitation in the open access fishery, although there were comments on other aspects of the Strategic Plan. Similarly, the public did not specifically provide comments on open access license limitation at the March Council meeting, except that one commenter expressed disappointment that capacity reduction issues seem to be falling lower and lower on the Council's priority list. APRIL 2002 Public comments at the April 2002 Council meeting on license limitation for the open access fisheries: knowing the time it took to implement the original limited entry permit program, it doesn't seem possible to implement a new license limitation program for another five years; if there's going to be a new license limitation program for the boats now in the open access fisheries, all of the fish allocated to the open access fisheries with the original limited entry program should be shifted to the limited entry fisheries; failing to eliminate the open access fishery in 1994 was a mistake and fixing it with another limited entry program would be a bigger mistake – the Council should consider the option of closing the directed portion of the open access fleet by 2004, allocating the necessary portion of the open access quota to the open access incidental fisheries and redistribute the remainder of the open access quota to the existing limited entry fleet and recreational fisheries; coupled with the alternative of eliminating the directed open access fleet altogether would be an FMP amendment that would allow vessels using gears other than the three limited entry gears to purchase a limited entry permit and convert that permit's gear endorsement to their non-limited entry gear, additionally, new "A" permits should be issued to groundfish directed fishing vessels that met the original limited entry qualifying criteria during the qualifying period with gear other than the three limited entry

gears; finally, the goals and objectives that you've set for yourself cannot be met with limited entry programs and trip limit management alone.

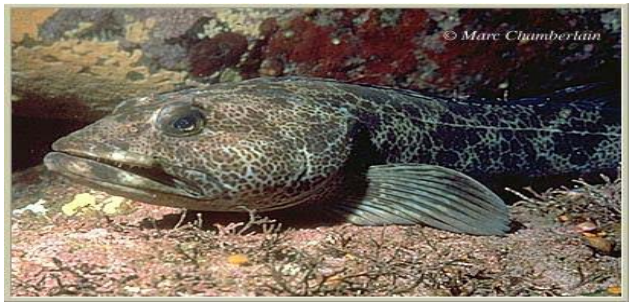
NOVEMBER 2002
At the November 2002 Council meeting, the public did not have specific recommendations on license limitation in the open access fishery, although there were comments on other aspects of the Strategic Plan.

JUNE 2005
Public comment was made during Public Comment that the time is right to revisit the open access permitting issue**.**

SEPTEMBER 2006
NEED TO REVIEW RECORD FOR OA AGENDA ITEM AND PUBLIC COMMENT

APRIL 2006
NEED TO REVIEW RECORD FOR OA AGENDA ITEM AND PUBLIC COMMENT

Conversion of Open Access Fishery to Limited Entry Management



California Department of Fish and Game with assistance from Washington Department of Fish and Wildlife, Oregon Department of Fish and Wildlife, Council Staff, and National Marine Fisheries Service, Northwest Region

June 12, 2007

Purpose and Need

(see pages 18-19 of report for exact wording)

Purpose

- **Meet the Council's Strategic Plan goal and commitment to OA permitting.**
- **Achieve a level of harvest capacity in the fishery that is diverse, stable, and profitable.**
- **Ensure that federal management of OA fisheries is compatible with state license limitation programs for state-managed fisheries**

Need

- **OA fleet size reduction is needed to better match harvest capacity with resource availability.**
- **State regulations in nearshore fisheries have pushed vessels into federal waters.**
- **Salmon regulations have shifted vessels to OA groundfish fisheries.**
- **Enforceability of measures to protect overfished groundfish species would be improved by vessel ID.**

Schedule

(Attachment 1)

Step	Dates
Overview and Council direction re: OA permitting alternatives	***June 2007***
Evaluation of alternatives and preparation of first preliminary draft environmental assessment	**June-September 2007**
Council meeting: adopt preliminary range of alternatives and preliminary preferred alternative for public review	**November 2007**
Council meeting: final adoption of preferred alternative	**April 2008**
Implementation phase and initial permit issuance	**April 2008 thru April 2009**
B and C permits required	**May 2009**

Process notes:

The CDFG will have the lead role in this process with assistance provided by WDFW, ODFW, Council staff, and NMFS. Tribal input will be welcomed.

Advisory body and public input will be received at regularly scheduled Council meetings.

Review OA Fishery Management and OA Permitting Issue (Page 1)

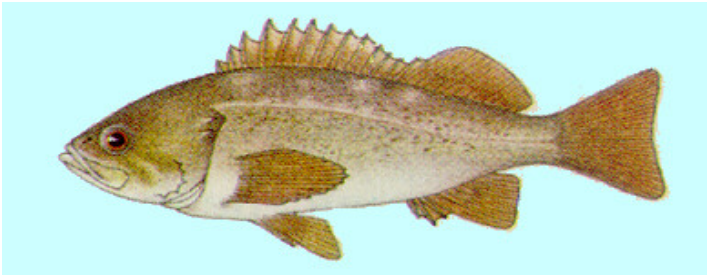
- **OA has existed since 1994 when A permits were issued.**
- **OA regulations and allocations have been implemented since that time.**
- **The OA sectors include incidental fisheries (primarily exempted trawl) and directed fisheries (non-trawl gear types).**
- **The states have commercial fishery limited entry programs that interact with the federal groundfish FMP (see Appendix A, which is still under construction)**
- **WA, OR and CA have each taken added measures to protect nearshore groundfish species (described in Appendix B).**
- **The Council's strategic plan (2000) calls for reduction in all groundfish fisheries and consideration for deferral of nearshore management to the states.**

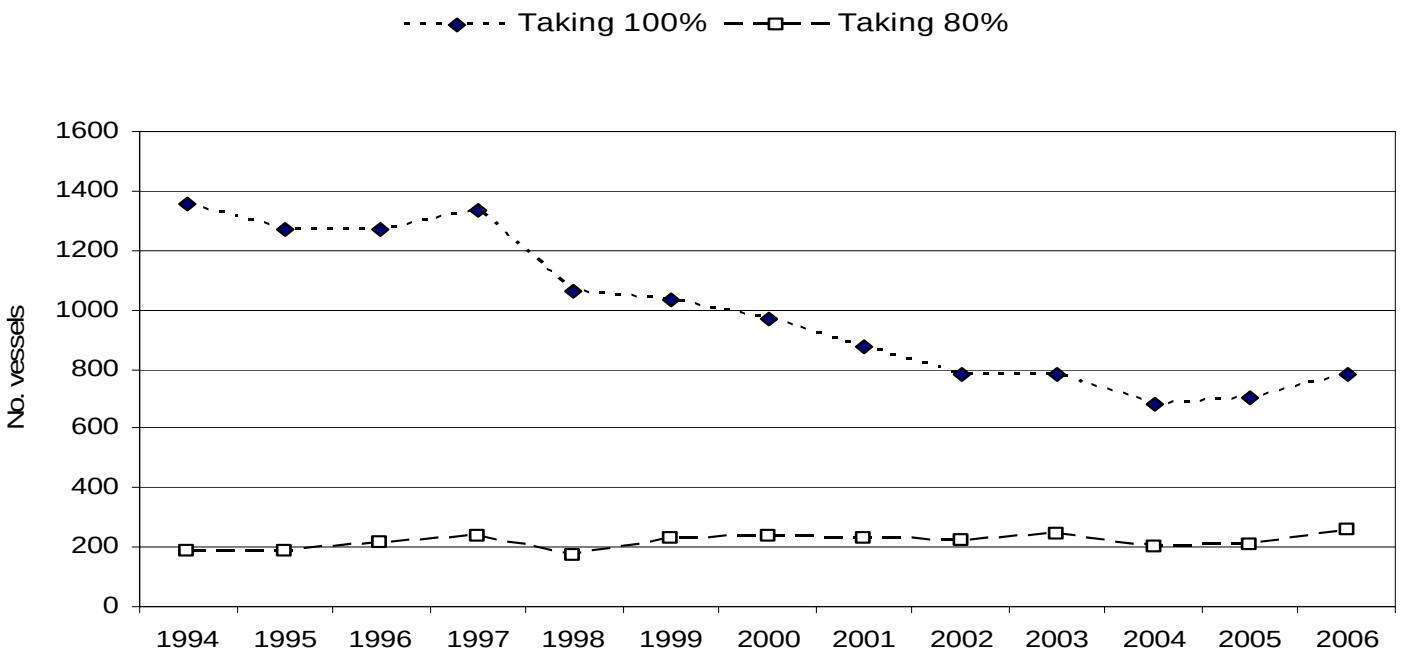
Review OA Fishery Management and OA Permitting Issue (Page 2)

- **OA data analyzed for 1994-2001 and 2000-2006 showed low total groundfish impact in incidental fisheries.**
- **The OA directed fishery landed rockfish mostly in dead condition during 1994-2001. The other important directed fisheries were sablefish, live rockfish, cabezon and lingcod. Over 3,500 different vessels participated in the directed fishery during 1994-1999; 50% of vessels participated in only one year and only 155 vessels (4%) all six years.**
- **A diverse range of tonnage or revenue-based criteria was shown in the previous analysis to achieve similar fleet size objectives for issuance of directed fishery permits (Table 4, pg 10).**
- **OA data for 2000-2006 showed that incidental and directed fisheries landed an average of 5% and 95%, respectively, of OA landings based revenues (Table 5, pg 14).**
- **Sablefish and nearshore species accounted for an average of 87% of the total directed fishery revenues during 2000-2006. Shelf and slope rockfish were minor species during these recent years (Table 6, pg 16).**

Data Update

Directed Fishery Vessel Trends

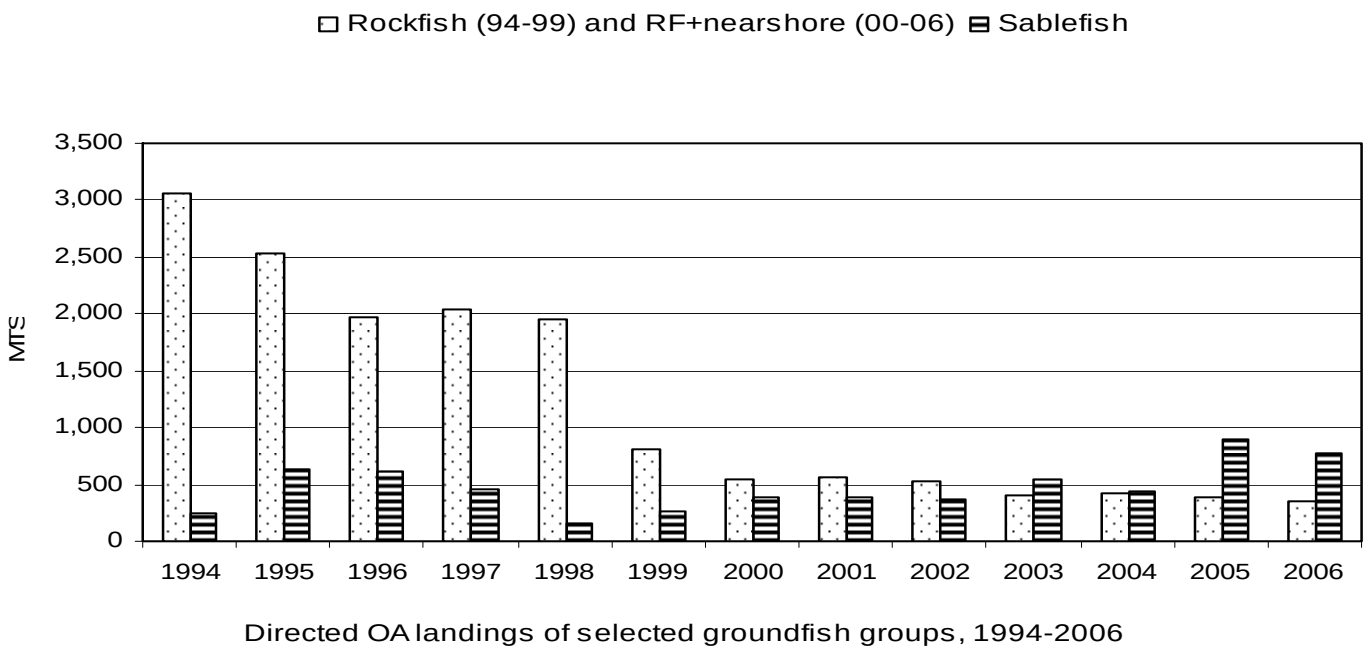




Directed OA fleet size including number of vessels taking 100% and 80% of catch, 1994-2006 (Hastie 2001 and current report)

Data Update

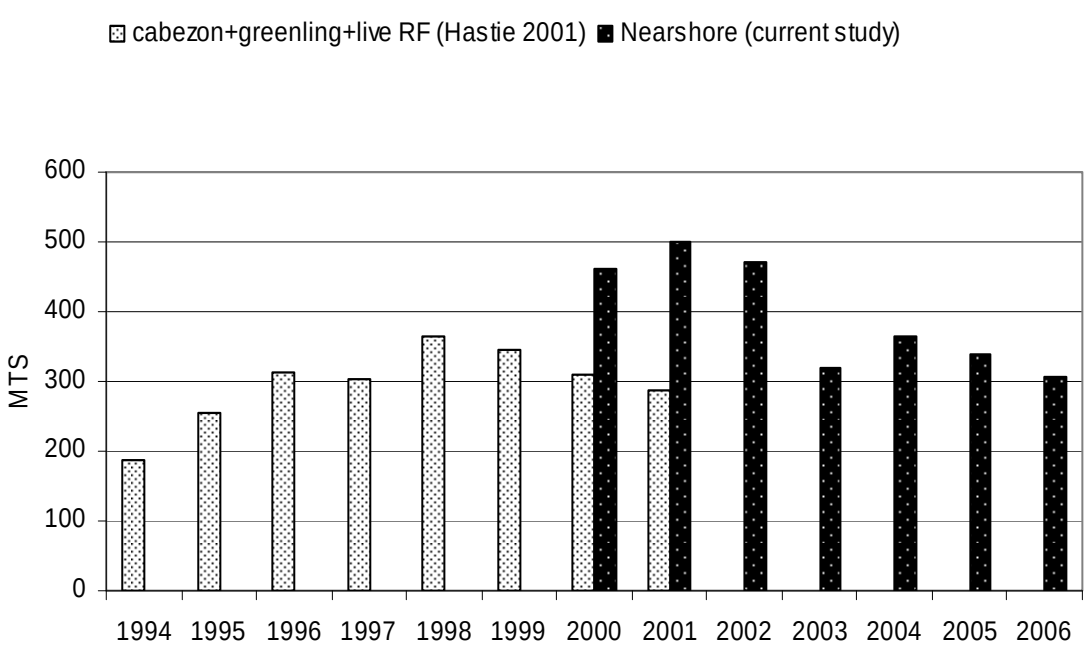
Rockfish and Sablefish Trends



Directed OA landings of selected groundfish groups, 1994-2006

Data Update

Nearshore Species Group Trends



OA landings of selected nearshore groundfish groups, 1994-2006

Assumptions

(see page 19)

(1) B permits will be assigned to vessels.

(2) B permits will be issued to *current vessel owners*.

(3) B permits will apply to the directed taking and landing of all federal groundfish *not including nearshore rockfish, cabezon, kelp greenling and California scorpionfish,* which are protected or managed under state regulations. There would be no federal permit requirement to take this particular group of nearshore groundfish in federal waters. The Council would continue to set biennial catch limits until which time management authority is transferred to the states. Exclusion of this nearshore species group is expected to affect about 72% of the recent open access groundfish vessels.

(4) A major aim of the B permit program is to match fishing fleet capacity with resource availability.

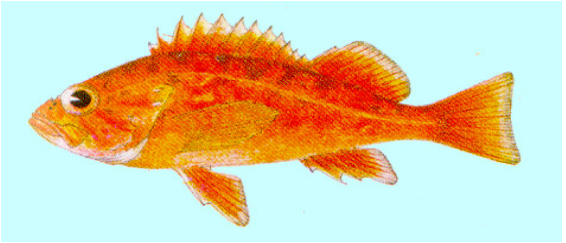
(5) Possession of a C permit will be required of all vessels that do not have an A or B permit to land incidental amounts of federal groundfish, excluding nearshore species.

(6) B and C permits will be valid for fishing and landing of permitted species in the entire California, Oregon, and Washington EEZ.

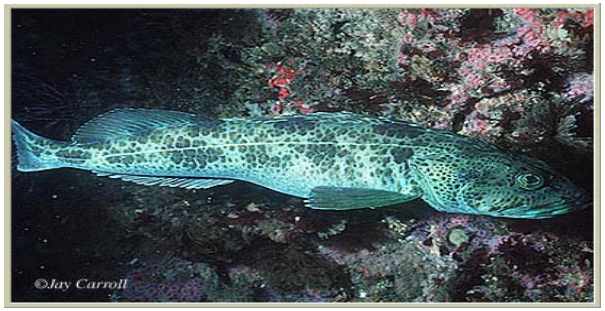
(7) Permits must be renewed annually and will be revocable by the NMFS; expired permits will not be renewed.

Recommended Alternatives

(see pages 21-22)



Issue	Alternative 1 – Status Quo	Alternative 2 – B permit required for directed (B) fisheries; liberal initial fleet size goal		Alternative 3 – Same as Alternative 2, but more restrictive initial fleet size goal.
(1) Initial B fleet size	N/A	1000 vessels; about 340 with nearshore removed		430 vessels; about 150 (34%) with nearshore removed
(2) B fleet capacity goal	N/A	500 vessels; about 170 with nearshore removed	200 vessels about 70 with nearshore removed	200 vessels; about 70 with nearshore removed
(3) B fleet qualifying window	N/A	(1) April 1998 – September 2006 or (2) January 1994 – September 2006		
(4) B fleet consolidation requirements (monitored annually)	N/A	Permit re-issuance based on previous year participation. Vessel owners must combine two permits after 5th year (387 vessels in yr 6)	Permit re-issuance based on previous year participation. Vessel owners must combine two permits after 1st and 5th years (153 vessels in yr 6)	Permit re-issuance based on previous year participation (333 vessels in yr 6)
(5) B permit endorsements	N/A	B permits would be length and gear endorsed. Permits would be endorsed for all the gear types used to qualify for permit.		
(6) C permit requirements	N/A	C permits would be available to any vessel with a state fishery permit, would be applied for and issued on an annual basis, and would not be transferable.		
(7) Integration of A & B programs	N/A	A and B permit holders may obtain the other permit type but may only use one type per year except if vessel is inoperable.		A and B permit holders may not obtain the other permit type except if vessel is inoperable.



Possible Additional Plan Elements

(see page 24)

Issue	Added Workload	Comment
(1) Grounds for permit appeals	Moderate	Mostly administrative/policy in nature
(2) Permit stacking alternatives (within or between A and B permit holders) in order to increase trip limit allowances	Very Heavy	Considerable additional analysis required
(3) Sablefish tiering and possible integration with A permit sablefish program	Very heavy	Considerable additional analysis required
(4) Permit transferability conditions prior to attainment of B permit capacity goal	Moderate	Mostly administrative/policy in nature
(5) Fish allocations between B permit gear types (as there is for A permit sablefish between trawl and fixed gear)	Heavy	Considerable additional analysis required
(6) Specific fish allocations between B and C permit fisheries	Very Heavy	Considerable additional analysis required
(7) Sub-area endorsements; e.g., 36 ° N. Lat for sablefish and 40 ° 10 ' N. Lat for other species	Heavy	Considerable additional analysis required
(8) Consistency of State with Federal regulations	Moderate	Mostly administrative/policy in nature, but may be important

Photo Credits

- **Lingcod: Mark Chamberlain and Jay Carroll**
- **Bocaccio: Mark Conlin**
- **Rockfish drawings: CDFG files**
- **Cabezon trap fishing: CDFG files**


QUESTIONS?

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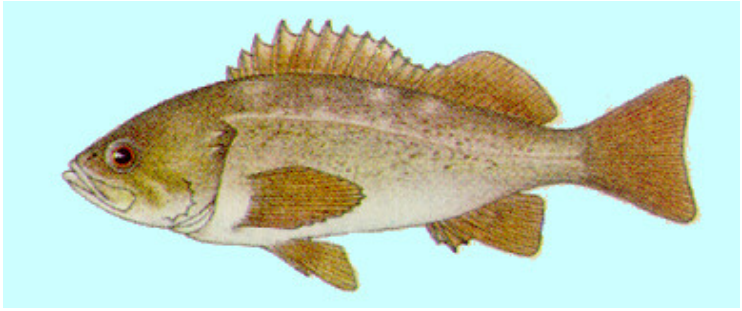


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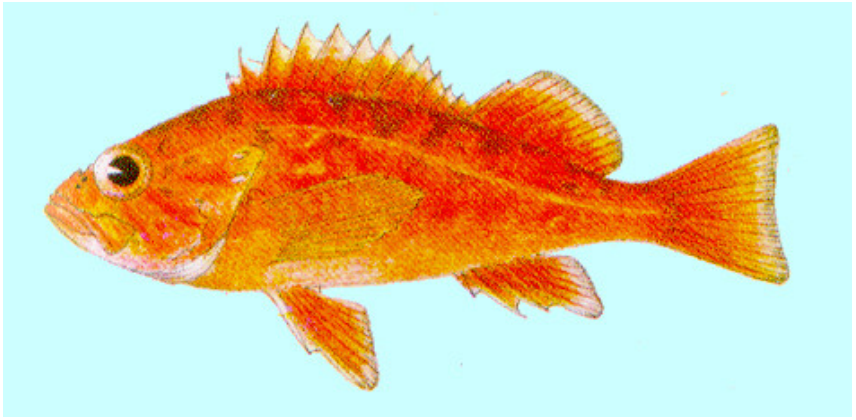


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NMFS REPORT ON NATIONAL ENVIRONMENTAL POLICY ACT (NEPA) ANALYSIS NEEDS FOR A LICENSE LIMITATION PROGRAM FOR THE GROUNDFISH OPEN ACCESS FISHERIES

NMFS conducted an internal scoping meeting prior to the Council's May 23, 2007 briefing book deadline to assess whether a licensing program for the open access fisheries should be analyzed via an Environmental Impact Statement (EIS) or an Environmental Assessment (EA). Staff discussed the potential Purpose and Need statement for this action, the potential action alternatives, and the potential effects that such a program could have on various environmental resources within the West Coast Exclusive Economic Zone, the "action area." Based on that meeting, NMFS is recommending that the action alternatives be analyzed under NEPA via an EA, accompanied by appropriate analyses under other applicable laws, including among others, the Magnuson-Stevens Fishery Conservation and Management Act, the Regulatory Flexibility Act.

One of the first steps in the NEPA public process is to identify a Purpose and Need for the action under discussion. In its materials for this meeting, the California Department of Fish and Game (CDFG) has provided an initial draft Purpose and Need statement based on the FMP and the Council's Strategic Plan for groundfish fisheries. The straw alternatives CDFG is providing for Council consideration are tied to the Purpose and Need statement. NMFS recommends that the Council adopt a Purpose and Need statement at this June 2007 meeting and consider whether it has a range of alternatives adequate to meet the goals provided by the Purpose and Need statement.

With regard to the physical, biological, and socio-economic resources that a licensing program for the open access fisheries could potentially affect, NMFS believes that the effects of such a program on following resources should be analyzed within the EA:

- O*verfished Groundfish* – Low potential for significant impact. This action is not expected to affect the overall harvest levels of groundfish, but it could reduce capacity and participation in the groundfish fishery, which could in turn have a beneficial effect on overfished groundfish species by reducing gear interactions with those species.

- *Listed and Non-listed Salmonids* - Low potential for significant impact. The bycatch of salmonids (listed and non-listed) is low in the open access groundfish fishery. If capacity and participation in the groundfish fishery were reduced by this action, bycatch of salmonids could in turn be reduced.

- *Marine Ecosystem and Fish Habitat* -- Low potential for significant impact. This action is not expected to affect the overall harvest levels of groundfish, but it could reduce capacity and participation in the groundfish fishery, which could in turn have a beneficial effect on fish habitat by reducing fishing impacts to that habitat.

- *Community Economic Impacts* – Low to moderate potential for significant impact. The potential impact, if any, will be to the income of individual fishery participants. For many participants in the open access fishery, this fishery does not provide their primary income. In 2006, NMFS completed an Environmental Impact Statement (EIS) for

Amendment 16-4 to the FMP and the 2007-2008 Groundfish Specifications and Management Measures. That EIS included a comprehensive analysis of West Coast groundfish fishing communities and their engagement in various groundfish fisheries. Most West Coast fishing ports with groundfish landings have some vessels that land open access groundfish. Appendix A to the EIS evaluated fishing communities for their dependence on groundfish resources and for their vulnerability to changes in availability of groundfish harvest. This action would not alter the overall available groundfish harvest, but it would affect particular vessels in particular ports, either by providing those vessels with a potentially valuable license to participate in the fishery or by eliminating opportunities for those vessels to participate in the fishery. Port cities that Appendix A identified as both having some history of open access groundfish landings and a relatively higher dependency on availability of groundfish resources are: Astoria, Bellingham, Brookings, Coos Bay, Crescent City, Eureka, Fort Bragg, Morro Bay, Newport, Port Orford, and San Francisco. Historically, open access landings have represented a small proportion of groundfish revenue into most West Coast ports; however, a NEPA analysis for this action would need to consider the potential effects of the alternatives on these and other groundfish fishing communities.

- *Environmental Justice* – Low potential for significant impact. This action does not target low income or minority communities; it would affect all population segments equally. However, some West Coast fishing communities have open access fishery participants that are not native-English speakers. In particular, Vietnamese-Americans fish from several northern California ports, but few of them participate in the fishery management process. Fishing families from these same communities also participate in the limited entry groundfish fishery, so there are within-community networks of translators; however, NMFS NWR has not historically translated its groundfish fishery regulations from English into other languages. Some of the communities with relatively high open access fishery landings are considered vulnerable to shifts in groundfish fishing opportunity, although open access landings themselves may not make up the majority of groundfish fishing income to the community. This action does not alter or affect tribal treaty rights to or allocations of groundfish.

- *Safety of Human Life at Sea* - Low potential for significant impact. Potential impact, if any, is expected to be beneficial. NMFS does not now have a database of fishery participants. Federally licensing this fishery would provide NMFS with the ability to communicate with the fleet through safety outreach programs, possibly resulting in more safe behavior by fishery participants.

- *Cumulative Impacts* - Low potential for significant impact. Participants in the open access groundfish fisheries annually land less than 3%, by weight, and less than 10% by value, of all groundfish taken by commercial fisheries. This action would not affect the overall harvest levels of West Coast groundfish, although it could displace some open access fishery participants into other, non-groundfish fisheries, or into state waters fisheries. Many open access fishery participants typically do not rely on the groundfish fishery for their primary income and, it is anticipated that those who do would likely meet any permit qualification requirements the PFMC considers. The cumulative impacts of this action on the biological environment, if any, are expected to be negligible, unmeasurable, and insignificant. The cumulative impacts of this action on the socio-economic environment are also expected to be insignificant, given the relatively small contributions of this fishery and its participants to groundfish landings into and income generated within West Coast ports.

ENFORCEMENT CONSULTANTS REPORT ON AMENDMENT 22: LIMITED ENTRY IN THE OPEN ACCESS GROUNDFISH FISHERY

The Enforcement Consultants suggest consideration of two additional options for permitting open access fishing in federal waters. Given the current options, enforcement personnel must rely on retained catch before a permitting violation could be addressed. In other words, someone intending to retain federally regulated species could maintain that they are targeting state regulated species. Until retention of a federally regulated fish actually occurs, there is no case. Both options suggested putting provisions in place to allow a fisherman to keep incidentally taken groundfish in federal waters and broaden our ability to enforce permit regulations when someone is fishing, versus only when someone possesses associated species. .

Option 1: Consider a minimum of a Type C permit for any person fishing with groundfish gear in federal waters. This permit would allow the person to keep incidentally caught groundfish in federal waters. The EC encourages strict incidental catch limits on groundfish to discourage any incidental (target) fishery as a result of these changes.

Option 2: Allow state nearshore open access permits to be valid to retain incidentally taken groundfish in federal waters. This is consistent with the current salmon permit requirement where no federal salmon permit is required to take salmon in federal waters. Again strict incidental catch limits on groundfish would be required.

PFMC
06/12/07

Agenda Item E.4.c
Supplemental GAP Report
June 2007

GROUNDFISH ADVISORY SUBPANEL REPORT ON AMENDMENT 22: LIMITING ENTRY IN THE OPEN ACCESS GROUNDFISH FISHERY

The Groundfish Advisory Subpanel (GAP) heard LB Boydstun's presentation on California's proposal for limiting open access. The GAP has several points for consideration by the Council during this process.

The GAP believes that the current proposal does not adequately capture the purpose and needs of Washington, Oregon, or California. Additional time should be provided to allow the individual states to define the purpose and need for their open access fisheries. Each state has different objectives that need to be met – one size does not fit all adequately. One more meeting in the proposed time line would provide the extra time and put the final meeting on preferred alternatives in Foster City next year. This would provide a central location for affected fishermen to attend.

The GAP also supports full transferability of permits. The forced buyback and mandatory fishing provisions should be dropped from this and any future open access (OA) permitting process. Forcing people to fish to maintain a permit, or in the future buy another permit to stay in the fishery, causes many unnecessary hardships.

The final analysis of permitted OA fishery should take into account the distribution of permits between states and ports. Many other questions came up during discussion that may need to be analyzed during the process such as: 1) would nearshore permitted boats that have landed federal trip limits need a B permit to continue landing these fish? 2) Would nearshore boats who have landed only lingcod qualify for a B permit? 3) Potential discard affects from boats that now have only shelf, or near shore permits.

A sablefish endorsement for the B permit also needs to be analyzed.

The GAP would like to see an analysis of a fourth option under Table 9. Apply qualifying criteria using the most recent year participation (with minimum landing requirements) combined with a history of past multi-year landings to determine initial and long-term fleet size objectives without future capacity reduction measures. Landings should be analyzed in terms of a range of values both in dollars value and amount of poundage caught from 1994 to 2006.

PFMC
06/12/07

GROUNDFISH MANAGEMENT TEAM REPORT ON AMENDMENT 22: LIMITING ENTRY IN THE OPEN ACCESS GROUNDFISH FISHERY

Introduction

The Council has considered several times since 1994 converting the open access (OA) fishery to a permitted fishery. Due to changing workload priorities, this issue has repeatedly been delayed. Most recently at its September 2006 meeting, the Council re-visited the OA limitation process and decided to go forward with additional exploration and updating of OA fishery information in preparation for the June discussion.

The GMT reviewed the report *Review and Update of Open Access Groundfish Permitting Issue and Possible Range of Alternatives for Issuance of B and C Limited Entry Permits*, (Agenda Item E.4.a, Attachment 2) and offers the following comments.

Purpose and Need for Limitation

The GMT feels that limitation of the OA fishery will help to address the issues of bycatch reduction, overfished species management, and overcapitalization and thus will ultimately assist managers to better match harvest capacity with resource availability. In addition, when completed, it will provide a better basis for projecting landings and help stabilize seasonal catches so that inseason management is more predictable under the proposed alternatives. The intent is to issue the OA permit coastwide, but a one size fits all application may not be the most appropriate. Due to differential needs, the GMT recommends that the report reflect the purpose and needs of each state.

Vessel Monitoring Systems (VMS)

The report suggests VMS will not be sufficient for meeting the strategic plan goal of matching the open access fleet with groundfish resource availability, nor will it meet the Council's goals for reducing fishery capacity. However, the GMT believes that VMS will provide useful information for the OA limitation process such as better estimates of numbers of vessels fishing under OA. Another benefit of VMS would be verification that fish tickets are filled out during landings and, if not, it would be an enforcement mechanism against vessels that failed to fill out a fish ticket if they made a fishing trip.

Definition and Division of Permits

The GMT discussed the need for further clarification of the definitions of the criteria for a directed and incidental permit. Questions arose regarding the delineation of directed and incidental trips for purposes of regulation and enforcement, and differentiation of permits based on strategy (e.g., can someone be issued a permit with a species specific endorsement?). The GMT notes that the Council may want to address such issues as alternatives are being developed.

Enforcement Issues
The GMT has identified potential areas of concern for enforcement related to fishing in state waters for federal species that are not covered under existing state permit programs. The GMT suggests that states meet with enforcement to help identify and resolve these issues.

Qualifying Criteria
The GMT feels that the determination of qualifying periods will be a key concern and the basis of qualifying criteria (pounds, value, etc.) will determine the final composition of the remaining fleet. There have been extensive changes in the fishery due to regulation changes, market factors, and stock availability (e.g. salmon) over the course of the full qualifying period (1994-2006). The GMT suggests that the following issues be considered on a state-by-state basis when determining qualifying criteria: (1) which years and control dates should be used for determining historical participation; (2) how should vessels be dealt with that have a long overall historical participation but intermittent catch/landings; (3) the number and characteristics of vessels that could be excluded by using various historical years for catch histories; and (4) applicability of species specific permits or permits with species endorsements.

Use or Lose Provision
The GMT recognizes that a use or lose provision may cause unintended fluctuations in participation and needs further analysis. For example, a fisher may be forced to fish in a given year under a use or lose provision. It could also limit the flexibility to use the open access fishery in intermittent years.

Review Process
The GMT noted that there was no discussion in the report concerning a mechanism for a review process. The GMT recommends that a 5-year review process be included to allow for a re-evaluation of participants and resources and to evaluate how the process is working.

<u>GMT Recommendations:</u>

1. States identify the purpose and need for their state and develop state-specific qualification criteria.

2. Define criteria for incidental and directed permits.

3. Regulations that state the level of groundfish associated with each incidental or directed permit.

4. Recommend that states meet with enforcement to identify potential areas of concern and analyze those items in the Environmental Assessment.

5. Include a 5-year review process.

PFMC
06/12/07

WASHINGTON DEPARTMENT OF FISH AND WILDLIFE REPORT ON AMENDMENT 22: LIMITING ENTRY IN THE OPEN ACCESS GROUNDFISH FISHERY

The Washington Department of Fish and Wildlife (WDFW) has reviewed the update of the open access permitting issue and the preliminary range of alternatives developed by the California Department of Fish and Game (Agenda Item E.4.a, Attachment 2), and offers the following comments and suggestions for Council consideration.

As described in the document, most of the open access fishery participation in Washington is in the sablefish daily trip limit (DTL) fishery. In addition, in the past decade, there have been a few vessels that have participated in a targeted open access fishery for spiny dogfish; however, participation in this fishery has declined in recent years.

Also, based on the analysis in the document, the total number of vessels participating in Washington open access fisheries has ranged from 86-112 vessels over the past six years, with an average of 96.

As stated in Attachment 2, one of the primary goals of the Open Access Limitation initiative is to closely align the number of participating vessels with the amount of resource available for harvest. As noted above, Washington's open access fishery is essentially the sablefish DTL fishery. The sablefish resource is healthy and the stock abundance is projected to be increasing. The open access fishery has a direct allocation of sablefish and is managed under a separate open access sablefish quota; therefore, relative to the sablefish resource, there does not appear to be overcapacity within the Washington open access fleet. Given that the open access fishery is viewed as one sector, WDFW recommends that the following alternatives be included for analysis:

1. As an initial step, create a federal permit requirement to participate in the open access fishery, but do not limit the number of participants.

2. Require a federal permit to participate in the open access fishery, and place a moratorium on the number of permits that can be issued and include a geographic restriction. The number of permits issued should reflect average effort. As an example, if the number of permits for Washington were 96, qualifying criteria could be established such that the 96 vessels with the highest amount of open access groundfish landings into Washington during a specified window period would receive permits.

In addition, if an analysis were done that simply compared total landings, by vessel, for various qualifying years, vessels that only participated in the sablefish DTL fishery may be at a disadvantage when compared to nearshore fishery participants. To address this, WDFW recommends that state-specific goals and objectives be developed, which would provide for consideration of state-specific qualifying criteria.

Finally, WDFW believes an alternative should be added that includes full transferability of the permits without an annual minimum landing requirement.

Agenda Item E.4.d
Public Comment
June 2007

To Whom It May Concern:

The subject of how to allocate some of the ground fish resource is of great concern to me. My wife and I are among a small group of fishers that started hook and line bottom fishing in 1994 and continued until we were shut out in July of 1998. We would very much like to continue our efforts of utilizing the most cost-effective system of supplying quality rockfish to the market place. It was proven during those years that quality rockfish, properly taken care of, would be in great demand once the general public had a chance to purchase it. That demand translated into more value per fish than any other method available. In addition, the system of hook and line fishing promotes the easy targeting of specific types of rockfish that in turn keeps the troubled species from any unnecessary stress.

I know that the job of trying to allocate a limited entry permit plan will not be an easy one and I don't have any quick fix ideas to add. I would like to request that importance be given to deliveries during those years previous to the closure in 1998 with minimum deliveries of at least 1,000 pounds. I would also like to point out that there were a lot of people who were aware of the impending closure and rushed to make some rock fish landings in order to be eligible for any future permits with the sole purpose of trying to get something to sell. Unfortunately, buying and selling of permits has become a lucrative business to the detriment of entry level fisherman. It would be nice if some time in the future, permits could become non-transferable to anyone other than a close relative with a fishing history. It would be better for the state to obtain the permit when, and if, it was not renewed and let them have lotteries in order to reissue them.

I respectively request that the matter of limited entry permits for hook and line bottom fish be given high priority especially in light of the problems with the salmon fishing sector.

Sincerely,

Gene & Elaine Holt,

Coos Bay, OR

Item E.4
Amendment 22
Limiting entry in the groundfish fishery.

From:
John Law
Wild West Commercial Fishing
2795 Massachusetts Ave.
Lemon Grove Ca. 91945
(858) 414-9731
WILDWESTJL@YAHOO.COM

Council Members,
I have supported the idea of a limited entry permit for the open access fleet from the onset of the council process. However, in keeping with the spirit of "participating in the process" I would like to ask that the council does not deviate too far from the original "strategic plan" document.
When the council process stared I tried to be involved, sent comments, spoke to members by phone, all in the hope that I would be able to continue to fish again at some point. The information in the "strategic plan" convinced me to stay in the fishery. According to the plan for the open access fleet I would qualify for a permit. With this in mind I continued to fish at what ever level I was allowed. I have participated in the observer program and kept up with the changing regulations via E-mail. It would be unfair at this point to make a drastic change to the "strategic plan".
The only thing that I am worried about is implementing a licensing process that would give permits to those who are no longer in the fishery. I have watched this happen with every limited entry program in California. A fisherman should not be granted a permit based solely on his past participation. Only those who are active now and have been active during the council process should be considered for licensing.
Thank You for considering my comments. John Law.

Mr. Donald Hansen
Chairman
Pacific Fisheries Management Council
7700 NE Ambassador Place, Ste. 101
Portland, Or. 97220

Laura Deach
318 Shark Reef Rd.
Lopez, WA 98261

Dear Chairman Hansen,

Please consider the following option for limiting entry of the OA fleet:

> Amend Amendment Six to allow any open access gear type to be used on a limited entry fixed gear permit. Close the open access fishery. Add the open access allocation to the limited entry fixed gear allocation and allow fishers to purchase an existing permit with its associated catch limits.

When deliberating please consider the following points:

- **Discards:** Closing the OA fishery reduces to zero both target species discards and bycatch discards. Permitted or not, placing observers on these vessels is problematic which compounds the collection of accurate catch and discard data. With today's restrictions, accurate data is essential to stock rebuilding.

- **Economic:** The OA fleet adds a small portion to the overall value of the west coast groundfish industry. Conversely, there are economic costs to maintaining even a portion of this fleet.

- **Monitoring:** Creating 200 more permits will permanently increase monitoring costs, including state and federal funds used to observe deliveries, process fish tickets and compile data. The current fishery cannot be monitored reliably nor properly. Zero new permits incur less cost than 200 new ones.

- **Enforcement:** There are 404 LE permits. Creating 200 more permits will permanently increase enforcement burdens and costs. The current fishery cannot be enforced adequately. Zero new permits require less enforcement than 200 new ones.

- **Management:** You will still have the problem of small daily trip limits. Tinkering with them all year long, each year costs management time and dollars. After limiting entry, an ITQ program will eventually be requested by this group. Developing an ITQ program costs substantial time and dollars.

- **Buyback:** Ninety groundfish permits were bought back by the government. This was probably not enough. Now the council wants the government to create 200 more groundfish permits. This mystifies common sense.

- **Allocation:** One of the ongoing results of trip limit management is a slow reallocation of the resource over time. Top producers in the LEFG fleet have had catches reduced by 50% or more. During the same time period, OA participants, in some cases, have had

catches increased from 0 to the level of a mid-tier permit. Returning quota to the LEFG fleet helps rectify this inequity.

- **Personal Responsibility:** Through regulation, the council told the LEFG fleet to be personally responsible by allowing us to purchase and stack additional permits. Many people have individually born this expense to regain lost poundage or increase catch. Asking OA participants to purchase an existing permit is no different. They have essentially had a 13 year extension compared to the requirements of LEFG fleet.

- **Paranoia:** If you create 200 more permits and then decide to add them to the current LEFG fleet, there will be another reallocation over time. A reduction in the overall LEFG trip limits will have to occur. The OA allocation added to LE allocation divided by another 200 permits equals less for more once again.

Sincerely,
Laura Deach

LIMITING ENTRY IN THE OPEN ACCESS GROUNDFISH FISHERY

PUBLIC COMMENT SUBMITTED BY JOHN LAW

JOHN LAW
2795 MASSACHUSETTS AVE.
LEMON GROVE, CA 91945
(858) 414-9731
WILDWESTJL@YAHOO.COM

FISHING VESSEL 'WILD WEST'
CDFG # 36207

INTRODUCTION.

I am an open access fisherman from San Diego, California. My vessel “Wild West” is a 25 foot open skiff operated out of Mission Bay. When you attend the Council meeting in San Diego this November you may see my skiff parked right under the window of your hotel room at the Mission Bay Hyatt.

As a skiff fisherman I am limited to the distance that I can travel and the variety of fish that I can access. My main fishery is for shelf rockfish and I hold a state permit for deeper nearshore. There is no volume of deeper nearshore rockfish along the San Diego coast so this permit is used to allow me to keep any fish that I may encounter along the shelf. I also target Ling Cod which are sold live, and a few deeper nearshore are encountered here too.

All of my fishing trips are local and depart in the morning and return in the afternoon.

My catch is sold to high quality restaurants and fish markets in the San Diego area. I have a great working relationship with these markets. The owners have come to trust me and they know the quality of my catch. In most cases I do not even have to call first.

I have targeted groundfish for 19 consecutive years beginning in 1989. Like many small boat fishermen my catch history is not measured in metric tons, but is still significant enough to be a valuable asset to my community.

On the following pages you will find my views and opinions of the proposal to license the open access groundfish fishery. I thank you for taking the time to read and consider my thoughts on the licensing process.

Sincerely, John Law

MY CONCERNS.

My biggest worry is that the council will try to hurry the process and implement the open access license too quickly. I can understand that California wants the matter handled quickly. However, a few extra weeks or months are not going to change anything in the big picture. I urge the council to take the amount of time necessary to do the job right the first time. The permitting process should be easy for all involved, not a continued source of worry and concern for participants. The idea of requiring the purchase of a second permit after going through all the other qualifying steps is hard to accept.

QUALIFYING CRITERIA.

Although I have participated in the directed groundfish fishery for 19 straight seasons, I still worry about the possibility that I may be excluded from the fishery. I would like to ask the council to place high value on long term participation regardless of the catch history. In the document submitted by the state of California "Review and update of the open access groundfish fishery permitting issue and possible alternatives for issuance of B and C permits" there were several possible options for qualification. Of these options I did not qualify for six of the eight possibilities. Only in item Q3 (1lb. in 5 of 6 years and 1 mt in 1999) and item Q7 ($ 1000 in 5 of 6 years and $1000 in 1999) did I qualify.
I would like to ask the council to create some options for qualification that are not rigidly connected to weight or dollar value of the catch.

Participation during the years from 1999 to the control date of September 2006 should be a good indicator of those individuals who are dependant on the fishery. During this time period it has been extremely hard to keep up on all of the changes occurring in the fishery. I have done everything possible to keep informed and participate in the council process. Those who have continued to fish and participated in the observer program should be given high credit.

I have owned three vessels and the one that I use now is not the one that I used from 1991 to 2000. Qualifications should be individually based not, vessel based. When a boat wears out it must be replaced. An individual should be able to designate the vessel to be used if there is not a significant size difference over time. My previous boats were 20 feet and 18 feet, and the boat that I own now is 25 feet. I would prefer to keep my existing boat and not be forced to downsize because of permit limitations.

The council should accept all landings of groundfish including nearshore. Many block numbers used to designate where a catch was made are split between state and federal waters.

PUBLIC COMMENT.

I am disappointed in the lack of public comment from open access participants. In the original briefing book prepared for the June 2007 meeting, I was the only open access fisherman from California to submit a comment. I am concerned that the council will view this to mean that participants are willing to accept whatever the council decides. I am taking the time to comment because this is very important to me. I want to continue to fish for groundfish.

NEED FOR AN OPEN ACCESS FISHERY

I have seen comments from limited entry permit holders asking the council to eliminate the open access fishery instead of granting licenses. It should be noted that the fishery has always existed and the council is not creating a fishery but stopping continued expansion.

In 2005 I decided that it would be best to try to find a way to create some security for myself and family, so I made an attempt to purchase a limited entry groundfish permit.
After talking to every permit holder more than once, I finally found someone that was willing to sell a permit at a fair price. After securing a bank loan, I had planned on making the trip to Northern California the following week to meet with the seller and complete the transfer. I called the NMFS office to verify that the permit that I was buying would be the proper permit for my fishery, and to make sure that there was nothing that I had overlooked. To my surprise, I was told that the limited entry permit did not allow for mobile fishing gear (rod and reel) or vertical set lines. If I bought the permit, I could lay out miles of longline hooks on the seafloor, but I could not use a rod and reel to catch fish one at a time. I contacted NMFS legal department and they verified the prohibition on the use of mobile gear. I then contacted Mr. John DeVore who told me that the council could possibly have the rule changed, but there was no guarantee, and it would be two years before it could be implemented. I could not take this risk, so I abandoned the idea and continued to fish in the open access sector.

EXTREME OVERCAPITALIZATION.

The open access fleet decreased in size from1400 vessels in 2000 to 960 in 2006. The California fleet decreased in size from 970 in 2000 to 519 in 2006. The groundfish fleet has declined 3.3% each year since 1994. These numbers indicate that the fleet is going in the proper direction and management measures do not need to be extreme.

Catch estimates from 1994 to date have declined for many reasons. The elimination of gillnets for rockfish in California played a big part in the low landings, along with decreased stocks and low quotas and depth restrictions.

VESSEL MONITORING SYSTEM

This is just another part of doing business.

NEARSHORE AND DEEPER NEARSHORE PERMITS

I would like to propose the idea of a groundfish permit that would allow fishing for all types of groundfish instead of the current state permit system for some stocks. This permit could be endorsed for slope rockfish and sablefish and would allow the take of all fish from the shelf to the shore. By putting all of the categories on one permit, there would be no chance for bycatch or waste. The way the system is now there is waste in all sectors. Shelf fisherman discard deeper nearshore, nearshore fishermen discard deeper nearshore, and deeper nearshore fishermen discard nearshore. California could still issue a separate permit for the take of sheephead.

Consolidating all of the stocks would make enforcement easier as wardens would not have to identify every fish. Many sheephead fishermen do not keep any rockfish for fear of making a mistaken identification. One permit would simplify the entire fishery.

FINAL COMMENTS

Initially, I was planning to attend the June meeting, but after I thought about it I decided to save both time and money by not attending. Although I would like to address the council in person, I feel that this document will express my feelings.

Please remember that the decisions made by the council will be long lasting. Many of the participants are small boat fishermen like myself with strong ties to the community where we live. I ask the council to be fair and not rush to a decision on any part of the licensing process that they are not sure of.

CALIFORNIA DEPARTMENT OF FISH AND GAME

MONTH DAY YEAR: 06 01 07

PERMIT #: R 231106

SEE 2ND PAGE ☐

FISHERMAN LAST NAME	F. I.	I.D. NUMBER	PORT OF FIRST LANDING	LOCATION WHERE FISH WERE CAUGHT
LAW	J	L 02989	869	860

VESSEL NAME	VESSEL I.D.	FISH BUSINESS NAME	FISH BUSINESS I.D.
WILD WEST	36207	WILD WEST	80571

FISH NAME	POUNDS	PRICE	TOTAL AMOUNT	CONDITION	GEAR
1) SHEEPHEAD 145					
2) OCEAN 499 WHITEFISH					
3) CALIF 299 SCORPIONFISH					
4) MAKO SHARK 161					
5) BOCACCIO ROCKFISH 253					
6) CHILIPEPPER ROCKFISH 254					
7) BLACKGILL ROCKFISH 667					
8) GOPHER 263 ROCKFISH					
9) COWCOD 245 ROCKFISH					
10) ROCKFISH 999 GROUP RED					
11) ROCKFISH 299 UNSPECIFIED					
12) BARRACUDA 130					
(13) LINGCOD 195	6020	300	180 60	06	
(14) LIVE SHELF	140	300	4 20	06	
(15) TREE FISH	170	300	5 10	06	
(16) SHORE DEPO	120	200	240		
17)					
18)					
19)					

PRIMARY GEAR USED: 01

GEAR LEGEND
(1) HOOK & LINE
3 VERTICAL H&L (PORTUGUESE LONGLINE)
5 SET LONGLINE
6 JIG/BAIT (ALBACORE)
7 TROLL (ALBACORE)
8 TROLL (GROUNDFISH)
OTHER

(BIOLOGIST USE) FISH CODE

TOTALS # 64.5 $ 192 30

NOTE PAD

CORRECTIONS - FOR FIELD BIOLOGIST USE ONLY

LINE#	FISH CODE	POUNDS	PRICE	CONDITION	GEAR	CHANGES ON BACK

FISHERMAN/PERMITTEE SIGNATURE: John E Law

RECEIVED BY: John E Law

CERTIFIED UNDER PENALTY OF PERJURY AS TRUE AND CORRECT

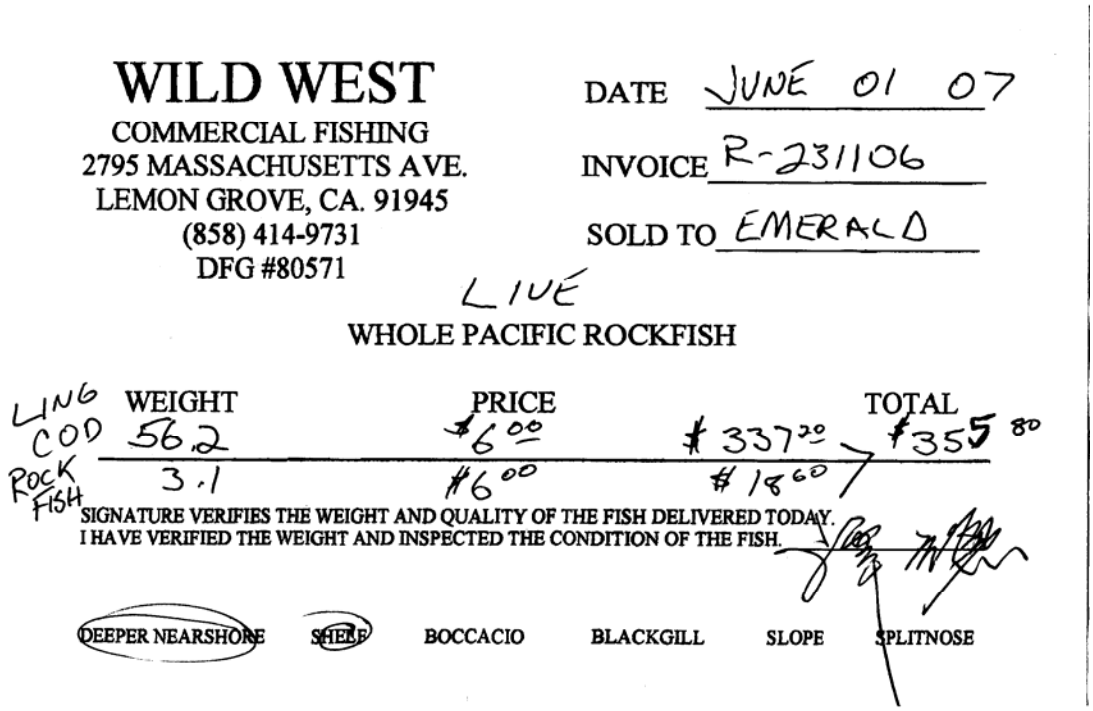
F&G 625 -R (10/96) GREEN = DEPT. OF FISH & GAME COPY ******** YELLOW = FISHERMAN COPY ******** PINK/GOLDENROD = FISH BUSINESS COPY (2)

nply
num

transit

t value

Fish receipt showing designated value of recent catch. Sales receipt on next page shows actual value of catch.



WILD WEST
COMMERCIAL FISHING
2795 MASSACHUSETTS AVE.
LEMON GROVE, CA. 91945
(858) 414-9731
DFG #80571

DATE JUNE 01 07
INVOICE R-231106
SOLD TO EMERALD

LIVE
WHOLE PACIFIC ROCKFISH

	WEIGHT	PRICE	TOTAL
LING COD	56.2	$6.00	$337.20
ROCK FISH	3.1	$6.00	$18.60
			$355.80

SIGNATURE VERIFIES THE WEIGHT AND QUALITY OF THE FISH DELIVERED TODAY.
I HAVE VERIFIED THE WEIGHT AND INSPECTED THE CONDITION OF THE FISH.

DEEPER NEARSHORE (SHELF) BOCCACIO BLACKGILL SLOPE SPLITNOSE

The receipt pictured above shows the actual value of the fish landed on June 01, 2007. Federal law requires that all groundfish be landed at the time of unloading. In order to comply with this I have to designate a value on the landing receipt. In most cases I enter the minimum amount that I would receive if I had to sell the fish to a wholesaler.
The weight of the Ling Cod is different on the sales receipt because one small fish died in transit and was not sold.

By combining the activities of fisherman and fish receiver, I am able to obtain the highest value possible for my catch.

Dear Chairman Hansen,

I've been fishing open access since 1990, I didn't get an "A" permit in 1994 because of gear type and don't want to get excluded from a B permit in the proposed conversion from open access to limited entry. After being denied in 1994 myself and several other hook and line fishermen in the Eureka area were assured that there would always be an open access fishery.

Their is no reason for converting "Open Access" to limited entry. Reducing capacity will not reduce bycatch because all of the species in open access have a set annual quota and the and arguably as many discards will be generated from 1000 boats fishing for as will from 500 fishing for that quota. A limited entry program will not reduce the possibility of overfishing because annual as well as monthly quotas have already been figured into open access and are adjusted based on the number of participants. The only remaining reason for it is economic and the open access fishery with the exception of nearshore was never intended to be a fishermen's sole source of income. Your own 2000 FMP used the above reasons as well as the recommendation of reducing the fleet of 2000 licensed fishers by 50%. That goal has already been achieved with your own data showing only 958 boats participating in open access in 2006. Therefore there is no need to further reduce the fleet.

The intent of Open Access is to "ensure that vessels participating in state managed fisheries (Salmon and Crab) and landing groundfish incidentally would continue to have access to the groundfish resource. The fishery was also left unlimited to allow smaller vessels (Nearshore) to directly target groundfish at lower landing rates than in the limited entry fishery." Yet Nearshore landings are proposed to be disqualified for eligibility for a B permit. We're the same ones that were disqualified in 1994! Perhaps the most egregious proposed criteria for eligibility is landings that are greater than 50% in value of open access fish excluding Nearshore. This criteria favors fishermen who recently entered the fishery and didn't receive a state Nearshore permit.

For the last 17 years I've landed shelf, Nearshore and Lingcod as a complex with separate landings Sable and Slope rock as well. Yet someone who entered the fishery in 2004 would be favored in the proposed eligibility for a "B" permit because their landings and effort wouldn't include nearshore. Therefore all of their landings would be counted toward a "B" permit because their Nearshore would have been discarded creating landings that were greater than 50% federal groundfish. This cannot be used as an eligibility requirement.

My preference would be to leave the fishery "status quo" since no need has been shown to make it limited entry. Since your own stock assessments for most if not all groundfish are showing stable or rebuilding populations there is no need to change management. Since the "Open Access" fleet has already been reduced 50%, there's no need to reduce it further. "Open Access" got me through last year's "Salmon Disaster", I need it to be there for the next one. If you do anything cap it where it was at last Septembers control date but please don't starve anyone else. If it is still deemed necessary to further reduce the fleet do it by attrition not the process of elimination, the West Coast groundfish fleet has suffered enough in the last 10 years.

Sincerely,
Mike Zamboni

I am a small boat owner operator out of San Diego. I fish with an 18' 6" aluminum boat commercially for Rockfish, mainly in waters from 170 to 300 feet of depth. I have been doing this from 1987 to present. I fish by myself mostly and only by rod and reel, hook and line. The income supplements other land work I do, as there is no way to make it a full time job due to present regulations. I fish out of Mission Bay and am one of only a few that fish the way we do. I feel that we are by no means having a detrimental effect to Rockfish stocks in our area. I am also a 4th issue 100 ton licensed master and ran open party Rockfish runs for a sports boat out of Mission Bay for seventeen years, so I know a little about our local resources.

I understand you are going to probably implement permits for us now and I would really like to keep fishing and possibly have higher quotas available.

- Rod Stumman

Subject: e.4 amendment 22
From: cookie2043@juno.com
Date: Tue, 05 Jun 2007 19:15:33 -0700
To: pfmc.comments@noaa.gov

I am a small boat owner operator out of San Diego. I fish with an 18' 6" aluminum boat commercially for Rockfish, mainly in waters from 170 to 300 feet of depth. I have been doing this from 1987 to present. I fish by myself mostly and only by rod and reel, hook and line. The income supplements other land work I do, as there is no way to make it a full time job due to present regulations. I fish out of Mission Bay and am one of only a few that fish the way we do. I feel that we are by no means having a detrimental effect to Rockfish stocks in our area. I am also a 4th issue 100 ton licensed master and ran open party Rockfish runs for a sports boat out of Mission Bay for seventeen years, so I know a little about our local resources.

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- Rod Stumman

PRELIMINARY REVIEW OF EXEMPTED FISHING PERMITS (EFPs) FOR 2008

Exempted fishing permits (EFPs) provide a process for testing innovative fishing gears and strategies to substantiate methods for prosecuting sustainable and risk-averse fishing opportunities. Applications for EFPs proposed for 2008 are provided as Agenda Item E.5.a, Attachments 1 through 4. The first two proposed EFPs are designed to test different commercial hook-and-line gear configurations and strategies to selectively harvest abundant chilipepper rockfish off central California. The third proposed EFP, sponsored by The Nature Conservancy and Environmental Defense, seeks to test hook and line and trap gears in central California using limited entry trawl permits purchased by The Nature Conservancy. The fourth EFP, sponsored by the Recreational Fishing Alliance and the Golden Gate Fishermen's Association, seeks to test the use of recreational hook and line gear to catch underutilized chilipepper and slope rockfish on Commercial Party Fishing Vessels in north central California in waters seaward of the non-trawl Rockfish Conservation Area (RCA) between Pigeon Point and 40°10' N latitude.

Under this agenda item, the Council will review these EFP applications, consider public and advisory body comments, and consider moving the 2008 EFP applications forward for public review. Any recommended modifications to these EFP applications will be communicated to the EFP sponsors and the public. The Council is scheduled to decide their final recommendations for 2008 EFPs at the November meeting in San Diego, California.

Council Action:

Consider EFP applications for 2008 and provide preliminary recommendations for public review.

Reference Materials:

1. Agenda Item E.5.a, Attachment 1: Application for Issuance of an Exempted Fishing Permit to Test a Sustainable Hook and Line Fishery for Chilipepper Rockfish Outside the Non Trawl RCA in Central California (40º10' N Lat.-34º27' N Lat.).
2. Agenda Item E.5.a, Attachment 2: Exempted Fishing Permit – Chilipepper Rockfish.
3. Agenda Item E.5.a, Attachment 3: Application for Issuance of an Exempted Fishing Permit (EFP) to Utilize Hook-and-line and Traps in a Harvesting Cooperative Based on the Catch History of Select Trawl Permits off the Central California Coast.
4. Agenda Item E.5.a, Attachment 4: Recreational Fishing Alliance/Golden Gate Fishermen's Association EFP Proposal Regarding the Recreational Catch Composition of Slope Rockfish.

Agenda Order:

a. Agenda Item Overview — John DeVore
b. Agency and Tribal Comments
c. Reports and Comments of Advisory Bodies
d. Public Comment
e. **Council Action**: Adopt Preliminary Recommendations for EFPs

APPLICATION FOR ISSUANCE OF AN EXEMPTED FISHING PERMIT TO TEST A SUSTAINABLE HOOK AND LINE FISHERY FOR CHILIPEPPER ROCKFISH OUTSIDE THE NON TRAWL RCA IN CENTRAL CALIFORNIA (40º10' N LAT.-34º27' N LAT.)

Date of application: 5/21/07

Applicant Name:
Josh Churchman
1 Opal Road
Bolinas, CA 94924
(415) 868-0982

Purposes and Goals of the Proposed Experiment
The goal of the exempted fishing permit is to develop a sustainable method for harvesting the abundant stocks of Chilipepper rockfish in the central California region (40º10' N Lat.-36º N Lat.) that will eliminate bycatch.

- Design a low impact, rod and reel fishery model that could be replicated for future open access vessels in this area.

-Restore a historic method of fishing for shelf rockfish and re-establish a sustainable fishery that strives for total retention.

The specific goals of the experiment are to:

-Evaluate whether vertically-fished gear, using a maximum of one hundred hooks outside the current R.C.A., effectively eliminates bycatch.

- Develop a harvest method that is equally accessible to vessels of all sizes.

Disposition of Fish Harvested under the Exempted Fishing Permit (EFP)
Species caught may be retained and sold.

Justification Explaining Why an EFP is Warranted
The traditional "fixed gear" fishery has two tragic flaws. First, is the fact that it is a bottom contact fishery. Central California contains three national marine sanctuaries whose guidelines prohibit any disturbance of the benthic habitat. This EFP proposes a non-bottom contact fishery that could be replicated throughout California. The experiment will use a vertical line to fish for Chilipepper (which swim in mid-water) that will not contact the bottom.

The second flaw is the fact that too many hooks are deployed on any given set. If the set lands on a spot where there are fish that you are not able to retain, the impact is significantly greater

the more hooks there are. Traditional long line methods can use 1,000s of hooks in one set. This EFP will limit the number of hooks to 100 per set, thereby reducing bycatch.

The major goal of this EFP is to reduce bycatch and strive toward total retention. Current regulations have created a situation where discard is inevitable. In thirty years of fishing for shelf rockfish, I have landed over one million pounds. For twenty three of those years, I never discarded a fish. Due to regulations over the past seven years, I have been forced to discard fish every time I go out. In the process of trying to catch my allotted quota of a Chilipepper, I am forced to throw back un-allotted Widows and Boccaccio that come to the surface dead. In those seven years, I always stopped fishing before I reached my quota of Chilipepper because the discard factor became too disgusting. Mandatory discard has removed the honor from what was once my favorite fishery. This experiment will explore whether discard can be virtually eliminated using the rod and reel model.

Statement of Project Significance

Historically, the three major ports in this area (Bodega Bay, San Francisco Bay, and Half Moon Bay) all had significant hook and line landings. The ex-vessel values of hook and line caught fish have always been much higher than trawl caught fish of the same species. If this EFP is successful, it could restore a vibrant hook and line fishery to these ports. An increase in boats using hook and line to catch fewer fish of higher value will be more efficient, have less environmental impact, and benefit local economies with a high quality, high value product. Prior to the turn of the century all fish were harvested with hook and line. This EFP has the potential to restore a truly "historic" method of take for shelf rockfish.

Vessels to be Covered by the EFP

FV Palo FG 27309 GF 0056 Josh Churchman
Bodega Bay

Species and Amounts to be Harvested

The target species to be harvested is the Chilipepper rockfish (Sebastes goodei), Bocaccio and Widow rockfish. Bocaccio and the Widow often swim with the Chilipepper. For this reason, this EFP combines these species into a Sebastes group with an allotment of five thousand pounds per two month period. By creating one allotment for the three species combined, the experiment strives to eliminate bycatch. There is no anticipated take of Canary, Yelloweye or Cow Cod outside the current R.C.A.

Other EFP Specifications

- All fishing will take place seaward of 150 fm.

- All vessels will declare the time and place of landing to allow access to interested biologists.

- All vessels will have a VMS system.

- A standardized data collection and reporting format will be coordinated by the California Department of Fish and Game, NMFS Northwest Fisheries Science Center, and Pacific States Marine Fisheries.

- All vessels will be subject to the current observer requirements for fishing outside the R.C.A.

Contact person:
Josh Churchman
1 Opal Road
Box 5 Ocean Parkway
Bolinas, CA94924
(415) 868 0982

To: Dr. Donald O. McIsaac
Executive Director
Pacific Fishery Management Council
7700 NE Ambassador Place, Suite 101
Portland, OR 97220-1384

Subject: RFA/GGFA EFP Proposal
Re: Recreational Catch Composition of Slope Rockfish
Date: May 23, 2007

Applicants:

Recreational Fishing Alliance
Contact: Jim Martin, West Coast Regional Director
P.O. Box 2420, Fort Bragg, CA 95437
(707) 357-3422

Golden Gate Fishermen's Association
Contact: Roger Thomas, President
P.O. Box 40
Sausalito CA 94966
(415) 760-9362

Justification: Since the implementation of the Rockfish Conservation Area as a bycatch reduction measure to protect overfished species such as canary rockfish, over 90% of the EEZ has been closed to recreational rockfishing. This proposal would exempt a specific number of CPFV vessels in north-central California to fish seaward of the RCA for underutilized species such as chilipepper.

Potential impacts: There is some historical data for recreational catches of slope rockfish, but no recent data is available. Impacts on canary rockfish and other shelf species should be zero.

Purpose and goal of the experiment: To use selective recreational fishing gear, hook and line, to access underutilized species of slope rockfish. The

data provided from this series of trips on CPFV vessels would provide management guidance to open a new market for the charter fleet during January through May in north-central California from Pigeon Point to 40°10' N latitude near Cape Mendocino, when inshore rockfishing seasons are closed. Experimenting with different types of terminal tackle results in a more selective fishery. Anglers will retain all legal fish after contributing scales, otoliths, or any other physical evidence needed by data collectors. Any prohibited species landed will be donated to the CDFG for scientific purposes. This EFP would be limited to the CPFV fleet to control effort, and to provide observer coverage, but the data gathered could result in a new fishery for the entire recreational fishing fleet.

Broader Significance: the data collected should prove that a recreational fishery can be conducted on the slope without impacts to overfished species.

Duration of the EFP: Three years (2008-2010). Given the limited number of vessels participating in the project, a long time series will be needed.

Number of vessels: No more than ten. This EFP must be self-funding and we do not know how many individual anglers will be interested in paying a premium for a slope rockfish trip, to cover the expense of the observer program. Angler loads will be limited, perhaps 15-20 people per trip.

Description of Target species: Slope rockfish, zero shelf rockfish.

Harvest Control: Anglers are limited to first ten rockfish landed. For a load of 15 anglers, a vessel would retain a maximum of 150 fish per trip, with observer coverage at-sea and dockside. CPFV logbooks will record species landed.

Vessel-level EFP bycatch caps:
- Cowcod: 5 fish
- Bocaccio: 5 fish
- Widow: 20 fish
- Canary: 5 fish

Total EFP bycatch caps:
- Cowcod: 10 fish
- Bocaccio: 10 fish
- Widow: 40 fish
- Canary: 10 fish

Proposed Data Collection and Analysis Methodology: This EFP will provide raw data to the existing CRFS data collection and analysis system. 100% retention will guarantee accurate dockside identification and age class data. Type of terminal tackle (weights, lures, hook sizes) would be recorded for comparison purposes and bycatch reduction data. Vessels will record other information such as location, depth and water temperatures. Data collection can be verified by video documentation and collaborative research between fishery managers and industry.

Participation: Vessels with a clean logbook reporting record will be chosen from various ports such as Monterey, Santa Cruz, Half Moon Bay, San Francisco Bay Area and Fort Bragg where the slope is reachable on a day trip. Priority will be given to vessels with historical landings of slope rockfish.

Time, Place and Amount of Gear Used: This EFP would be conducted during fair weather days during the months of January through May, with anglers limited to one rod apiece, two hooks, and 36 ounces of weight.

Signature of Applicant:

James Martin, RFA

Roger Thomas, GGFA

EXEMPTED FISHING PERMIT – CHILIPEPPER ROCKFISH

Request for an exempted fishing permit (EFP).

Project Title: Evaluation of an epibenthic trolled longline to selectively catch chilipepper rockfish (*Sebastes goodei*).

Date of Application: May 23, 2007

Applicant: Steven A. Berkeley
Long Marine Lab, University of California, Santa Cruz,
100 Shaffer Road
Santa Cruz, CA 95060

Phone: 831-459-3530
Email: stevenab@ucsc.edu

Purpose and Goals

Chilipepper rockfish stocks on the west coast are considered healthy. However, because of weak stock management, the OY for this species cannot be taken. In 2004, chilipepper landings were 58.3 mt (http://www.st.nmfs.gov/pls/webpls/MF_ANNUAL_LANDINGS.RESULTS) of a 2000 mt OY. Area closures to protect overfished rockfish species have effectively closed access to this resource.

The long-term objective of this project is to describe and evaluate the effectiveness of a species-selective longline technique, which if proven effective, will allow commercial fishermen access to a relatively abundant species of rockfish, chilipepper, the fishery for which is constrained by the current rockfish area closures (RCA), implemented to protect overfished rockfish species. Despite the generally depressed condition of many west coast groundfish stocks, there are some stocks that remain healthy. These healthier stocks could safely sustain increased harvest levels if they could be fished more cleanly and without bycatch of more depleted stocks. If stronger stocks could be targeted without increasing fishing mortality on depressed stocks, the California commercial fishing fleet would have alternative fishing opportunities that would provide some economic relief to the industry while providing the public with a highly desirable product.

The objective of the research for which we are requesting an EFP would be to establish the performance characteristics of the gear, and to rigorously document the catch and bycatch when deployed under commercial fishing conditions. The location, gear characteristics (number of hooks, length of mainline, etc.), species composition, size distribution, and sex ratio (of chilipepper) of each set of gear will be recorded by onboard observers.

The EFP that we are requesting would allow up to three (3) vessels. Each would be limited to a bimonthly landing as established for 2007 to fish inside the current RCA using otherwise legal open access fixed gear. The gear will consist of a maximum of 500-750 hooks per set. Gear

consists of open access troll fly and vertical hook and line gear that is set and fished in a unique way such that the hooks sink to near, but not hard on bottom. Prior to setting the gear, a test set will be made with vertical gear in which the gear is set vertically. This will be with no hooks closer than 3 fm of the bottom, based on acoustic soundings, to ensure that the target species is present and to minimize the chance of encountering any of the overfished rockfish species. Once the test set establishes the presence of chilipepper rockfish, the gear will be deployed as follows: The vessel moves slowly ahead as the gear is deployed. The gear remains attached to the vessel at all times. Artificial "flies" are used in lieu of bait. The mainline consists of 200-600 lb test monofilament, and may be spooled on a hydraulic drum. One end, with buoy and weight attached in such a way that the gear does not touch the bottom is sent overboard as the boat moves slowly ahead, and the remaining gear is deployed. The weighted buoy line length is adjusted in such a way that does not have bottom contact to reduce the likelihood of bycatch and to prevent the hooks from hanging up on bottom. Hooks are spaced approximately 18-30" apart on 12" monofilament gangions (approximately 60 lb test). Hooks are tied with artificial flies, and no bait is used. This gear is reported by the fisherman to selectively catch chilipepper rockfish when properly deployed (Steve Fosmark, Moss Landing, CA, F/V SeeAdler, Phone: 831-373-5238; cell phones: 831-601-4074; or Boat 831-601-7934 email: FVSeeAdler@aol.com).

The research would be conducted off central California (36 to 37.30 degrees), at depths of approximately 80-120 fm, *but no shallower than 80 fm*. This depth range is currently within the RCA (60-120 fm February -September and from 30-150 fm the rest of the year) established to protect overfished rockfish species.

To ensure that this experimental fishery has a minimal impact on overfished rockfish species, we are requesting caps on the fishery as follows:

Widow rockfish: 1,440 lb (*0.7 mt*) annual cap calculated as a maximum 3% by weight of expected chilipepper take
Bocaccio: 7,200 lb (*3.3 mt*) annual cap calculated as a maximum 15% by weight of expected chilipepper take
Canary: *20 fish* annual cap
Cowcod: *1 fish* annual cap
Yelloweye: *1 fish* annual cap
Darkblotched: 50 lb bimonthly per vessel cap, *0.4 mt* annual cap for all vessels

Under the terms of this EFP, each vessel will carry an observer *with the cost of observer coverage borne by EFP participants*. All species will be retained. Catch of species other than the above are expected to be uncommon although some yellowtail and perhaps other rockfish may be encountered in small numbers. The above caps would apply for each vessel during the two-month cumulative period for the entire EFP and attaining the annual caps for any one species would terminate the EFP for all vessels.

Although the caps specified above are simply recommendations, which we realize may be modified, we provide the following extrapolations to illustrate the maximum potential bycatch of overfished species that could be realized under these caps with the present landing limits in place. We anticipate that fishing as described in this EFP will not be constrained by these caps.

Chilipepper rockfish caught under this EFP will be retained and sold by the permitted vessel. Although we have calculated the maximum weight of overfished rockfish that could be caught under the suggested caps, we believe this fishery will not be constrained by these caps and will have a smaller bycatch than indicated above.

The initial duration of this EFP is for one year. However, if the results of this experiment are successful, we would request that the EFP be extended.

All vessels participating in this EFP fishery will be required to carry an observer. The observer will record all fish caught and ensure that bycatch caps are not exceeded. Vessel captains will keep records of catch by species by set for all sets under this EFP. As it is possible that the catch and bycatch will change seasonally, we expect participants to fish year round (or in each month that the fishery is permitted).

This EFP will incorporate a standardized data collection and reporting format coordinated by the California Department of Fish and Game and the NMFS Northwest Fisheries Science Center. The applicant, Steve Berkeley, will be responsible for data analysis. Data analysis will consist of statistical analysis of catch and bycatch of all species by set, trip, and month. Catch rates will be expressed as catch per hook, per set, per day, and per trip. Value of the catch will be recorded following sale of the catch. The final report will provide an estimate fishing effort and total catch, absolute and relative species composition summarized by set, trip, and month, size composition of catch and bycatch, and sex ratio, and stage of maturity for chilipepper.

Vessel to participate in this EFP fishery will be chosen on their ability to accommodate an observer and their willingness to maintain detailed catch data and their willingness to fish for an entire year.

Application for Issuance of an Exempted Fishing Permit (EFP) to Utilize Hook-and-line and Traps in a Harvesting Cooperative Based on the Catch History of Select Trawl Permits off the Central California Coast

Date of application: June, 2007

Applicant's Contact Information:

Morro Bay/Port San Luis Commercial Fishing Organizations
Presidents: Jeremiah O'Brien, Bill Ward
Contact: Rick Algert, Morro Bay Harbor Master
Harbor Department
1275 Embarcadero
Morro Bay, California 93442
Phone: (805)772-6254
Fax: (805) 772-6258

Rod Fujita, Environmental Defense
California Regional Office
5655 College Avenue; Suite 304
Oakland, CA 94618
Phone: (510) 658-8008
Fax: (510) 658-0630

Michael Bell, The Nature Conservancy
75 Higuera Street, Suite 200
San Luis Obispo, CA 93401
Phone: (805) 594-1658
Cell: (805) 441-1460
Fax: (805) 544-2209

Ms. Marija Vojkovich, California Department of Fish & Game
Santa Barbara, CA
Phone (805) 568-1246
Fax (805) 568-1235

Statement of purpose and goals of the experiment for which an EFP is needed, including a general description of the arrangements for the disposition of all species harvested under the EFP:

Purpose and Goals:

Our goal for the EFP is to test the hypothesis that converting trawl effort into a community-based fishing cooperative that utilizes hook-and-line and traps in the Central California area will improve the economic value and stability of fishing and associated businesses and be cost-effective and manageable within the larger groundfish management structure. The EFP is designed to provide the

Council with practical experience in monitoring and managing a harvesting cooperative with fixed gear that would operate in the context of a trawl IFQ program with the opportunity for gear-switching. Further, it is anticipated as an interim step to inform how we (the applicants) make progress in achieving a larger vision of transforming Central California of Morro Bay/Port San Luis fisheries to be economically and environmentally sustainable. As we work towards rationalizing the Central Coast fisheries, we have designed this EFP to provide information on the economic efficiency of pooling catch limits into a harvesting cooperative or a regional fishery association that utilize longline and traps. The EFP will provide critical information on the socioeconomic effects of gear-switching and dedicated access in addition to informing the cost-effectiveness of managing a co-op within the framework of the Council system. The EFP is structured to inform the Council on the environmental, social, economic, and management impacts of utilizing trawl permits in a fixed gear harvesting cooperative (co-op).

We expect to use the information gained under the EFP to work with the Council, either through the development of the Individual Transferable Quota program or similar fishery management plan (FMP) amendment process that would authorize co-ops. If data indicates the hypothesis is correct, we will work with the Council to develop one or more FMP amendments (or other appropriate policy guidance) that would: (a) allow pooling of Individual Transferable Quotas (ITQ) by co-ops or regional fishery associations; and, (b) allow quotas currently allocated to bottom trawl fisheries to be caught by hook and line or traps. If the data indicates the hypothesis is incorrect, we will consider other means of seeking a long-term ecologically and economically stable fishery for Central California. In either case, data collected under this EFP will be valuable to informing which path to follow to achieve our long term vision for sustainable fisheries in Central California and throughout the West Coast.

Disposition of Species Harvested Under the EFP:

Species caught within the limits authorized for the EFP may be retained and sold by the vessel.

Justification for Issuance of the EFP:

The EFP is relevant to new provisions of the Magnuson-Stevens Fishery Conservation and Management Act (MSFCMA) that allow for Regional Fishery Associations to hold and manage quota (Section 303A(c)(4), P.L. 109-479). The EFP will provide directed practical experience that will assist the Council in its requirement to develop criteria for how such associations are implemented. In particular, the EFP will provide practical experience relative to this new provision by directing catch limits to an area based association that will manage itself within those limits and in concert with (and complementary to) the Council process. Over the long term, this experiment may inform the implementation of this new authority by the Council.

This EFP is a unique opportunity to further a public/private partnership between the Nature Conservancy, Environmental Defense, and the Council, first established through our collective work on Amendment 19 to the Groundfish FMP. This proposal follows up on the Nature Conservancy's commitment to work with the Council to "explore the disposition possibilities of these fishing privileges" associated with the groundfish trawl permits owned by the Nature Conservancy (see page 12 of appendix F to the EIS for Amendment 19). The EFP is designed to study and prepare for the Council's eventual transformation from coastwide management by trip limits to dedicated access (trawl IFQ program). The project relies on Council and federal action to bring together state fishery managers, fishermen, community leaders, and environmentalists in a focused effort to gain practical

experience in area based co-op management and gear-switching. The EFP is designed to illuminate the costs and benefits of allowing individual quota holders in a specific region to pool quota and utilize gear other than trawl to harvest that quota and to take head-on the challenges of monitoring and managing a non-trawl gear harvest co-op in the context of the geographically larger west coast groundfish fishery. It will explore how to structure an economically feasible monitoring system that would provide 100% monitoring of catch while allowing alternative technologies to be employed.

The EFP is warranted because it will serve as a pilot project and provide information that will be crucial for implementing gear switching within the context of a trawl IFQ program while still assuring the there is 100% monitoring of the harvest. The EFP will provide information on the environmental, socioeconomic, and cost-of-management aspects of managing the groundfish fishery in a geographically constrained harvesting co-op that transforms trawl effort to fixed-gear. The relative success of this EFP will inform the future development of multi-species regional fishery associations, or co-ops, in a rationalized groundfish fishery.

It is essential that the co-op have access to commercially viable amounts of fish in order to fully realize its socioeconomic potential and assess the net costs of management. The project team considered requesting an EFP to pool open access quotas into a harvesting co-op; however, it was determined such quotas would be insufficient to attract qualified fishermen and gain realistic experience with gear switching. Supporting this determination is the present day experience of open access sablefish quota going unutilized in the project area because fishermen are not able to profit at such low catch levels (300 lbs per day). On the other hand, the quota associated with the permits owned by the Nature Conservancy was determined to be sufficient given the provisions for gear switching and pooling requested through this EFP. Further, because the harvest associated with the Nature Conservancy's permits are already accounted for in the Council's trip limits for the groundfish fishery, this application does not represent an allocation. Rather, it requests fish already authorized for harvest under the Nature Conservancy permits to be harvest according to the provisions of this EFP.

Socioeconomic

A major focus of the project will be to study the socioeconomic consequences of gear switching and dedicated access of the harvesting co-op. The project will assess changes to fishing behavior, revenue, marketing opportunities, and product value. In addition, the project will assess socioeconomic consequences at the community level. In a practical sense, the project provides new economic opportunities for fishermen and ports that have been impacted by the regulatory and economic changes in the groundfish fishery that can be studied through the EFP. It will help pioneer "sustainable fish marketing," a growing economic opportunity for groundfish fishermen as well as potentially help jumpstart consumer demand, markets, and distribution channels for such products in advance of future gear-switching opportunities.

Cost-of-Management

The EFP will provide practical experience in the monitoring and management of a harvest co-op within the context of the Council's coastwide management of the groundfish fishery. We believe cost-of-management issues are a significant barrier to transforming the groundfish fishery to dedicated access and allowing gear-switching on a coastwide scale and that the experience gained through this project will be indispensable in that transformation. While not an exhaustive list, specific questions that the project team will address include:

- How to develop a cost-effective monitoring program that provides for full accountability within the co-op while meeting the demands of fishery managers?

- How are hard-caps monitored and enforced[1]?
- How is information distributed efficiently between the co-op and fishery managers?
- How to manage a geographic sub-set of the groundfish fishery within the Council's management of the larger, coastwide fishery?

Expected Total Duration of the EFP: One year (with option to re-submit application to the Council for renewal).

Number of Vessels Covered Under the EFP: This EFP will lease the catch limits associated with 6 LE permits owned by The Nature Conservancy. The Project Manager will determine the optimal number of vessels to participate in the co-op based on the goals and objectives described elsewhere in this application.

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As an alternative to assigning permits to specific vessels, we would prefer to identify which vessels are participating in the EFP and attribute and document their landings and catch limits to the EFP. We recognize the need for guidance from the GMT on this issue and will work with them prior to initiation of fishing under the EFP.

Species to be Harvested or Discarded Under the EFP:

The following species have been identified, through an examination of Morro Bay ex-vessel revenue data and interviews with Central Coast fishermen, to be catchable in commercially viable amounts by long line or pot gears:

- Sablefish
- Slope Rockfish (e.g. blackgill)
- Longspine thornyhead
- Shortspine thornyhead
- Lingcod
- Other

Vessels will use longline and traps and will fish throughout the fishing year. Fishing will be constrained south of 36-degrees North latitude and deeper than the 150 fathom (as approximated in the regulations that define the rockfish conservation area). All fishing by vessels will be done in compliance with state and federal regulations. Total catch caps for the co-op will be apportioned as follows:

Sablefish:	**No upfront allocation – EFP will pool trip limits associated with the 6 TNC trawl permits and fish them cooperatively within normal regulations and be subject to inseason adjustments.** Special consideration is being given to how best to incorporate sablefish into this EFP, due to the unique "Conception Area" OY and high demand for this species.

[1] The term "enforced" here refers to private sector enforcement of individual allocations.

	Option 1: EFP will fish under normal 60 day trawl cumulative trip limit. The coop would be accountable to normal Council tracking and inseason adjustment procedures, with the goal of pacing the fishery and minimizing impacts on the other fishing operations in the Conception Area. Option 2: EFP will fish under new 60 day trawl cumulative trip limits based on the weekly fixed gear limit (currently 1,050 lbs/week). The coop would be accountable to normal Council tracking and inseason adjustment procedures, with the goal of pacing the fishery and minimizing impacts on the other fishing operations in the Conception Area.
All other target species:	(hard caps for EFP TBD - Calculated as follows: 2008 harvest specification summed annual limit for limited entry trawl gear[2] multiplied by the six trawl permits owned by the Nature Conservancy covered in this EFP.
Canary Rockfish:	hard cap for the EFP of 200-300 lbs
Yelloweye Rockfish:	hard cap for the EFP of 50-150lbs
Widow Rockfish:	hard cap for the EFP of 2 mt
Darkblotched Rockfish:	hard cap for the EFP up to 1000 lbs
Pacific Ocean Perch:	hard cap for the EFP up to 300 lbs
Cowcod	hard cap for the EFP 200-300 lbs
Bocaccio	hard cap for the EFP of 1000-2000 lbs

All caps will be apportioned to individual vessels within the co-op at the discretion of the project manager to achieve the goals of the EFP.

Mechanism for Ensuring Harvest Limits (target and incidental) Are Not Exceeded and are Accurately Accounted

Harvest limits will be monitored by observers and through landings data. Total landings and discard of all species will be accounted for the project director who will regularly report to the Council. All fishing under the EFP will be terminated (for all vessels) when mortality limits are reached.

Proposed Data Collection and Analysis Methodology

Immediately following the June Council meeting, the project team will establish a steering committee to develop data collection protocols for the socioeconomic and cost-of-management aspects of the study. The protocols will be developed to inform the larger goals of the study (as described in the justifications section above) as well as to inform the Council's ongoing fishery management process.

The composition of the steering committee will reflect the socioeconomic and cost-of-management goals of the EFP. At a minimum, we anticipate having experts in groundfish management, commercial fishing, and socioeconomics.

[2] As described at 50 CFR Part 660,Subpart G, § 660.381

The process we will use to determine exact data collection protocols follows:

1. Establish a Steering Committee and Project Manager to oversee the implementation and analysis of the EFP;
2. Consult with the Steering Committee to establish observer coverage levels and protocols for tracking total catch for the purposes of internal co-op management and staying within harvest caps;
3. Steering Committee develops specific metrics to measure the outcome of the EFP; including environmental, economic, social, and cost-of-management performance.
    a. Quantitative analysis of metrics, where applicable, based on fish tickets, on-board observer data and other quantitative results
    b. Qualitative analysis of fishermen and participants perceptions of the EFP, following a standard format and protocol. A sample interview guide is attached and can provide the basis for developing an appropriate set of questions for this EFP
4. In consultation with the Steering Committee, the Project Manager will oversee data collections.

Specific data collection protocols will be developed according to the project management schedule below.

For in-season monitoring relative to catch limits, the project director will summarize data on a weekly basis and track catches relative to the overall EFP caps. The project manager will potentially move to daily tracking as the EFP approaches its catch limits. All fishing will be ceased prior to attaining the caps associated with this EFP. At the end of the fishing year, the project director will summarize the data in a report that will be made available to the Council. Any unintentional overages will be reported to the Council as soon as the project manager is aware of them. Observer coverage levels will be established in consultation with NWFSC prior to Council final action on this EFP.

Exploring at-sea data collection methodologies that are cost-effective, allow for full accountability of individual fishermen within the co-op, and can provide the Council with necessary fisheries management information is a major point of emphasis for this EFP. Preliminary cost estimates indicate that requiring 100% observer information on all vessels is expensive; however, there is a need for each vessel to be fully accountable for hard species caps. The project director, in consultation with the EFP steering committee will assess observer cost structures, and may test different observer coverage levels, on-board cameras, and other appropriate means of tracking catch and landings. Specific protocols will be developed prior to launching the EFP according to the project management schedule below. The information will be synthesized in order to advise the Council on alternatives for a cost-effective at-sea monitoring program that meets the goals of the co-op and fisheries managers.

Description of How Vessels will be Chosen to Participate in the EFP

The Nature Conservancy will lease permits and the associated catch limits in an unbiased and equitable manner to interested and qualified fishermen. Preference will be given to fishermen with experience using hook-and-line and pots in the geographic area of study. We anticipate that the demand for leases will exceed the number of permits available. Should this be the case, the Conservancy will select fishermen using a lottery system.

For Each Vessel, the Approximate Time(s) and Place(s) Fishing Will Take Place, and the Type, Size, and Amount of Gear to be Used

Vessels will use longline and traps and will fish throughout the fishing year. Fishing will be constrained south of 36-degrees North latitude and seaward than the 150 fathom (as approximated in the regulations that define the rockfish conservation area).

Project Management and Personnel

Fishing leases will be managed by The Nature Conservancy. Data collection, analysis, and reporting will be managed by an independent third party and steering committee. The steering committee will be named sometime after the June 2007 Council meeting and will include 2-5 people with expertise in fishing, project management, and socioeconomics.

Project Milestones

May 25, 2007	EFP Proposal delivered to Council
June 10-15, 2007	GMT/SSC review and comment on proposal
Summer/early fall 2007	Consider comments/finalize experimental design/secure funding
October 19, 2007	Revised EFP Proposal delivered to Council
November 4-9, 2007	Council adopts EFP
Dec./Jan 2008	Vessel selection/observer training
February 2008	Commence exempted fishing
Throughout 2008	Track total catch and report to Council as necessary.
April 2009	Preliminary report to Council.
November 2009	Final report to Council

GROUNDFISH ADVISORY SUBPANEL REPORT ON PRELIMINARY REVIEW OF EXEMPTED FISHING PERMITS (EFPs) FOR 2008

The Groundfish Advisory Subpanel (GAP) discussed four applications for Exempted Fishing Permits for the 2008 season and has the following recommendations and comments.

Applications 1, 2, and 4

The GAP recommends forwarding the three EFP applications which seek to test different hook and line configurations to fish both commercially and recreationally for rockfish species off central and northern California. The GAP stresses that there are unknown risk factors involved with each of these EFPs with regards to potential bycatch of depleted species. The GAP recommends that bycatch caps are articulated specifically in order to determine whether the scorecard can accommodate the potential bycatch impacts. The GAP also recommends that the applicants explore the potential costs associated with the EFPs including fuel, observers and other operational costs and whether the potential benefits of the EFP outweigh the cost of implementing the permit. Further, if the bycatch projections could cause disruption to existing fisheries the GAP believes the caps should be amended or the EFPs should not be forwarded for consideration.

Application 3

The GAP does not support forwarding The Nature Conservancy/Environmental Defense (TNC/ED) EFP application for further consideration. The GAP believes that the hypothesis the applicants seek to test does not require special privileges or an EFP. Regional-based co-ops exist in other areas of the country; this is not a ground-breaking endeavor. If the TNC/ED partnership wishes to explore the potential benefits of a cooperative regional fishery management organization and report their findings on how the co-op works to help inform the individual quota (IQ) process - they can do that with existing limited entry fixed gear vessels in the Morro Bay area under existing limited entry fixed gear limits. While they argue that they want to "pool" the trip limits to share among participants they have also stated that they would like to support several vessels – so in the end the vessels will likely be relegated to similar trip limits to those that are currently in place. The applicants could also test their hypothesis with open access vessels in the area under existing open access limits. The TNC/ED partnership has argued that the low open access trip limits do not provide enough fish to make the co-op successfully operable. However, working within existing trip limits more closely reflect reality versus utilizing an artificial limit.

The GAP believes that the EFP as proposed is a reallocation of fish and the GAP questions where the additional fish requested will come from. We further believe that the EFP as written could harm other fishermen operating under the same sablefish optimum yield (OY) in the area. The TNC seems to believe that they have guaranteed access to landings history associated with 6 trawl permits that were bought in Morro Bay. It is unclear to the GAP what the landings history associated with these permits is. The GAP reminds the Council and the applicants that until there is an individual trawl quota program in place, there is no guaranteed access to any amount of fish and there is no hard allocation. Further, the GAP questions the biological effects of taking a larger amount of a single species from an area where the fishery has traditionally landed

a lesser amount of fish. In other words, we believe there could be issues with localized depletion that have not been fully explored.

If the TNC/ED partnership wishes to explore how regional fishery organizations work and report their findings to inform the IQ process they do not require special privileges or an EFP in order to do that. The experiment will still be ongoing when final preferred options in the trawl IQ process are selected so it is unclear how this experiment would inform the IQ program. The GAP is opposed to forwarding this EFP for consideration.

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GROUNDFISH MANAGEMENT TEAM REPORT ON PRELIMINARY REVIEW OF EXEMPTED FISHING PERMITS (EFPs) FOR 2008

The Groundfish Management Team (GMT) reviewed the technical merit of the four exempted fishing permit (EFP) applications. Three of the proposed EFPs evaluate the effectiveness of using different gear types in various areas to target a specific species while avoiding bycatch of overfished species. One of the EFPs proposes to investigate converting trawl effort into a regional fishery management association that utilizes hook and line and traps, to evaluate the stability of fishing and associated businesses as well as cost-effectiveness.

The GMT reviewed the applications relative to evaluation criteria in the Council's Operating Procedure (COP) on EFPs. EFPs are designed to promote increased utilization of underutilized species, realize the expansion potential of the domestic groundfish fishery, and increase the harvest efficiency of the fishery consistent with the Magnuson-Stevens Act and the management goals of the Fishery Management Plan. EFPs are also commonly used to explore ways to reduce effort on depressed stocks, encourage innovation and efficiency in the fisheries, provide access to constrained target stocks while directly measuring the bycatch associated with those fishing strategies, and to evaluate current and proposed management measures. A primary requirement of EFPs is the evaluation of fishing gear or management measures that can be transferred into regulation and applied fleetwide. EFPs that rely upon fisher experience, skill or ability that cannot be harnessed through a regulation fail to meet this requirement.

The GMT only reviewed the technical merits of the EFPs and notes that the Council will likely need to make their decision based on the availability of overfished species in the November scorecard, which will contain the most up to date projection for the 2008 fisheries.

Churchman (Agenda Item E.5.a, Attachment 1)
This application proposes to target chilipepper, widow, and bocaccio rockfish using vertical non-bottom contact gear outside the non-trawl Rockfish Conservation Area in central California (40°10' to 36° N. lat). The EFP proposes to use one vessel and limit the number of hooks to 100 per set. This experiment will explore whether discard can be virtually eliminated by using a rod and reel method, thereby reducing bycatch.

The GMT questions the innovation of the proposal, as it relies on skipper expertise rather than a new fishing technique or methodology. We suggest that the applicant refine the EFP to include a new fishing technique or gear type (e.g., adding a float to keep the fixed gear off the bottom) that, if successful, could be replicated fleetwide and transferred into regulation. The proposal states that there are no catch allowances for canary, cowcod, or yelloweye rockfish. The GMT suggests adding minimal caps to allow for the incidental take of those species to prevent the EFP from prematurely being shut down if any of these species are encountered. The GMT also notes that with all EFPs, 100% at-sea observer coverage is necessary and the application would need to incorporate this.

The GMT does not support the proposal as written due to the concerns above. Although the GMT would support a revision to include a new gear description, we feel it would reflect a major change, resulting in a new EFP. The GMT does not feel that we would be able to adequately

review the new EFP within the Council timeline for the 2008 EFP season. The GMT does encourage the participant to develop a new fishing technique or gear type that, if successful, could be replicated fleetwide and transferred into regulation.

Berkeley proposal (Agenda Item E.5.a, Attachment 2)
This application proposes to target chilipepper rockfish using an epipelagic longline gear in central California (36° to 37°30' N. lat), with the long-term objective of evaluating the effectiveness of a species-specific longline technique for its potential of providing future economic opportunities. This EFP proposes to use up to three vessels and open access troll fly and vertical hook and line gear that is set and fished in a unique way such that the hooks sink near to, but not on, the bottom.

This proposal was well thought out, met most of the criteria required for EFPs, and may have technical merit. However, the GMT had difficulty envisioning the gear and requests more information on the "unique way" that the gear will be deployed to help determine whether the concept can be transferred fleetwide. A primary requirement of EFPs is the evaluation of fishing gear or management measures that can be transferred into regulation and applied fleetwide. Therefore, this EFP must meet this requirement in order to be approved.

Nature Conservancy and Environmental Defense (Agenda Item E.5.a, Attachment 3)
The GMT reviewed the EFP application from the Nature Conservancy (TNC) and Environmental Defense, which proposes the initiation of a slope groundfish fishery by vessels with trawl permits that use non-trawl gear in a regional fishing association on the central California coast. TNC designed this EFP to provide information on the economic efficacy of pooling catch limits into a harvesting cooperative, or a regional fishery association, that utilizes longline and traps. The EFP is intended to provide information on the socioeconomic effects of gear-switching and dedicated access in addition to informing the cost-effectiveness of managing a regional fishing association within the framework of the Council system.

The GMT is in support of this proposal because it can provide useful information on economic efficiency, gear switching, and transference to co-ops as well as help inform future management decisions on a coast wide basis. Although this proposal does not use a new gear type and whiting co-ops are currently in operation, it does satisfy the definition of an EFP as defined in the COPs. This EFP will provide information towards evaluating current and proposed management measures, specifically as it applies to the trawl rationalization program. This multi-species, multi-target fishery uses multiple gear types and is significantly different from the whiting fishery. Additionally, the proposed EFP co-op is a regional fishery association and not a sector co-op, like whiting. Even if the socioeconomic or cost/benefit results are not available prior to initial development of a rationalization program, they could still prove informative for groups seeking to develop co-ops after a rationalization program has been developed. Similarly the results may have value for both managers and fishery participants during the first scheduled review of the rationalization program. Therefore the GMT believes there is technical merit in this proposal.

The GMT notes that if the requested total allocation of sablefish (60-day cumulative trip limits based on the weekly fixed gear – 1,050 lbs/week) is achieved, it would result in over 130 metric tons of sablefish. The GMT recommends that the proposal authors resubmit a lower cap for sablefish.

One premise of this EFP is to evaluate the socioeconomic aspects and cost effectiveness of co-ops. Therefore, the GMT requests more information on the socioeconomic component as well as full accounting of the co-op budget and revenues to inform the feasibility of future rationalization programs.

Recreational Fishing Association (Agenda Item E.5.a, Attachment 4)
This EFP proposes to investigate recreational hook and line fishing of slope rockfish in north-central California (Pigeon Point to 40°10' N. lat) seaward of the RCA. The goal of this EFP is to investigate whether a recreational fishery can still occur on the slope without impacts to overfished species. If successful, this might open a new market for charter fleets during months when inshore rockfish seasons are closed.

This proposal, as written, is an area EFP which does not incorporate a new innovative gear. The GMT suggests that the technical merit of this EFP would improve with a selective gear component. The application also describes using Electronic Monitoring System (EMS), yet EMS has not been tested on Commercial Passenger Fishing Vessels (CPFV). As with the other EFPs, the GMT indicates that 100% at-sea observer coverage is necessary. Specifically, we recommend using a Pacific States Marine Fisheries Commission recreational sampler, preferably with experience observing aboard CPFVs. EFPs can only be conducted for the duration of one year, so this proposal also needs to be modified. This proposal only suggests fishing during those months when the nearshore fishing is closed, yet if the goal of the proposal is to demonstrate the applicability to a year round fishing opportunity, then the GMT suggests that the EFP be conducted year-round to examine seasonality of species compositions. The GMT also suggests that the proposed hard caps be decreased.

The GMT does recognize the potential of this EFP, but recommends that the applicant further define any new novel gear and work with the California Department of Fish and Game to further refine the sample design.

GMT Recommendations:

1. The Churchman proposal be redesigned and resubmitted in June 2008 based on the reasons stated above.
2. The GMT acknowledges the technical merit of the remaining EFPs and recommends revisions based on items addressed above.

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06/13/07

STOCK ASSESSMENTS FOR 2009-2010 GROUNDFISH FISHERIES

The Council process for setting groundfish harvest levels and other specifications depends on periodic assessments of the status of groundfish stocks and a report from an established assessment review body or, in the Council parlance, a Stock Assessment Review (STAR) Panel. The Scientific and Statistical Committee (SSC) reviews this information and makes a recommendation relative to the standards of 1) the best available science and 2) soundness for use in groundfish fishery management decision-making by the Council. The Council then approves the new assessments and relevant analyses used to set groundfish harvest levels and other specifications for the following biennial management period.

New full assessments for sablefish and longnose skate were recently prepared and reviewed by a STAR Panel. The executive summaries of these assessments and the associated STAR Panel reports are provided as Agenda Item E.6.a, Attachments 1-4. Additionally, members of the Groundfish Subcommittee of the SSC, the Groundfish Management Team (GMT), and Groundfish Advisory Subpanel (GAP) are scheduled to review five updated assessments during the weekend preceding the June Council meeting (see Ancillary Agenda A). The executive summaries of these five updated assessments are provided as Agenda Item E.6.a, Attachments 5-9 and **all the assessments in their entirety and STAR Panel reports under Council consideration at this meeting are included in the CD copy of meeting materials.**

A shortbelly rockfish assessment was done in 2005 and reviewed outside the Council process. It was published last year in a NOAA Technical Memorandum. The SSC Groundfish Subcommittee, GMT, and GAP will also review this assessment and the comments from last year's reviewers. Since there is no executive summary available for this assessment, only an electronic copy of the assessment and the reviewers' comments are available on the CD copy of meeting materials.

The Council should consider the new full and updated assessments and STAR Panel reports, as well as the advice of the SSC, other advisory bodies, and the public before adopting the new stock assessments for use in 2009-2010 groundfish management.

Council Action:

Approve stock assessments recommended by the SSC.

Reference Materials:

1. Agenda Item E.6.a, Attachment 1: Executive Summary of "Status of the Sablefish Resource off the Continental U.S. Pacific Coast in 2007".
2. Agenda Item E.6.a, Attachment 2: Sablefish STAR Panel Report.
3. Agenda Item E.6.a, Attachment 3: Executive Summary of "Status of the Longnose Skate (*Raja rhina*) off the continental U.S. Pacific Coast in 2007.
4. Agenda Item E.6.a, Attachment 4: Longnose Skate STAR Panel Report.
5. Agenda Item E.6.a, Attachment 5: Executive Summary of "Updated U.S. English Sole Stock Assessment: Status of the Resource in 2007".

6. Agenda Item E.6.a, Attachment 6: Executive Summary of "Status and Future Prospects for the Pacific Ocean Perch Resource in Waters off Washington and Oregon as Assessed in 2007".
7. Agenda Item E.6.a, Attachment 7: Executive Summary of "Status of the Widow Rockfish Resource in 2007: An Update".
8. Agenda Item E.6.a, Attachment 8: Executive Summary of "Status of Cowcod, *Sebastes levis*, in the Southern California Bight".
9. Agenda Item E.6.a, Attachment 9: Executive Summary of "Update to the Status of Yelloweye Rockfish (*Sebastes ruberrimus*) off the U.S. West Coast in 2007".

Agenda Order:

a. Agenda Item Overview	John DeVore
b. SSC Report	Bob Conrad
c. Reports and Comments of Advisory Bodies	
d. Public Comment	
e. **Council Action:** Approve Stock Assessments	

PFMC
05/25/07

Sablefish STAR Panel Report

National Marine Fisheries Service
Hatfield Marine Science Center
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2032 S.E. Oregon State University Drive
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May 7-11, 2007

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Stock Assessment Team:
Michael Schirripa, Northwest Fisheries Science Center (NWFSC)

Overview

The West Coast sablefish stock assessment assumes a unit stock in the waters off Oregon, Washington, and California. The draft stock assessment was conducted using a recent version of Stock Synthesis 2 (SS2) and used data from many sources. Five alternative model configurations were presented, with the proposed base model using nine data sources including two environmental variables as recruitment indices. The proposed configurations excluded logbook and pot survey indices which were used in the previous assessment. All model configurations included available length, age, and biomass data from four bottom trawl surveys of the slope or shelf. Available length and age data from trawl, hook and line, and pot fleets were included. The estimated catch history extended back to 1915 (split into the three gears). All proposed configurations had the proportionality constant (q) for the NWFSC slope survey fixed at 1.

The STAR Panel was concerned about many aspects of the proposed base model. In general terms, there were three main concerns. First, the model appeared too complex relative to the expected information content of the available data. Second, the age, length, and length-at-age data from each data source were input into the model as if they were independent (when they clearly were not). Finally, the assumption of q=1 had no firm basis. In specific terms, the STAR Panel had one over-riding concern with the base model. The model did not fit the NWFSC slope survey abundance indices despite the assumption of q=1. The expected values were almost all larger than the observed values (they went "over the top").

The STAR Panel and STAT worked towards a new base model by making progressive changes to the proposed base model. Minor changes included the incorporation of some discard rate data that were available but had not been used, a tightening of the allowed variability on the annual fishery selectivities, and the exclusion of the zooplankton time series. Iterative re-weighting procedures were also applied to the age and length frequency data sets.

An important change was made to the NWFSC slope survey biomass indices. In some years, in the Conception stratum, all trawl stations were north of Point Conception and the average catch rate had been applied to the whole stratum area – despite catch rates being much lower south of Point Conception. A new biomass time series was obtained in which the Conception stratum extended only to Point Conception.

An informative prior was developed for the NWFSC slope survey q by considering its individual components and using the expert opinion of meeting participants (and some data) to bound each component. The median of the prior was obtained by using the "best guesses" for each component. The range on q was (0.22, 0.86) with a "best guess" of 0.56. A prior was formed by equating the "bounds" to 99% of the distribution. The prior was used in a model run but the estimated q was well outside the "bounds." The decision was made to fix q at the median of the prior for a revised base model.

After the above changes were incorporated the revised base model still exhibited the "over the top" problem. This problem was addressed by down-weighting the commercial fishery age and length frequencies (by shifting the emphasis level from 1.0 to 0.1). This is a pragmatic approach, which the STAR Panel and STAT agreed was justified given the uneven spatial and temporal coverage of the commercial fishery sampling (and hence the large potential that the data were not representative).

Uncertainty in the base model was represented by three sensitivity runs: a lower *q*, a higher *q*, and a run excluding the environmental time series.

Analyses requested by the STAR Panel

Round 1 requests

A: Use discard rates from Pikitch et al. (1988) and the ADCP database and interpolate where necessary. Briefly compare model results to base-run model (spawning biomass trajectory).

B: Two requests re the NWFSC slope survey:

1. Produce a plot of the proportion of biomass in the Conception stratum each year.
2. Obtain mean catch rates and biomass estimates for north and south of Point Conception for each year.

C: Time series of selectivities for each fishery:

1. Plots of selectivity at length, for the following lengths:

   H&L: 51 cm
   Pot: 49 cm
   Trawl: 45 cm

2. Plots of selectivity at age 40 (all fisheries).

D: Develop an age-only run with the following specifications:

1. Fit only to biomass indices and age frequencies.
   Three fisheries.
   Estimate age-based selectivities (constant for each fishery)
   Estimate recruitment deviations.
   Estimate all *q*s
   Fix steepness = 0.5

2. Variation on D1: allow selectivities to vary annually to better fit age frequencies

3. Variation on D1: q=1

Round 1 responses

Run A showed little change from the original base model (Configuration 4).

A request was placed to obtain the NWFSC trawl survey data and biomass estimates – reporting on Request B was delayed until the data arrived. Further requests were made with regard to this biomass time series which superseded/included this request (see Round 2 requests).

The time series of length and age selectivities were produced and showed very wide variation in selectivity across years. Few consistent trends, if any, were visible. The suggestion was made to tighten the sd on annual deviations (see Round 2 requests).

All three runs in request D were completed and the diagnostics for run D1 were examined in detail by the Panel and STAT. Several issues arose during the presentation of the results.

The poor fit to NWFSC slope survey biomass indices seen in the base model was fixed but the estimated q was unrealistically low. A poor fit was noted for NWFSC slope survey age frequencies in the plus group, with too many males observed and not enough females (relative to the models expectations). Peculiar data in the age-length observations for AFSC slope survey were noted – the data at times appeared too regular, forming perfect linear relationships. Some peculiar fits to age data were also seen – there appeared to be very high predicted values for some young age classes, which implied a strong cohort within the model, but when the age-0 recruits were examined, the cohorts were not strong (Dr Haist suggested that the predicted values must be accumulations from age 1 – and she was subsequently proven correct – an SS2 feature.)

The biomass time series for NWFSC slope survey was again discussed – in particular the change from a GLM approach to an area-swept approach. The STAT expressed concern about the GLM results used previously and the interpretation of them as biomass. Hence the STAT argued in favor of a change to the simpler and more easily understood swept-area method. The iterative re-weighting method used by the STAT was discussed – the method used was determined to be inappropriate as it potentially changed the relative sample sizes across years within a data set.

Runs D2 and D3 were briefly examined. The estimation of annual selectivities in D2 gave a much improved fit (200 likelihood units, for 60 constrained parameters), but annual deviations were still “very wild”. Run D3, which again fixed q=1, gave similar results to the base model and exhibited the same bad fit to the NWFSC slope survey biomass indices (going “over the top” of the observations).

There was a verbal request for the STAT to try a variation on D3 with R_0 fixed at 80% of its estimated value. The idea being that the model would then be forced to fit NWFSC slope survey biomass and there was interest in seeing which likelihood components degraded (and hence which data sets "preferred" the higher biomass – and hence caused the "over the top" problem.) This run did not initiate successfully. A "crash" penalty occurred almost immediately, a consequence of exceeding the maximum exploitation rate. Dr Haist requested that the input files be made available to her to investigate. The STAT volunteered to investigate the cause of the "over the top" problem using the base model.

Round 2 requests

E: Two runs building on the "progressive" base case (see A in Round 1 requests):

A1: Change sd on annual deviations for selectivities to 0.35; and use the recommended iterative re-weighting procedure

A2: In addition to A1, change to "north of Point Conception" biomass time series.

F: Produce a plot of the "north of Point Conception" biomass time series from swept area and the corresponding GLM time series used in the previous assessment.

G: Investigate and report on the strong yet average cohort seen in run D1 (strong on age fit but not a strong cohort (in 1988 and 1999 age composition) according to age 0 recruits).

H: Investigate and report on the "too regular" age-length data.

I: Plot the biomass estimates and/or density (kg/ha) north and south of Point Conception within the Conception INPFC area.

Round 2 responses

Runs A1 and A2 were partially completed because the iterative re-weighting was not repeated long enough for convergence. The changes made little difference to the results and the "over the top" problem still existed. When q was estimated in a variation of A2 the estimate was again unrealistically low.

The new area-swept "north of Point Conception" time series and the corresponding 2005 GLM time series showed similar trends but with the GLM time series at a higher absolute level (and curiously expressed in units of "1000 t / 2 ha").

Requests G and H were not able to be done (request G was subsequently not needed as Dr Haist's suspicion was later confirmed; and request H was repeated in Round 3 requests).

The density estimates north of Point Conception within the Conception stratum were shown to be typically much higher than those south of Point Conception (confirming that the NWFSC time series used in the original base model was inappropriate).

Formation of a prior for the NWFSC slope trawl survey

The STAR Panel Chair suggested to the STATs (for both sablefish and longnose skate) that it could be beneficial to construct informed priors for the trawl surveys where each of them had fixed q=1. A joint session was held for this since the proposed method was identical for both species. There was a general discussion on what the approach entailed and both STATs agreed to participate. The general approach described below has been used in New Zealand for several years in one form or another.

The approach requires that the trawl survey q is split into three components: areal availability (the proportion of stock biomass in the trawl survey area), vertical availability (the proportion of biomass in the water column that is available to the trawl after vertical herding), and vulnerability (the proportion of biomass between the wings (assuming wing-spread estimates) that is retained in the cod-end). During discussions, areal availability was split into two components: depth and latitude (essentially being the proportion of biomass south of the southern survey-area boundary).

Discussions were held on each of the four components for sablefish, with regard to what was thought to be fully selected fish (being about 53 cm long and perhaps 3-6 years old). The objective with regard to each component was to agree a "lower bound", an "upper bound", and a "best guess". By default, the best guess was the mid-point of the bounds. It was noted that data were available to help with some components (e.g. proportion of biomass south of Point Conception) and finalization of the bounds and best guesses were delayed until the data became available.

The final bounds and best guesses for each component were:

	Depth	Latitude	Vertical av.	Vulnerability
Low	0.85	0.82	0.8	0.4
High	0.98	0.88	1.0	1.0
Best	Mid point	0.85	Mid point	0.8

NWFSC slope trawl survey data from 2003-2006 were used to determine the latitude values. Other values were chosen by consensus (in particular, for the bounds, on the basis that everyone was willing to accept that the "true" value was within the specified bounds).

The consequent bounds on *q* and the best guess are: (0.22, 0.86) and 0.56. The best guess was equated to the median of a lognormal distribution and the bounds to 99% of that distribution. This gave a normal prior on log(*q*): mean = -0.58, sd = 0.184.

The normal prior on log(*q*) was subsequently used to provide three qs for model runs with nominal weights of 25%, 50%, and 25%. A random sample of size 10,000 was generated from the normal distribution and the mean of the samples below the 25th percentile (of the normal distribution) was exponentiated to provide the "low *q*". Similarly, the mean of the samples above the 75th percentile was exponentiated to provide the "high *q*". The median of the prior was used in the base model.

The low, base, and high *q*s were: 0.445, 0.560, 0.712.

Round 3 requests

H: Still to be done (see "Round 2 requests")

J: Four runs – building on progressive base case.

J1: Configuration 4 with discard rate data added (Run A) + tighter sd on annual selectivities (part of A1) + "north of Point Conception" times series (A2) + iterative re-weighting (using ratio of arithmetic means).

J2: Single change from J1: *q* = 0.56 (NWFSC slope survey)

J3: Single change from J2: age based selectivity for the NWFSC slope survey (free up as many parameters as possible)

J4: Single change from J3: estimate *q*

Round 3 responses

Request H was held over from Round 2 requests and required that the "too regular" age-length data be investigated (and corrected). However, the STAT concentrated on request J. An explanation for the "too regular" data was provided: at some time in the past, some age-length estimates had been extended across multiple ages to "get the model working", and the actual data had never put back in.

Run J1 still had the "over the top" problem, as did J2, but to a lesser extent. The results of J3 were not encouraging with poor fits to the age and length frequencies for the NWFSC slope survey. The reason for moving to an age based selectivity for NWFSC slope survey was to ensure that the fixed value of *q* was easily interpretable. There had been a concern within the STAR Panel that the length-age selectivities only reached a maximum of 0.8 when represented as selectivity at age integrated over length (which meant that there were no ages at which all of the fish were fully selected at length).

Verbal requests were made for variations on J3 and J4: removing the NWFSC slope survey length frequencies and ensuring that the age selectivity had initial parameters that made it suitably domed. The variation on J3 resulted in a selectivity that hit bounds on 3 or 4 of the parameters and the run was quickly (but perhaps too hastily) dismissed by the STAR Panel and STAT.

The decision was jointly taken to return to Run J2 as a "progressive" base model. This had the problem that NWFSC slope survey selectivity was age-length based and that the interpretation of *q* was problematic because the length-integrated age selectivity only reached a maximum of 0.8. The STAR Panel was concerned that only a "small locus" of age and length combinations were fully selected. Therefore, the decision was made to rescale the prior on *q* by increasing all values by the reciprocal of 0.8 to account for the expected maximum value of the length-integrated age selectivity.

Round 4 requests

K: Four runs, a base run and three sensitivities (using a rescaled *q* prior based on a maximum age selectivity for NWFSC slope survey of 0.8):

K1: Run J2 with the zooplankton index removed and q = 0.7. Iterative re-weighting must then be completed (this to be done for the age and length frequencies as well as biomass time series for the AFSC shelf survey and the NWFSC slope survey). When the re-weighting is complete, check the fit for NWFSC slope survey biomass. If the "over-the-top" problem occurs for NWFSC slope survey biomass, then the lambda should be increased to 5 (or higher – until the over-the-top problem is resolved). The end result is the base run.

K2: K1 with $q = 0.556$

K3: K1 with $q = 0.890$

K4: K1 with SSH removed.

The decision to rescale the prior on *q* was revisited by the STAR Panel before the Round 4 requests were completed (indeed before K1 was completed). An examination of NWFSC slope survey length frequencies, the observed age-length relationship, and the estimated age-length selectivities convinced the Panel that there were a relatively wide range of ages at which lengths around 53 cm were fully selected. It was decided that the original prior on *q* could stand.

Round 5 requests

L: Further consideration of whether the *q*-prior should be re-scaled or not lead to the conclusion that it should not be (as there appears to be a wide range of ages for

which a reasonable number of length bins are fully selected). Therefore, the three runs with fixed *q* need to be done at the original values. The iterative re-weighting and the determination of the NWFSC slope survey lambda should not be redone.

Also, discard data from 2005 are available and should be used for 2005 and future years in preference to the 2004 data.

Three further runs are requested:

L1: K1 with $q = 0.445$ and the 2005 discard data
L2: K1 with $q = 0.560$ and the 2005 discard data
L3: K1 with $q = 0.712$ and the 2005 discard data

Round 4 & 5 responses

Run K1 was partially completed. The STAT reported that after iterative re-weighting, the NWFSC slope survey biomass time series had been substantially down-weighted and the "over the top" problem persisted. After an unsuccessful run with an emphasis level (lambda) of 5, the STAT was uncomfortable with further up-weighting NWFSC slope survey biomass by increasing the emphasis level – wondering what was the point of down-weighting it by one means only to then up-weight it by another. The STAR Panel's explanation, that the initial iterative re-weighting was to provide a "starting point", and that the subsequent up-weighting of NWFSC slope survey biomass was the quickest way to solve the "over the top" problem, was not accepted by the STAT.

Nevertheless, the STAR Panel requested that a run be done with extreme emphasis on NWFSC slope survey biomass simply to see if it would solve the "over the top" problem. While the run was executing, options for other runs were discussed. It was decided to make one last attempt to find a base run which was acceptable to both the STAT and the STAR Panel.

The resolution of the "over the top" problem

A possible cause of the "over the top" problem had been identified by the STAR Panel by pursuing the variation on D3 that had failed to run because of "crash" penalties. Dr Haist had got the variation running and the model had responded by changing the estimated growth parameters. Another variation was run with the growth parameters fixed at their D3 estimates. In this variation, the NWFSC slope survey biomass indices were properly fitted (with a gain of 2 likelihood units) and the likelihood components to suffer (by about 7 units) were the age frequencies from the commercial fisheries. The STAT had, under their own volition, tried a run where the commercial age frequencies were down-weighted in the original base model, but the "over the top" problem had persisted.

The STAT suggested that perhaps the age *and* length frequencies needed to be down-weighted for the commercial fisheries. The potential lack of representative sampling

suggested that these data may be problematic. It was decided to remove the additional process error from the AFSC shelf survey and NWFSC slope survey biomass indices and to shift the emphasis factors on the commercial data from 1 to 0.1. The emphasis level on NWFSC slope survey biomass was reset to 1. The idea being to down-weight the problematic data rather than up-weight the data that needed to be fitted properly. The previous day we had chosen the up-weighting option because it was not clear which data sets needed to be down-weighted to solve the problem.

The down-weighting variation worked with an emphasis level of 1 on the NWFSC slope survey biomass. The up-weighting option also solved the "over the top" problem and gave very similar results to the down-weighting variation. The down-weighting variation was accepted as a base model and the definition of the three sensitivity runs was modified accordingly.

Final base model description

The final base model was a modification of the original base model (configuration 4). The changes were:

- Discard rates from Pikitch et al. 1988 and the ADCP database were used and values interpolated as necessary.
- Discard rates from 2005 were used in 2005 and later years (previously, 2004 rates were assumed to apply from 2005 onwards).
- The biomass time series for NWFSC slope survey was replaced by the "north of Point Conception" time series.
- The zooplankton time series was excluded.
- The sd for annual deviations on fishing selectivities was reduced from 1.0 to 0.35.
- The NWFSC slope survey q was fixed at 0.56 (the median of the informative prior).
- Iterative re-weighting was applied to the age and length frequency data sets after which the emphasis levels on the commercial fishery age and length frequencies were set to 0.1 (rather than 1).

It is interesting to note that the original base model gave very similar results to the revised base model. This is coincidental. The original base model had three serious problems: an assumed NWFSC slope survey q=1 (without an adequate basis for the assumption); an "over the top" fit to NWFSC slope survey biomass indices; and inappropriate biomass indices for NWFSC slope survey.

Comments on the technical merits and/or deficiencies of the assessment

The STAT had made significant efforts to improve the assessment for 2007 by simplifying some model assumptions and being more discriminating in the use of data. While this effort was endorsed by the STAR Panel, the Panel is concerned some of the data still included in the model, particularly the length data, add to model complexity without improving the assessment.

The revised assessment is much improved from a technical basis. Its original merits remain but so do its *general* deficiencies. The STAR Panel still retains some unease with regard to the assessment. While we can safely state that it is the best available assessment and we believe it is sufficiently robust to inform management, there is some chance that different results would be obtained if the general deficiencies of the assessment were rectified.

Merits:

- Efforts were made to simply the model and to apply greater discrimination in the use of some data sets.
- SS2 was used and as such brings the advantages of a standard and well tested package.
- Environmental variables were used as recruitment indices which is technically superior to the previous approach (where they modified the stock recruitment relationship).

Deficiencies:

- The complexity of the model is not justified given the likely information content of the available data.
- The use of combined age and length selectivities makes the interpretation of model results extremely difficult. While the concept is not too difficult, the effect that the use of such a complex parameterization has on model results is very difficult to understand. The parameterization also appears unnecessary given that growth morphs are not being used (and so the complexity is imposed simply to fit problematic length data that should probably not be used in any case.)
- Many of the data sets have not been scrutinized and analyzed nearly enough to justify their inclusion in base model runs.
- The age, length, and length-at-age data are used inappropriately. It may not be uncommon to use "all of the data" in this way, but it is technically incorrect. In the case of sablefish it is also unwise. There is almost no genuine information on recruitment (or biomass) in the length data which is not already contained in the age data.
- It was apparent that the STAT had used ad-hoc methods, at unspecified times in the past, to get the model "working." This had included fixing selectivity parameters and smoothing length-at age input data. Due to an oversight by the STAT, the temporary data were still in the input files in the final runs. Many of the selectivity parameters were also still fixed in the final runs, and there was no documentation for the choice of the fixed values.
- The link between the environmental indices and recruitment remains to be validated (although current results are encouraging).
- A detailed analysis of residual patterns appears not to have been undertaken in recent assessments. E.g., an investigation of sex ratios and whether the patterns are adequately explained by the current model.

Explanation of areas of disagreement regarding STAR Panel recommendations

There were no important areas of disagreement between members of the STAR Panel.

There were two main areas of disagreement between the STAR Panel and the STAT.

The first issue concerned the use of sea surface height (SSH) in the base model. The STAR Panel recommended that it only be used in a sensitivity run. However, the STAT decided to keep it in the base model. As there is very little difference in stock status and projections whether SSH is included or not the dispute is somewhat academic (at least for this assessment). However, the STAR Panel maintain that SSH should not be used as an index of recruitment until a full cross validation study is undertaken and the apparent link between SSH and sablefish recruitment is shown to be robust.

The second area of disagreement was about the *process* used to derive the prior on *q*. In particular, STAT was concerned about the use of the expert opinion from the STAR panel, the GMT and GAP advisors, and the STAT to derive the prior. The STAR Panel certainly agrees that this was not the ideal group nor setting for this task, and that it would be desirable to redo the exercise more comprehensively with a selected group of participants with greater knowledge about fish-trawl interactions and sablefish behavior. There are also data available on fish distribution by depth which could be used to help in determining the depth component of areal availability (the data on fish distribution south of Point Conception was used in the original exercise, but data on depth was not readily available).

Unresolved problems and major uncertainties

As described earlier, the general technical deficiencies of the assessment remain and as such are an unresolved problem. However, as noted, we believe that the current assessment results are probably relatively robust to the technical deficiencies. This is because the assessment is driven by the prior on *q*. We have little confidence that the base model uses the "true" value of *q*, but we are much more confident that the value of *q* is within the range of the prior.

Major uncertainties:

- The value of q remains very uncertain.
- The low-*q* and high-*q* sensitivity runs are only indicative of potential biases in the base model; they do not span the full range of uncertainty.
- There is uncertainty associated with other fixed and estimated parameters including natural mortality and steepness. The implication of errors in these parameters was not explored during the meeting.

Issues of concern raised by GMT and GAP representatives during the meeting

There were no concerns raised by the GMT or GAP representatives that were not addressed elsewhere by the STAT.

Recommendations for future research and data collection

The sablefish assessment needs a full review (this is not possible during a STAR Panel meeting). Additional resources are required to do this. Personnel with specialist experience and skills should critically review each data source. Model complexity should be simplified to be compatible with the expected information content of the data. The starting point should probably be an age-only model with growth estimated outside the model.

Age data, in general, and especially for sablefish, intrinsically contains more information on recruitment (and biomass) than length data. Of course, if ageing methods are unreliable, then age frequencies will be also. The existing age frequencies (and model fits) should be critically examined to see if cohorts (at relatively young ages) are being tracked reliably. If they are not, then ageing methods should perhaps be reviewed (and consideration given to how representative the age samples are likely to be). If cohorts do track reliably, then priority should be given to ageing any remaining samples.

The exercise for deriving the prior on *q* should be redone. All potentially relevant data sources should be made available to a selected group of participants with appropriate skills and experience. Ideally, priors would be formed for all of the trawl surveys used in the assessment. The sablefish q-priors could be derived at a more general workshop covering several species.

The use of environmental variables as recruitment indices is currently fashionable and results do look encouraging. However, the priority for this work is to conduct a full cross validation study on the existing candidates rather than to further refine the candidate environmental indices.

Continuation of trawl time series is essential for future stock assessments. The NWFSC slope survey has been surveying the whole of the Conception stratum in recent years and this should probably continue. If the full survey results are used to construct a time series then the Conception stratum must be subdivided at Point Conception. A consistent time series, using the full area, could be constructed using a number of methods including a GLM or extrapolation using the ratio of average catch rates north and south of Point Conception. A GLM is probably preferable, especially if there are significant vessel effects.

Continued sampling of the commercial fishery is necessary and priority should be given to obtaining *representative* samples (good spatial and temporal coverage for the main fleets).

DRAFT

Agenda Item E.6.a
Attachment 3
June 2007

Status of the Longnose Skate (*Raja rhina*)

off the continental US Pacific Coast in 2007

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May 23, 2007

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EXECUTIVE SUMMARY

Stock

Longnose skates (*Raja rhina*) are found from Navarin Canyon in the Bering Sea and Unalaska Island in Alaska to Cedros Island, Baja California in Mexico. This assessment is for the population occupying the waters off California, Oregon and Washington, bounded by Canada in the north and Mexico in the south. Within this study area, the longnose skate population is treated as one fishery stock, due to the lack of biological and genetic data supporting the presence of multiple stocks.

Catches

The longnose skate is not a commercially important target species. It is caught primarily as bycatch in trawl fisheries, where most are discarded. Although the landed catch of skates is documented through fish tickets, most records are for a combined-skate category. There are also apparent reporting inconsistencies with regard to the condition of landed skates (e.g., as whole fish or as wings). The extent to which landings in the combined-skate category were comprised by longnose skate is informed by limited periods of species-composition sampling in Oregon and Washington. Historical landed catch was reconstructed from variety of sources. Over the last 57 years, longnose skate landings ranged between 35 and 1,721 mt. Landings peaked in the mid-1990s, due to increased demand from Asian markets. Discards rates were estimated at 93% prior to 1995 and 53% after 1995, which corresponds to changes in skate markets in the mid-1990s.

Table ES-1. Recent landings (mt) for longnose skate by year and state.

Year	California	Oregon	Washington	Total (mt)
1997	779	771	171	1,721
1998	509	218	55	782
1999	518	562	97	1,177
2000	352	804	196	1,351
2001	380	410	71	860
2002	49	123	141	313
2003	74	629	145	848
2004	66	238	69	373
2005	55	508	51	615
2006	70	581	91	742

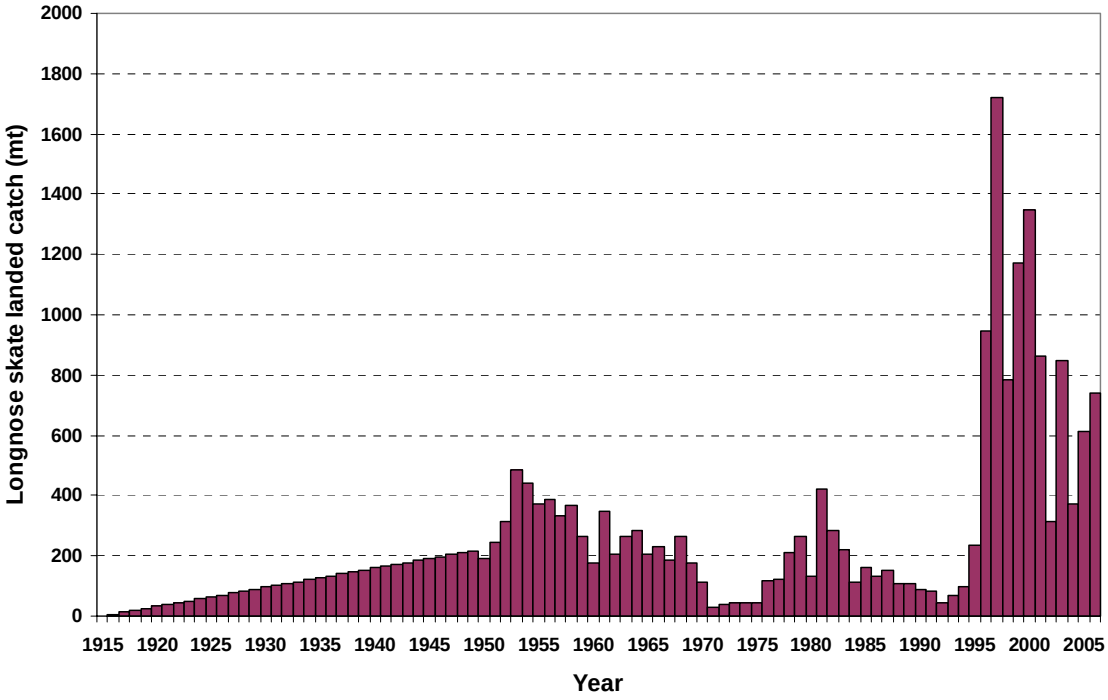

Figure ES-1. Reconstructed historical landings (mt) for longnose skate.

Data and Assessment

This is the first assessment for longnose skate on the U.S. West Coast. The Stock Synthesis 2 (version 2.00e) modeling program was used to conduct the analysis and to estimate model parameters and management quantities. Since there are no apparent differences in biological and life history parameters as well as length and age frequencies between females and males, the assessment uses a single-sex model. The model starts in 1916, assuming an unfished equilibrium state of the stock in 1915. The assessment model includes one fishery that operates within the entire area of assessment. Fishery dependent data used in the assessment include combined-skate landings (1950-2006), fishery length compositions (1995-2006) and limited age data (2003-2004). Fishery independent data include biomass estimates (1980-2006) and length compositions (1997-2006) from four NMFS surveys conducted on the continental shelf and slope, as well as age data from one of the surveys (2003). The model uses discard data from Rogers and Pikitch's study (1986-1987), the Enhanced Data Collection Project (1996-1998), and the NMFS West Coast Groundfish Observer Program (2004-2005).

Stock biomass

This assessment uses a single-sex model; therefore, spawning biomass is the sum of the mature biomasses of both sexes. Using the base model, the unexploited level of spawning stock biomass for longnose skate is estimated to be 14,069 mt. At the beginning of 2007, the spawning stock biomass is estimated to be 9,268 mt, which represents 66% of the unfished stock level.

Table ES-2. Recent trend in longnose skate spawning biomass and depletion.

Year	Estimated spawning biomass (mt)	95% Confidence interval	Estimated depletion
1996	10,622	9,712-11,532	75%
1997	10,490	9,581-11,399	75%
1998	10,065	9,164-10,966	72%
1999	9,964	9,064-10,864	71%
2000	9,716	8,821-10,611	69%
2001	9,407	8,519-10,294	67%
2002	9,275	8,392-10,158	66%
2003	9,342	8,458-10,225	66%
2004	9,234	8,354-10,114	66%
2005	9,302	8,422-10,183	66%
2006	9,300	8,421-10,179	66%
2007	9,268	8,391-10,146	66%

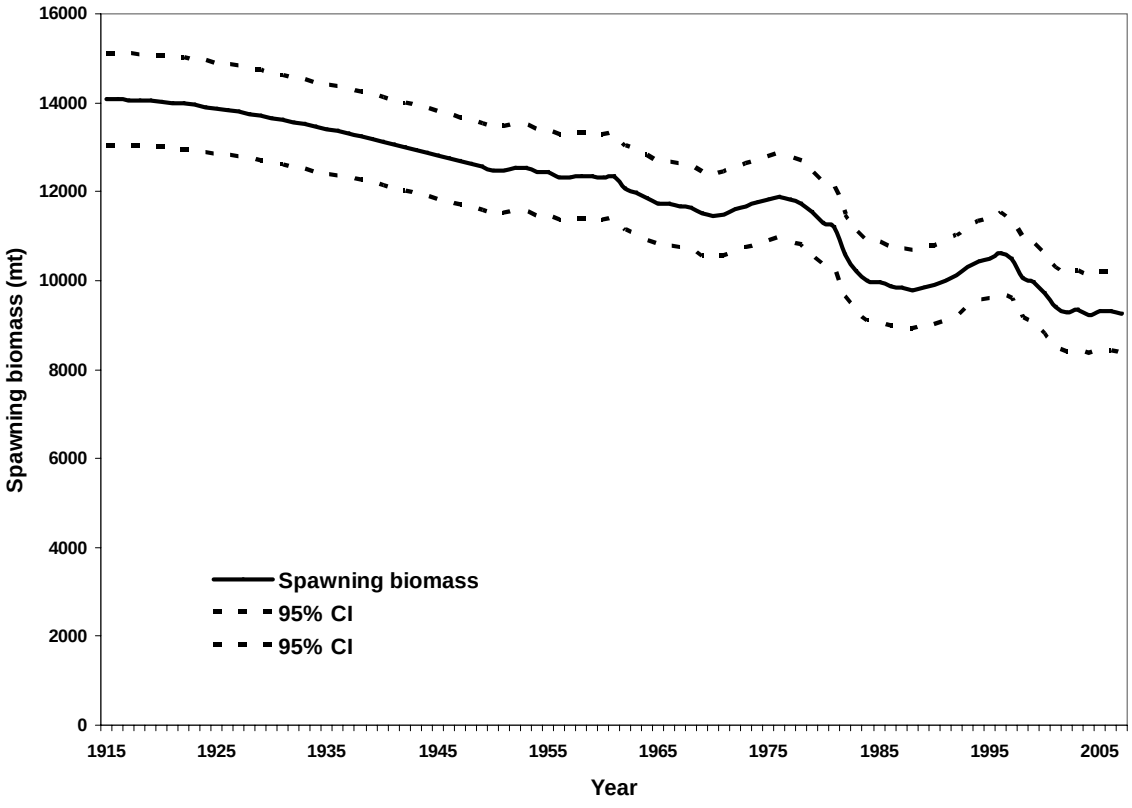

Figure ES-2. Estimated spawning biomass time-series with 95% confidence interval.

Recruitment

In the assessment, we used the Beverton-Holt model to describe the stock-recruitment relationship. Recruits were taken deterministically from the stock-recruit curve. The

level of virgin recruitment R_0 was estimated to assess the magnitude of the initial stock size. Steepness of the stock-recruitment curve was fixed at a value of 0.4, to reflect the *K*-type reproductive strategy of the longnose skate.

Table ES-3. Recent estimated trend in longnose skate recruitment.

Year	Estimated recruitment (1000s)	95% Confidence interval
1996	13,778	12,745-14,811
1997	13,701	12,667-14,735
1998	13,448	12,414-14,482
1999	13,386	12,351-14,421
2000	13,231	12,195-14,267
2001	13,032	11,995-14,069
2002	12,945	11,908-13,982
2003	12,989	11,951-14,027
2004	12,918	11,880-13,956
2005	12,963	11,926-14,000
2006	12,962	11,925-13,999
2007	12,941	11,905-13,978

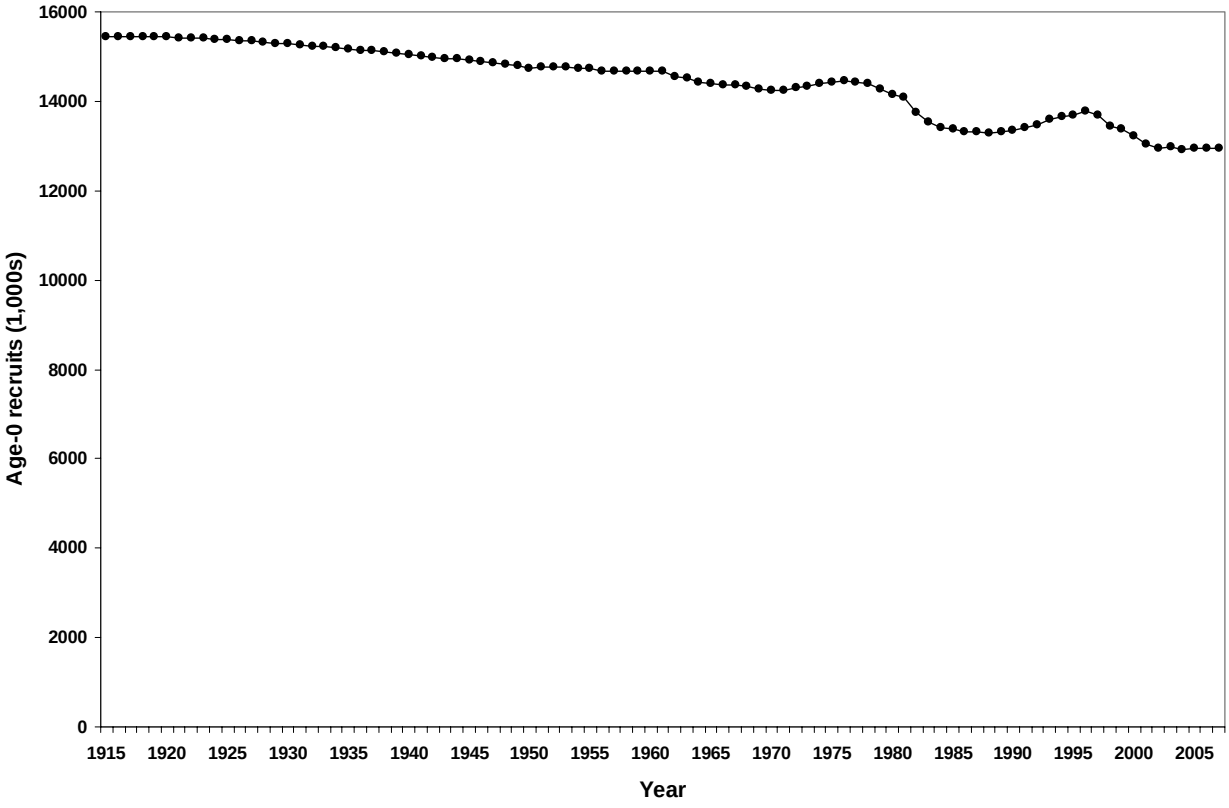

Figure ES-3. Time-series of estimated recruitment for longnose skate.

Reference Points

For the longnose skate, the management target is defined as 40% of the unfished spawning stock biomass ($SB_{40\%}$), which is estimated to be 5,627 mt (95% Confidence Interval: 5,217-6,036 mt) in the base model. The stock is declared overfished if the current spawning biomass is estimated to be below 25% of unfished level. The MSY-proxy harvest rate for longnose skate is SPR=F45%, which corresponds to an exploitation rate of 0.043. This harvest rate provides an equilibrium yield of 1,264 mt (95% Confidence Interval: 1,194-1,334 mt) at $SB_{40\%}$. The model estimate of maximum sustainable yield (MSY) is 1,268 mt (95% Confidence Interval: 1,198-1,338). The estimated spawning stock biomass at MSY is 5,253 mt (95% Confidence Interval: 4,867-5,638 mt). The exploitation rate corresponding to the estimated SPRmsy of F61% is 0.027.

Reference point results are calculated on both a per-recruit and total-recruits basis. The total-recruits results take into account the spawner-recruitment relationship with the steepness as defined in the base model (h=0.4). Because of this low steepness and other reproductive characteristics of the stock, fishing at the target SPR of 45% is expected to reduce the spawning biomass to less than 13% of the unfished level over the long term (Table ES-9). Conversely, fishing at a rate that would maintain spawning biomass near 40% of the unfished level would require a target SPR much higher than 45%. The Council's Scientific and Statistical Committee should consider the appropriateness of using the current proxy harvest rate for setting the Allowable Biological Catch for longnose skate.

Exploitation Status

The assessment shows that the stock of the longnose skate in the US West Coast is not overfished. Currently, the stock is at 66% of its unfished level. Historically, the exploitation rate for the longnose skate has been low. It reached its maximum level of 4.02 % in 1981. Currently, it is at the level of 1.25 %.

Table ES-4. Recent trend in longnose skate exploitation.

Year	Exploitation rate
1998	1.66%
1999	2.50%
2000	2.90%
2001	1.87%
2002	0.68%
2003	1.84%
2004	0.81%
2005	1.33%
2006	1.60%
2007	1.25%

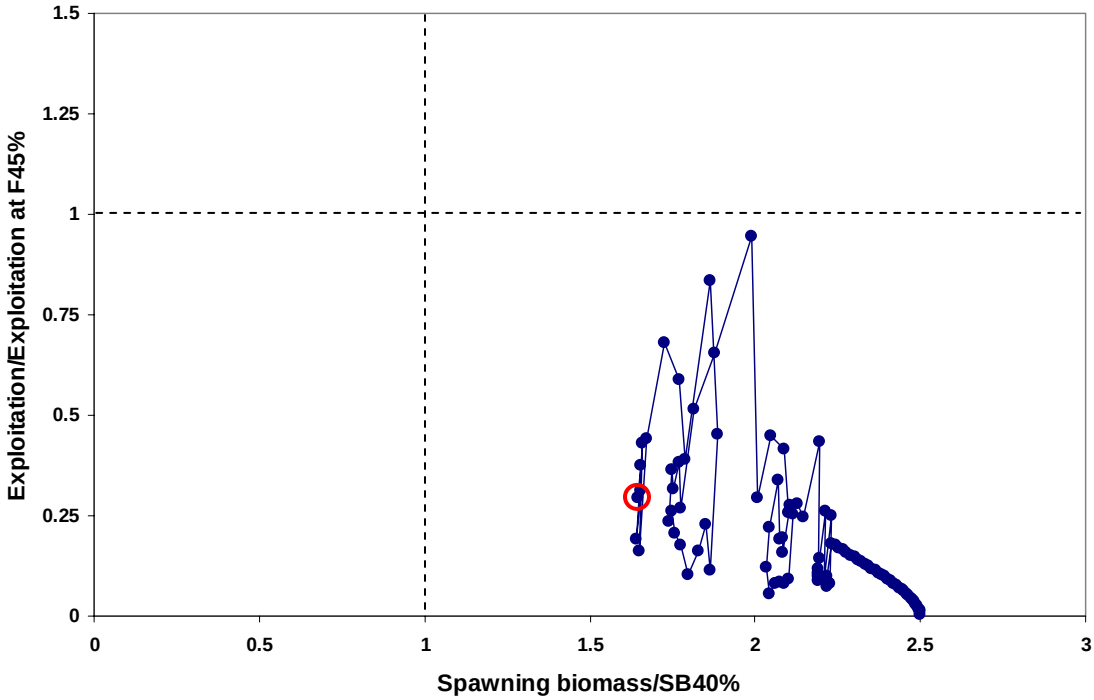

Figure ES-4. Exploitation rate and spawning biomass relative to their target values (circle indicates the point that corresponds to 2007).

Management

The longnose skate is grouped with other unrelated species ("Other Fish") for the purposes of specifying annual Allowable Biological Catches and Optimum Yields (OY). Combined landings of species within this category are typically well below the specified OY. As a result, landings of species in this category are not actively monitored throughout the year, nor have they been subject to trip-limit management. In most areas of the world, management of skates has generally been a low priority and where management and assessments are implemented, the available data are generally inadequate. The longnose skate, like other elasmobranches, presents an array of problems for fisheries management. Given the low economic value of skates, information about their fisheries and basic biology is scarce. However, skate life history characteristics make them more susceptible to overfishing than teleost fishes. Vulnerability of this group and the past history of elasmobranch fisheries collapses are general causes for concern. At the same time, the absence of a strong directed fishery for skates in this region, combined with reductions in trawl effort shoreward of 150 fm to promote rockfish stock rebuilding, reflect a different fishing environment than has characterized these other collapses.

Forecast

Projections of future catches, summary biomass, spawning biomass and stock depletion were made based on F45%, as well as the current rate of fishing mortality. The projected spawning biomasses are greater than 40% of the unfished level for both approaches. No

40:10 harvest control rule reductions were applied. Optimum yield catch values were equivalent to ABC values.

Table ES-5. 10-year forecast of longnose skate catch, summary biomass, spawning biomass and stock depletion estimated based on F45%.

Year	Total catch (mt)	Summary biomass (mt)	Spawning Biomass (mt)	Depletion
2009	3,428	71,184	9,347	66%
2010	3,269	68,833	8,847	63%
2011	3,128	66,836	8,389	60%
2012	3,006	65,135	7,970	57%
2013	2,902	63,676	7,587	54%
2014	2,816	62,403	7,241	51%
2015	2,745	61,264	6,930	49%
2016	2,686	60,211	6,654	47%
2017	2,638	59,208	6,411	46%
2018	2,598	58,226	6,201	44%

Table ES-6. 10-year forecast of longnose skate catch, summary biomass, spawning biomass and stock depletion estimated based on current rate of fishing mortality.

Year	Total catch (mt)	Summary biomass (mt)	Spawning Biomass (mt)	Depletion
2009	176	71,184	9,347	66%
2010	175	71,129	9,394	67%
2011	175	71,060	9,442	67%
2012	175	70,986	9,486	67%
2013	174	70,914	9,525	68%
2014	174	70,848	9,556	68%
2015	173	70,794	9,578	68%
2016	173	70,754	9,590	68%
2017	173	70,727	9,593	68%
2018	172	70,714	9,589	68%

Rebuilding Projection

Since the longnose skate stock is estimated to be above the overfished level, no rebuilding is required.

Unresolved Problems and Major Uncertainties

The major uncertainties for the assessment include uncertainties in the longnose skate catch history, particularly in proportion of longnose skate in combined-skate landings, discard and discard mortality rates, and Northwest Fishery Science Center (NWFSC) shelf-slope survey catchability *Q*. To address uncertainties related to longnose skate catches, alternative catch histories were developed, which reflect variations in proportion of longnose skate in combined-skate landings, as well as discard and discard mortality rates. These alternative histories include the base scenario, which was reconstructed using the best information available, along with "high" and "low" catch scenarios. To explore uncertainty regarding the estimation of the NWFSC shelf-slope survey *Q*, the base-case model (with *Q* fixed at 0.83) results were contrasted with "high" and "low" *Q* scenarios.

Alternative catch histories and *Q* values were used to define alternative states of nature and develop the decision table.

Decision Table

Three states of nature were defined based on the alternative longnose skate catch history and values of NWFSC shelf-slope survey *Q*. The base scenario uses the base catch history and base *Q* (*Q*=0.83), the "low" scenario uses the low catch history and low *Q* (*Q*=0.654), and the "high" scenario uses the high catch history and high *Q* (*Q*=1.046). Ten-year forecasts for each state of nature were calculated based on F45% for the base scenario. Ten-year forecasts were also produced with future catch fixed at the average amount (using the base catch history) for last three years (2004-2006) and at 150% of that three-year average. Under the "high" scenario, the F45% harvest rate is projected to reduce the spawning stock biomass below 40% of the unfished level within two years. In all other scenarios covered by the decision table, the spawning biomass remains above the target level throughout the 10-year projection period. The current rate of fishing mortality is significantly lower than F45% (current exploitation rate is 1.25%). Therefore, it is very unlikely that the stock, even under the "high" scenario will fall below 40% of its virgin state in the next 10 years.

Research and Data Needs

This assessment reflects a data-moderate to data-poor circumstance with respect to several influential model elements, including catch history, survey catchability, and some life history characteristics. Consequently, some critical assumptions were based on very limited supporting data and research. There are several data and research needs which, if satisfied, could improve the assessment.

Data needs:

1) Continue species-specific identification in fishery to improve the accuracy of fishery catch data;
2) Continue monitoring discard of the longnose skate;
3) Resume collecting and processing of vertebra samples for age determination to improve the accuracy of growth model parameters and size-at-age relationships.

Research needs:

1) Conduct studies to determine survival rates of discarded longnose skate, especially with trawl gear, so that total fishing mortality can be estimated more precisely;
2) Conduct studies on life history characteristics, especially those related to maturity and reproduction;
3) Conduct age-validation studies;
4) Conduct studies of longnose skate catchability by survey gear types.

Table ES-7. Decision table based on three states of nature, defined based on alternative catch histories and levels of NWFSC shelf-slope survey catchability *Q*.

		Low Q (Q=0.654) Low historical catch			Q=0.83 BASE			High Q (Q=1.046) High historical catch		
Forecast	**Year**	**Total catch (mt) (landings and discard mortality)**	**SSB (mt)**	**Depletion**	**Total catch (mt) (landings and discard mortality)**	**SSB (mt)**	**Depletion**	**Total catch (mt) (landings and discard mortality)**	**SSB (mt)**	**Depletion**
	2009	3,428	11,711	80%	3,428	9,347	66%	3,428	8,042	41%
	2010	3,269	11,154	76%	3,269	8,847	63%	3,269	7,708	39%
	2011	3,128	10,643	72%	3,128	8,389	60%	3,128	7,398	37%
	2012	3,006	10,175	69%	3,006	7,970	57%	3,006	7,111	36%
F45% for base scanario 40-10	2013	2,902	9,749	66%	2,902	7,587	54%	2,902	6,843	35%
	2014	2,816	9,363	64%	2,816	7,241	51%	2,816	6,596	33%
	2015	2,745	9,015	61%	2,745	6,930	49%	2,745	6,371	32%
	2016	2,686	8,706	59%	2,686	6,654	47%	2,686	6,169	31%
	2017	2,638	8,434	57%	2,638	6,411	46%	2,638	5,995	30%
	2018	2,598	8,196	56%	2,598	6,201	44%	2,598	5,846	30%
	2009	899	11,711	80%	899	9,347	66%	899	8,042	41%
	2010	899	11,700	80%	899	9,394	67%	899	8,249	42%
	2011	899	11,691	80%	899	9,443	67%	899	8,456	43%
Average landings and discard mortality for base scanario 2004-2006	2012	899	11,679	80%	899	9,488	67%	899	8,653	44%
	2013	899	11,665	79%	899	9,527	68%	899	8,836	45%
	2014	899	11,645	79%	899	9,559	68%	899	9,000	46%
	2015	899	11,620	79%	899	9,580	68%	899	9,141	46%
	2016	899	11,589	79%	899	9,591	68%	899	9,260	47%
	2017	899	11,553	79%	899	9,594	68%	899	9,359	47%
	2018	899	11,513	78%	899	9,588	68%	899	9,440	48%
	2009	1,349	11,711	80%	1,349	9,347	66%	1,349	8,042	41%
	2010	1,349	11,603	79%	1,349	9,297	66%	1,349	8,153	41%
50% increase in average landings and discard mortality for base scanario 2004-2006	2011	1,349	11,497	78%	1,349	9,248	66%	1,349	8,261	42%
	2012	1,349	11,392	78%	1,349	9,198	65%	1,349	8,358	42%
	2013	1,349	11,286	77%	1,349	9,143	65%	1,349	8,441	43%
	2014	1,349	11,179	76%	1,349	9,084	65%	1,349	8,506	43%
	2015	1,349	11,072	75%	1,349	9,019	64%	1,349	8,553	43%
	2016	1,349	10,964	75%	1,349	8,950	64%	1,349	8,583	43%
	2017	1,349	10,857	74%	1,349	8,878	63%	1,349	8,600	44%
	2018	1,349	10,753	73%	1,349	8,805	63%	1,349	8,606	44%

Table ES-8. Summary of recent trends in longnose skate exploitation and estimated population levels.

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Landings (mt)	782	1,177	1,351	860	313	848	373	615	742	*576
Estimated Discards (mt)	438	659	757	482	175	475	209	344	415	323
Estimated Total Catch (mt)	1,220	1,835	2,108	1,342	488	1,323	582	959	1,157	*899
ABC (mt)										
OY * (if different from ABC) (mt)										
SPR	74.28%	64.22%	59.83%	71.03%	87.96%	71.56%	85.99%	78.42%	74.81%	79.65%
Exploitation Rate (total catch/summary bi	1.66%	2.50%	2.90%	1.87%	0.68%	1.84%	0.81%	1.33%	1.60%	1.25%
Summary Age 2+ Biomass (B) (mt)	72,877	72,599	71,802	70,844	70,671	71,272	71,027	71,445	71,439	71,217
Spawning Stock Biomass (*SB*) (mt)	10,065	9,964	9,716	9,406	9,275	9,342	9,234	9,302	9,300	9,268
Uncertainty in Spawning Stock Biomass estimate	9,164-10,966	9,064-10,864	8,821-10,611	8,519-10,294	8,392-10,158	8,458-10,225	8,354-10,114	8,422-10,183	8,421-10,179	8,391-10,146
Recruitment at age 0	13,448	13,386	13,232	13,032	12,945	12,989	12,918	12,963	12,962	12,941
Uncertainty in Recruitment estimate	12,414-14,482	12,351-14,421	12,195-14,267	11,995-14,069	11,908-13,982	11,951-14,027	11,880-13,956	11,926-14,000	11,925-13,999	11,905-13,978
Depletion (SB/SB0)	71.54%	70.82%	69.06%	66.86%	65.93%	66.40%	65.64%	66.12%	66.13%	66.44%
Uncertainty in Depletion estimate									64.15%-68.11%	64.46%-68.41%

* indicates values calculated as the average for the last three years (2004-2006)

Table ES-9. Summary of longnose skate reference points.

	Point estimate	95% confidence interval
Unfished Spawning Stock Biomass (SB_0) (mt)	14,069	13,042-15,096
Unfished Summary Age 2+ Biomass (B_0) (mt)	90,955	
Unfished Recruitment (R_0) at age 0	15,454	14,403-16,505
Reference points based on $SB_{40\%}$		
MSY Proxy Spawning Stock Biomass ($SB_{40\%}$)	5,627	5,217-6,036
SPR resulting in $SB_{45\%}$ ($SPR_{SB40\%}$)	62.50%	62.4999%-62.500059%
Exploitation rate resulting in $SB_{40\%}$	2.67%	N/A
Yield with $SPR_{SB45\%}$ at $SB_{40\%}$ (mt)	1,264	1,194-1,334
Reference points based on SPR proxy for MSY		
Spawning Stock Biomass at SPR (SB_{SPR})(mt)	1,688	1,565-1,812
$SPR_{MSY\text{-}proxy}$	45%	
Exploitation rate corresponding to SPR	4.26%	N/A
Yield with $SPR_{MSY\text{-}proxy}$ at SB_{SPR} (mt)	787	744-831
Reference points based on estimated MSY values		
Spawning Stock Biomass at MSY (SB_{MSY}) (mt)	5,253	4,867-5,638
SPR_{MSY}	60.84%	60.80%-60.86%
Exploitation Rate corresponding to SPR_{MSY}	2.71%	N/A
MSY (mt)	1,268	1,198-1,338

Longnose Skate STAR Panel Report

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Hatfield Marine Science Center
Captain R. Barry Fisher Building
2032 S.E. Oregon State University Drive
Newport, Oregon 97365

May 7-11, 2007

Reviewers

Martin Dorn, Scientific and Statistical Committee (SSC) Representative, STAR Panel Chair
Patrick Cordue, Center for Independent Experts (CIE)
Vivian Haist, Center for Independent Experts (CIE, Rapporteur)

Advisors

Heather Mann, Groundfish Advisory Subpanel (GAP) Representative
Mark Saelens, Groundfish Management Team (GMT) Representative

Stock Assessment Team

Vladlena Gertseva, Cooperative Institute for Marine Resources Studies, Oregon State University
Michael Schirripa, Northwest Fisheries Science Center (NWFSC)

1 Minutes of STAR Panel meeting

1.1 Name and affiliation of STAR Panel members

Martin Dorn, Scientific and Statistical Committee (SSC) Representative, STAR Panel Chair
Patrick Cordue, Center for Independent Experts (CIE)
Vivian Haist, Center for Independent Experts (CIE, Rapporteur)

1.2 Analyses requested by STAR Panel

An iterative process was used for the longnose skate STAR Panel review, alternating between written requests for additional analyses and evaluation of results of these requested analyses. Some additional model runs were conducted while meeting with the STAT, as runs could be conducted quickly and this facilitated the review process.

A summary of key results and decisions resulting from the Panel review of longnose skate is presented in section 1.2.1. The STAR panel requests for longnose skate analyses (Series 1 through Series 5) are provided in section 1.2.2.

The primary objectives of the STAR Panel requests were to: 1) simplify the model parameterization where appropriate, and 2) develop an objective basis for characterizing the uncertainty in this data-poor assessment.

The longnose skate assessment scientist responded to all requests from the STAR panel, providing results from requested analyses and often bringing in additional information that was relevant to the deliberations. The STAR panel acknowledges the hard work of this scientist whose dedication and enthusiasm made the review a productive and enjoyable experience.

1.2.1 Summary of results from STAR Panel requests

1. The base model was simplified to have one sex and constant recruitment. There are no apparent differences between males and females in their size-at-age or in their fishery and survey length frequencies, so a sex-specific parameterization adds model complexity without adding information. There is no discernable year-class signal in the length frequency data, so there is little information to support estimation of year-class strength.

2. Modifications were made to the selectivity parameters estimated for the slope surveys: asymptotic selectivity, estimate peak parameter, and no estimation of

descending width parameters. The asymptotic assumption was made because the slope survey covers the entire depth range of the species and estimation of the descending limb did not influence on the model fits.

3. In response to questions raised during the meeting about historical skate landings from Washington State, the stock assessment scientist reviewed additional documents about these landings. The 1951-1979 Washington State skate recorded catch was primarily landed in Puget Sound. These catches were likely caught either in Puget Sound or in Canadian waters. It was decided to remove these landings from the catch statistics used in the assessment as it was unlikely that they came from the assessed stock.

4. The estimated biomass in the 2004 AFSC triennial survey appears anomalous, being twice as high as any other estimate in the survey series. Efforts were made to obtain data for flatfish species captured in this survey to see if they also showed anomalous abundance in the 2004 survey. It was not possible to obtain the additional data in the time available, so the 2004 AFSC triennial survey data point was retained in the analysis.

5. The size-at-age data used to estimate growth parameters in the assessment suggest almost linear growth for the longnose skate. The STAT provided estimates of longnose skate growth parameters from four sources, for populations ranging from California through Alaska. Growth parameters estimated in this assessment are similar to those from B.C. and Alaska (although L_∞ is lower for the B.C. study).

6. The STAT suggested the *M* might be higher than the 0.1 value assumed in the initial stock assessment. Using methods that calculate *M* based on maximum age results in estimates around 0.2 (Hoenig 1983, Frisk et al. 2001). The STAT agreed 0.2 was a better estimate of *M* for the longnose skate assessment. Using this higher *M* value resulted in better estimation of growth parameters. That is, all three growth parameters could be estimated (previously one parameter had been fixed) and the estimate of L_∞ was lower and more consistent with the maximum observed size.

7. The estimate of length at 50% maturity used in the assessment (Thompson 2006) suggest delayed maturation, and the estimate is significantly higher than the estimate from a B.C. study (McFarlane and King 2006). Josie Thompson met with the Panel and described the methodology used in her study. The criteria used to distinguish mature from immature individuals was more conservative (i.e. more likely to err in the direction of underestimating the proportion mature) than those used in the B.C. study. The Panel did not feel that one approach was necessarily superior to the other and concluded that use of the Thompson (2006) estimates in the assessment is appropriate. The McFarlane and King (2006) estimates can provide a useful sensitivity analysis.

8. The longnose skate model was run under two scenarios for initializing the population; 1) at unfished equilibrium in 1916 with a ramp-up of the catches, and 2) at

equilibrium in 1980 under a constant prior fishing mortality rate (tuned to average catch). The rationale for this comparison was to determine if the two approaches provided equivalent results. The model had a better fit when initialized in 1916 (objective function value of 708.38 versus 723.49). The reason for this was not clear. Fitting to a longer catch time series allows the recruitment to decrease over time (given the assumption of low stock recruitment steepness), whereas initializing at equilibrium under constant F does not (in the SS2 code). Because the ramp-up in historical catch is a more realistic assumption, this approach was adopted for further runs.

9. Alternative longnose skate catch (landings plus discard mortalities) were developed to reflect the uncertainty in the catch time series. The catch histories were constructed "outside the model" (i.e., the discard rate in the model was set equal to 0) to allow easy comparison of assumed catch history. The landings series developed for the assessment (minus the Washington State landings as noted in 3 above) were taken to be the "best" available time series. Alternative high and low catch scenarios were developed that reflect uncertainty in the discard rate, the discard mortality rate, and the proportion of longnose skate in the combined skate landings. All three uncertainties are assumed to affect the catch for the pre-1995 period (table below). For 1981 through 1984 discard mortality and discard rate (with lower uncertainty because there is one discard estimate for this period) are assumed to affect the catch. For 1995 onward only uncertainty in the discard mortality rate is assumed. The table below summarizes the "best", low and high values assumed for the three sources of uncertainty.

	pre- 1981			1981-1994			1995-present		
	"best"	low catch	high catch	"best"	low catch	high catch	"best"	low catch	high catch
Proportion longnose	0.62	0.50	0.75	Annual estimates			Annual estimates		
Discard rate	0.93	0.85	0.97	0.93	0.91	0.95	0.53	0.53	0.53
Discard mortality	0.50	0.30	0.70	0.50	0.30	0.70	0.50	0.30	0.70
Longnose landings relative to "best" estimates	1.00	0.81	1.21	1.00	1.00	1.00	1.00	1.00	1.00
Discard mortalities relative to longnose landings	6.64	1.37	27.38	6.64	3.03	13.30	0.56	0.34	0.79
Total "catch" (landings + morts) relative to "best" landing estimates	7.64	2.18	28.59	7.64	4.03	14.30	1.56	1.34	1.79

The longnose landings relative to the "best" estimates adjust for the proportion longnose skate in the total skate catch for the pre-1981 period when annual estimates are not available. The discard mortalities relative to longnose landings adjust for the discard rate and discard mortalities. Finally, the table above provides the ratios of total catch (landings and discard mortalities) to the "best" landings estimates.

10. Model runs were conducted using the low catch, best catch and high catch time series resulting in depletion estimates of 0.71, 0.61, and 0.40, respectively.

11. The draft longnose skate assessment assumed a NWFSC shelf-slope trawl survey proportionality constant, *q*, of 1. During the review a prior for *q* was developed based on consideration of the availability of longnose skate to the survey gear and the probability that a skate in the path of the gear would be caught and retained by the gear. The methodology for developing the prior involves specifying the potential range in the proportion of fish that are available to the gear and the potential range in the vulnerability to the gear, and "best guesses" for the individual probabilities. These values are translated into a lognormal prior where the median of the lognormal is the "best guess" and the range of plausible values covers 99% of the lognormal distribution.

    The NWFSC shelf-slope survey covers the full latitudinal range of longnose skate modeled in the assessment so a latitudinal availability of 1 was assumed. The survey coverage appears to exceed the maximum depth distribution of longnose skate but may not fully cover the shallow end of the skate distribution. A range of 95% to 100% was assumed for the depth availability. A range of 75% to 95% was assumed for vertical availability on the basis that longnose skate are known to bury in the mud and therefore some may be unavailable to the bottom trawl gear. The largest bounds were place on the probability of capture, given a fish is in the net path. It is known that flatfish can be herded by trawl gear, and it is possible that this could also occur for skate. But it is also possible that skate could avoid the trawl nets. For capture probability, a range of 75% to 150% was assumed. "Best guess" estimates were set at the mid-point of the range for individual factors, except for the probability of capture which was given a best guess of 1. The overall best guess for the survey *q* was 0.83 (table below).

	minimum	maximum	best guess
Depth availability	0.95	1.00	0.975
Latitudinal availability	1.00	1.00	1.00
Vertical availability	0.75	0.95	0.85
Probability of capture given in net path	0.75	1.50	1.00
Product of all factors	0.53	1.43	0.83

    The consequent bounds on *q* and the best guess are: (0.53, 1.43) and 0.83. The best guess was equated to the median of a lognormal distribution and the bounds to 99% of that distribution. This gave a normal prior on log(*q*): mean = -0.188, sd = 0.187.

    Additional runs were conducted using the low catch, best catch and high catch time series but with a prior on *q* rather than a fixed *q*. Results from these runs showed highly variable estimates of *q* (from 0.3 to 0.8) and relatively constant estimates of stock depletion (from 0.69 to 0.75). There was not time to do profiles on *q* to see how well determined these estimates are. Because the objective of evaluating results with the different catch series is to see how this uncertainty affects estimates of current stock status, fixed *q* runs are considered more useful at this time. The normal prior on log(q) was used to provide three *q*s for model runs with nominal weights of 25%, 50%, and 25%. A random sample of size 10,000 was generated from the normal

distribution and the mean of the samples below the 25th percentile (of the normal distribution) was exponentiated to provide the "low *q*". Similarly, the mean of the samples above the 75th percentile was exponentiated to provide the "high *q*". The median of the prior (0.83) was used to represent the mid 50% of the range of uncertainty.

12. The iterative re-weighting of length (and age) sample sizes was redone using the procedure of updating weights by data series rather than individual points within each data series. As in the sablefish assessment, initial trials showed a "flip-flop" between each successive set of weightings, and averaging between two successive sets was required to obtain stability in the re-weighting process.

13. A full Bayesian analysis (MCMC) was performed on a model formulation that could be used as a base model (prior on *q*, prior on M, no recruitment deviations, best catch series). An MCMC chain of 1 million was run. Results were unsatisfactory, indicating a lack of convergence. Also, the range of *q* sampled in the posterior was small relative to its prior, which is unacceptable given there is little information in the data about absolute abundance. Problems with the MCMC are likely the result of the selectivity parameterization. A short MCMC chain was run with all selectivity parameters fixed, and this run showed better behavior (good convergence properties and *q* posterior similar to its prior). However, there was not enough time during the review to fully investigate whether an MCMC approach could be used to characterize uncertainty in the assessment.

14. The major axes of uncertainty in the longnose skate assessment are the uncertainty in the catch history and the uncertainty in the NWFSC shelf-slope survey *q*. To capture the full range of uncertainty three runs were conducted: low *q* with low catch history; mid *q* with mid catch history; and high *q* with high catch history. These runs resulted in depletion estimates ranging from 0.39 to 0.80.

1.2.2 STAR Panel requests

STAR panel requests for longnose skate analyses (Series 1)

Modify base model (from current formulation):

- One sex model
- No recruitment deviations
- Use F45% proxy for MSY
- Do not assume discards on historical catch estimates, rather adjust the catch series to account for discarding, proportion of longnose skate in skate catch, discard mortality, etc.

A. Do fits using the base model formulation as adjusted above, with the equilibrium non-zero catch initialization (in 1980) to:

    1. The "best" historical catch (same as current)
    2. The low historical catch (see below)
    3. The high historical catch (see below)

    For these three series we are interested to see the biomass trajectories and a summary of the likelihood components.

B. Do a fit initializing the population at equilibrium conditions in 1915, with catches ramping up from 0 to the high historical catch between 1915 and 1950 and constant at the high historical level from 1951 to 1980. Show a comparison of the estimated 1980 age structure from this run and from run A3 above. This run is formulated the same as the runs "A" above, other than in how the population is initialized.

C. Based on run A1 above: Modify selectivity for the two slope surveys to be asymptotic. Do a profile on q.

D. AFSC triennial survey data. Jim Hastie is getting summary information so that potential bias in catchability in the 2004 survey can be investigated.

STAR panel requests for longnose skate analyses (Series 2)

The updated base model continues from changes made under the Series 1 requested changes (One sex model, no recruitment deviations). Additional changes to the new update base model will include:

- Washington State 1950-1979 catches will be removed
- M=0.2 (subject to evaluating basis for this)
- Population to be initialized at equilibrium in 1916
- Re-do the iterative re-weighting of fishery sample sizes using the output from SS2 (i.e., rescale a series, rather than individual samples)
- Slope surveys selectivity parameters; asymptotic selectivity, estimate peak parameter, and no estimation of descending width parameters (because it had no influence on the fits)

For this new base model:

A. Fit to the "best" catch data series

B. Separate fits to the "low catch" and "high catch" series

C. Profile on q (NWFSC shelf-slope survey) for the "best" catch series run

D. Do a fit using the B.C. estimates of maturity at length ("best" catch series)

E. Provide supporting information for M=0.2

F. For one run (e.g., base model with "best" catch series) try different techniques to see if you find alternative minima (jittering or other method to begin with different initial parameter estimates and different phases for the parameters).

STAR panel requests for longnose skate analyses (Series 3)

New base model:
- fix one parameter (descending limb) of fishery selectivity
- add priors for q and M
- finish iterative re-weighting for sample sizes
- keep the Thompson estimates of maturity for base model
- add extra error to AFSC shelf survey (so that the RMSEs are similar to SEs)

1) Run base model with "best" catch series. Produce R graphics for this run.
2) Run base model formulation with low catch series
3) Run base model formulation with high catch series
4) Run model with B.C. maturity estimates (otherwise same formulation as base case)

STAR panel requests for longnose skate analyses (Series 4)

Base model as defined in previous request:

1) Run base model formulation using the low catch series but fixing the shelf-slope survey q at the value estimated for the base model run (using the "best" catch series)
2) Run base model formulation using the high catch series but fixing the shelf-slope survey q at the value estimated for the base model run (using the "best" catch series)

STAR panel requests for longnose skate analyses (Series 5)

Base model as defined in previous request, except that M is fixed 0.2 and the NWFSC shelf-slope survey q is fixed at 0.83. Three runs:

1) Low q (0.654) and low catch history
2) Mid q (0.83) and mid catch history
3) High q (1.046) and high catch history

1.3 Description of base model and alternative models

The selected base model formulation for the longnose skate assessment has the following characteristics:

- Single sex
- No recruitment deviations
- *M* fixed at 0.2
- Estimate 3 von Bertalanffy growth parameters, fix growth CV parameters
- NWFSC slope-shelf survey *q* fixed at median of the prior (0.83)
- NWFSC shelf-slope survey selectivity modeled as asymptotic
- Population initialized at equilibrium in 1916
- Use Thompson (2006) maturation estimates (McFarlane & King 2006 estimates for sensitivity)
- Washington State 1951-1979 landings estimate removed
- Use "data series" rather than "data point" approach for iterative re-weighting
- Use "best" catch time series

The major axes of uncertainty for the longnose skate assessment are the catch history and the NWFSC shelf-slope trawl survey proportionality constant *q*. Two runs, reflecting best guesses of the mean of the lower quartile and the mean of the upper quartile, are proposed to bracket uncertainty. These runs have the same characteristics as the base model except for:

- Low *q* (0.654) with low catch history
- High *q* (1.046) with high catch history

2 Technical merits and/or deficiencies in the assessment

The longnose skate stock assessment was as comprehensive as possible; given it is a data poor stock.

The use of "total skate" landing statistics may not be the best approach for recreating the stock's catch history. The "total skate" landings may contain erroneous information (as assumed for the Washington State 1951-1979 landings), and assumptions about proportion longnose skate and discard rates are required to re-create the time series. An alternative approach would be to use effort statistics to develop "best" estimates (and the plausible range for these estimates) based on available data for longnose skate catch per unit effort (CPUE) for different target fisheries. Other assumptions would be required to apply this approach and an estimate of discard mortality rate would still be needed, but least a comparison would be possible between alternative methods for reconstructing the catch history.

3 Areas of disagreement regarding STAR Panel recommendations

3.1 Among STAR Panel members

There were no areas of disagreement among the STAR Panel members.

3.2 Between STAR Panel and STAT

There were no areas of disagreement between the STAR Panel and the STAT.

4 Unresolved problems and major uncertainties

The total fishery-induced mortality of longnose skates is unknown. Components of this include; the landings history, the proportion of longnose in total skate catch, the discard rate and the discard mortality. For recent years the data on longnose skate landings and discards are reasonably good, however because the discard rate is high and discard mortality unknown there is still considerable uncertainty about the level of fishery-induced mortality.

Four published studies of longnose skate ageing provide similar estimates of growth and maximum age. However, none of these studies have included ageing validation so there is uncertainty about the accuracy of the methodology.

Estimates of the longnose skate maturation ogive used in this assessment differ substantially from those reported for B.C., and suggest that only a small fraction of the female population is mature.

Analyses using an MCMC algorithm to estimate model posterior distributions and quantify uncertainty in the longnose skate stock assessment were conducted. Results were not useable because of lack of MCMC convergence, likely the result of the complex selectivity parameterization. Further investigation of this problem is warranted, as MCMC simulation is a useful approach for quantifying uncertainty.

5 Management, data or fisheries issues raised by GMT or GAP representatives during the STAR Panel.

There were no concerns raised by the GMT or GAP representatives that were not addressed elsewhere by the STAT.

6 Prioritized recommendations for future research and data collection

The following list summarizes the STAR Panel's research recommendations for longnose skate. Items 1 through 3 are considered high priority.

1) Re-create catch history (best estimates plus uncertainty) based on fishing effort.
2) Investigate anomalous 2004 AFSC triennial survey longnose skate (and possibly other flatfish) catches.
3) Ageing (validation) studies and maturation rate studies.
4) Continue skate species identification in the fishery.
5) Continue discard monitoring.
6) Studies to estimate discard rates and discard mortality.

7 References

Frisk, M.G., T. J. Miller, and M.J. Fogarty. 2001. Estimation and analysis of biological parameters in elasmobranch fishes: a comparative life history study. Can. J. Fish. Aquat. Sci. 58: 969-981.

Hoenig, J.M. 1983. Empirical use of longevity data to estimate mortality rates. Fishery Bulletin 82(1): 898-902.

McFarlane, G.A. and J.R. King. 2006. Age and growth of big skate (*Raja binoculata*) and longnose skate (*Raja rhina*) in British Columbia waters. Fisheries Research 78: 169-178.

Thompson, J.E. 2006. Age, growth and maturity of longnose skate (*Raja rhina*) in the U.S. west coast and sensitivity to fishing impacts. MS Thesis, Oregon State University.

Agenda Item E.6.a
Attachment 5
June 2007

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Updated U.S. English sole stock assessment: Status of the resource in 2007

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Executive Summary

Stock

This assessment updates the status of the English sole (*Parophrys vetulus*) resource off the coast of the United States from the Mexican Border to the Canadian border. As in the 2005 assessment, data sources are treated separately for a southern (INPFC Conception and Monterey) and a northern (INPFC Eureka, Columbia and U.S. Vancouver) area, however the English sole population is modeled as a single stock.

The biggest obstacle to modeling the English sole population in the southern and northern areas separately is a lack of data; specifically the length frequency of discarded fish (to reliably estimate selectivity separately for each fleet), current maturity observations and sufficient age data (mainly from the south) to allow estimation of the growth curve for each area as well as model changes in growth over time. Without these data and more spatially complex models, it is difficult to speculate on whether regional management is appropriate for English sole, as relatively large historical catches of similar magnitude have been removed from both areas, albeit over different portions of the historical record.

Catches

This updated assessment uses historical landings reconstructed from a variety of sources for the 2005 assessment describing the fishery removals over the period 1876 to 1980. Landings from 1981 to 2006 have been updated to reflect the best available estimates as of May, 2007. Peak landings from the southern area occurred in the 1920s with a maximum of 3,976 metric tons (mt) of English sole landed in 1929. Peak landings from the northern area occurred from the 1940s to the 1960s with a maximum of 4,008 mt landed in 1948. Landings in both areas have generally declined since the mid 1960s and are at historical lows in recent years. Model estimates of discarding average 24% by weight over the time-series since 1940, with higher discards corresponding to periods of large recruitment and due to the associated increase in catch of smaller unmarketable English sole due to modeled changes in selectivity and growth.

Table a. Recent commercial fishery landings by INPFC area and fleet.

Year	Conception	Monterey	South total	Eureka	Columbia	US Vancouver	North total
1997	12	453	466	185	454	301	941
1998	5	224	229	198	330	264	792
1999	9	219	227	158	296	172	626
2000	9	173	182	125	227	200	552
2001	29	170	199	223	340	180	742
2002	6	95	102	271	342	439	1,052
2003	3	114	117	68	171	432	670
2004	31	66	97	205	242	372	819
2005	15	55	70	183	290	345	818
2006	1	56	57	238	338	254	829

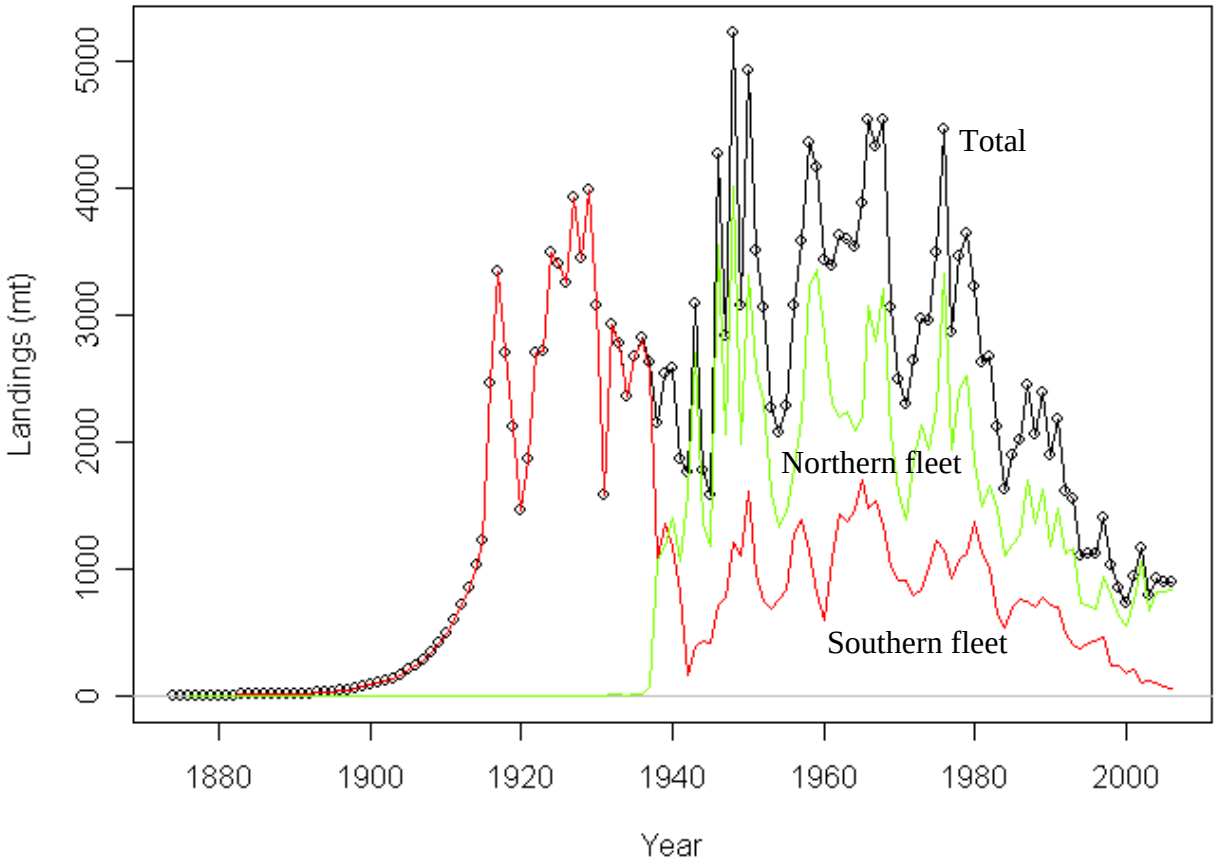

Figure a. Reconstructed historical landings (mt) by year and fleet, 1876-2006.

Data and assessment

The most recent assessment for English sole was performed in 2005. The 2005 assessment used an early version (1.19) of the Stock Synthesis 2 modeling framework to estimate model parameters and management quantities. That assessment modeled the coast-wide English sole population (U.S. only), including both males and females. Fishery independent data included the NMFS triennial groundfish survey index of abundance (1980-2004), maturity observations, length-weight relationships as well as survey length-frequency and age-frequency data. Length and age data from commercial fishery landings are included from 1948-2004, as well as fishery discard information from three separate observer programs, 1950-1961, 1985-1987 and 2001-2004.

This document updates the 2005 assessment using the newest version of SS2 available, 2.00e (Methot 2007). The methods for summarizing the raw data and the modeling approach are maintained. The recent landings series have been updated for 1981-2006, and a large quantity of fishery length and age data (primarily from Washington) that was previously unavailable is now included. These new data provide substantially improved information regarding recent year class strengths and current stock status.

Stock biomass

As in 2005, English sole spawning biomass was found to be increasing rapidly over the last 15 years after a period of poor recruitments from the mid 1970s to the early

1990s, which left the stock at nearly historically low levels. The spawning biomass at the beginning of 2007 was estimated to be 41,906 mt (~ 95% confidence interval: 31,046-52,766), which corresponds to 116% (83-149%) of the unexploited equilibrium level. This value reflects the accelerated maturity schedule estimated from the 1990's relative to historical conditions and therefore does not necessarily correspond to the same age structure in the population as implied by unexploited conditions. Historical depletion levels were estimated to have reached minima as low as 20% in 1953 and, more recently, 23% in 1992. Current (2006) total catches were estimated to be 1,078 mt, of which 886 mt were landed. These results are very similar to the 2005 assessment, although the recent trend shows a slightly larger increase in stock size.

Table b. Recent trend in English sole spawning biomass and depletion level.

Year	Estimated spawning biomass (mt)	~95% confidence interval	Estimated depletion	~95% confidence interval
1998	11,022	7,920-14,124	31%	NA
1999	13,290	9,756-16,824	37%	NA
2000	16,006	11,924-20,088	44%	NA
2001	20,120	15,201-25,039	56%	NA
2002	26,545	20,167-32,923	74%	NA
2003	33,548	25,386-41,710	93%	NA
2004	38,534	29,057-48,011	107%	NA
2005	41,029	30,767-51,289	114%	NA
2006	42,193	31,445-52,939	117%	83-151%
2007	41,907	31,046-52,766	116%	83-149%

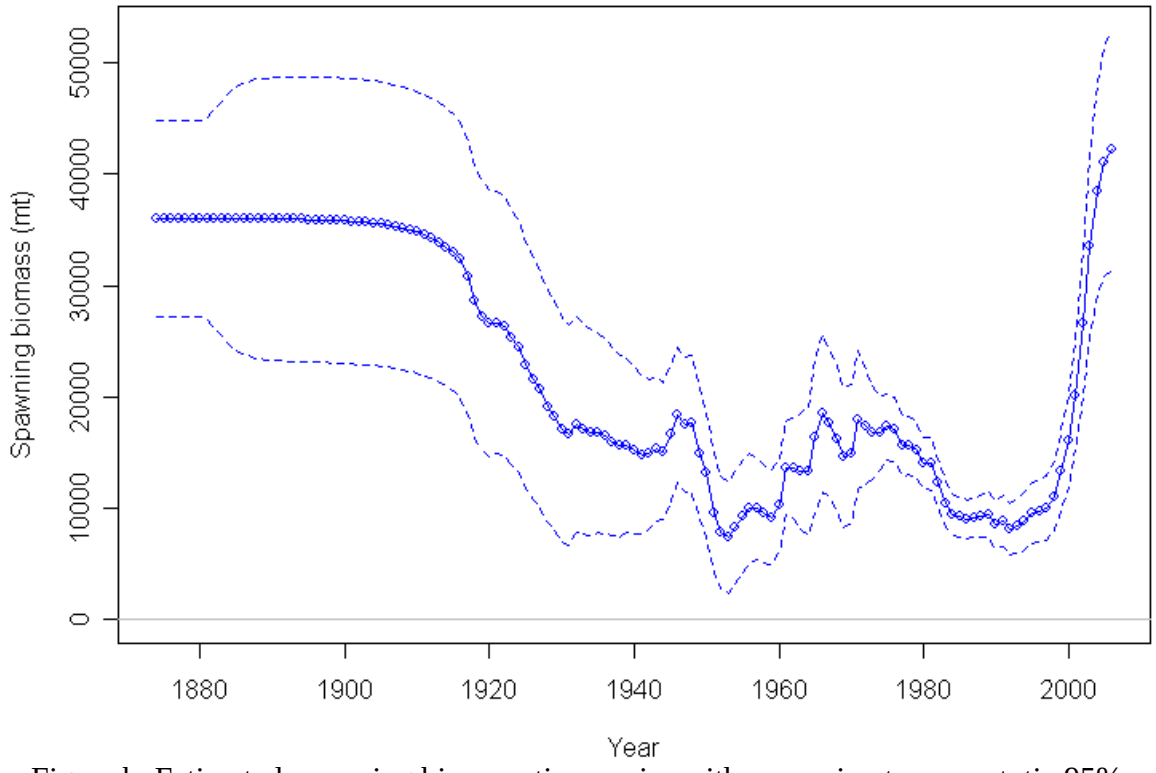

Figure b. Estimated spawning biomass time-series with approximate asymptotic 95% confidence interval.

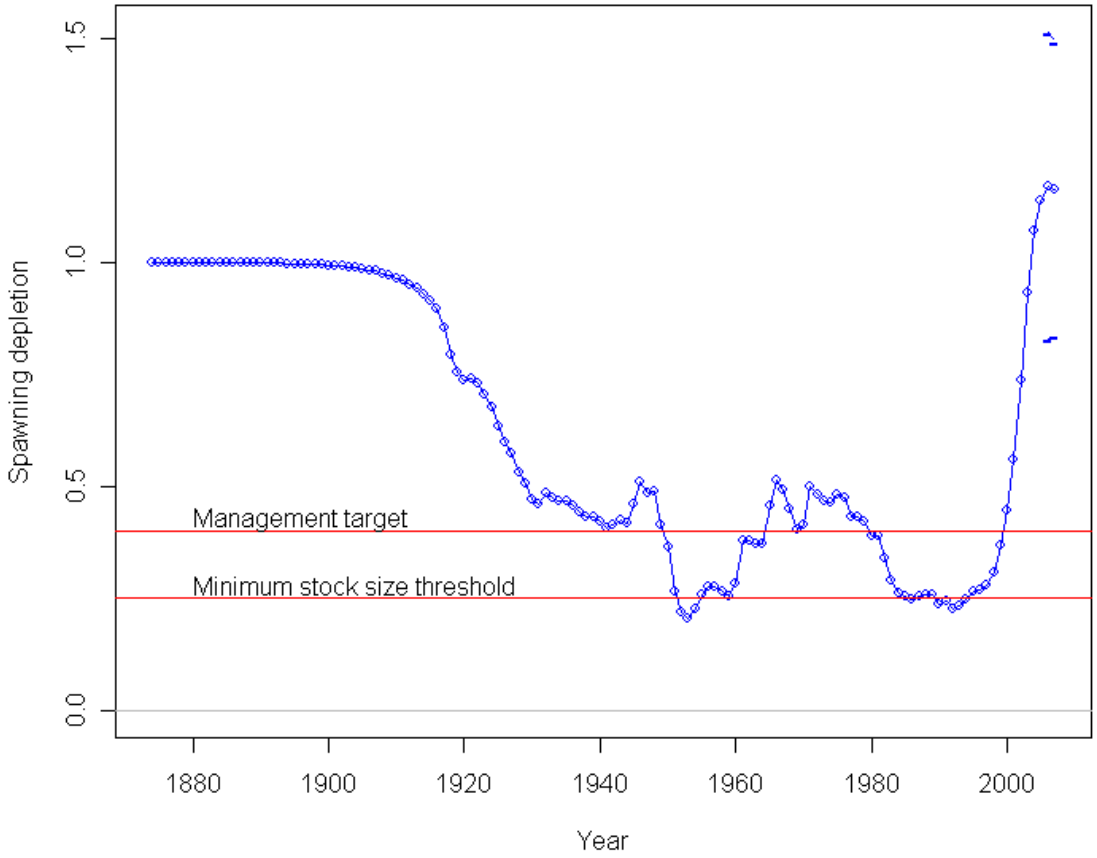

Figure c. Time-series of estimated depletion level, 1876-2007 with approximate asymptotic 95% confidence interval for 2006 and 2007.

Recruitment

Following two decades of low recruitments, strong year classes were estimated for 1995, 1998-2000, and 2002. The data indicate that the 1999 year class is the largest in the time-series, and the magnitude of this event is now much more certain than in the 2005 assessment; the coefficient of variation (CV) of this estimate has dropped from 25% (in 2005) to 19%. This change is mainly due to the large quantity of age data now available through 2006. These large recent recruitment estimates are larger than those from the 2005 assessment, resulting in the estimate of relatively higher current stock size. The recruitment deviations for 2004 and later years are informed primarily by the stock-recruitment function and this is reflected in the increased relative uncertainty of these estimates.

Table c. Recent estimated trend in English sole recruitment.

Year	Estimated recruitment (1000s)	~95% confidence interval
1998	284,960	195,739-414,849
1999	403,290	279,399-582,116
2000	274,080	172,836-434,631
2001	111,850	57,834-216,315
2002	209,360	109,931-398,721
2003	140,690	58,711-337,140
2004	118,760	50,558-278,965
2005	115,140	49,545-267,577
2006	114,440	49,350-265,380
2007	124,990	54,067-288,949

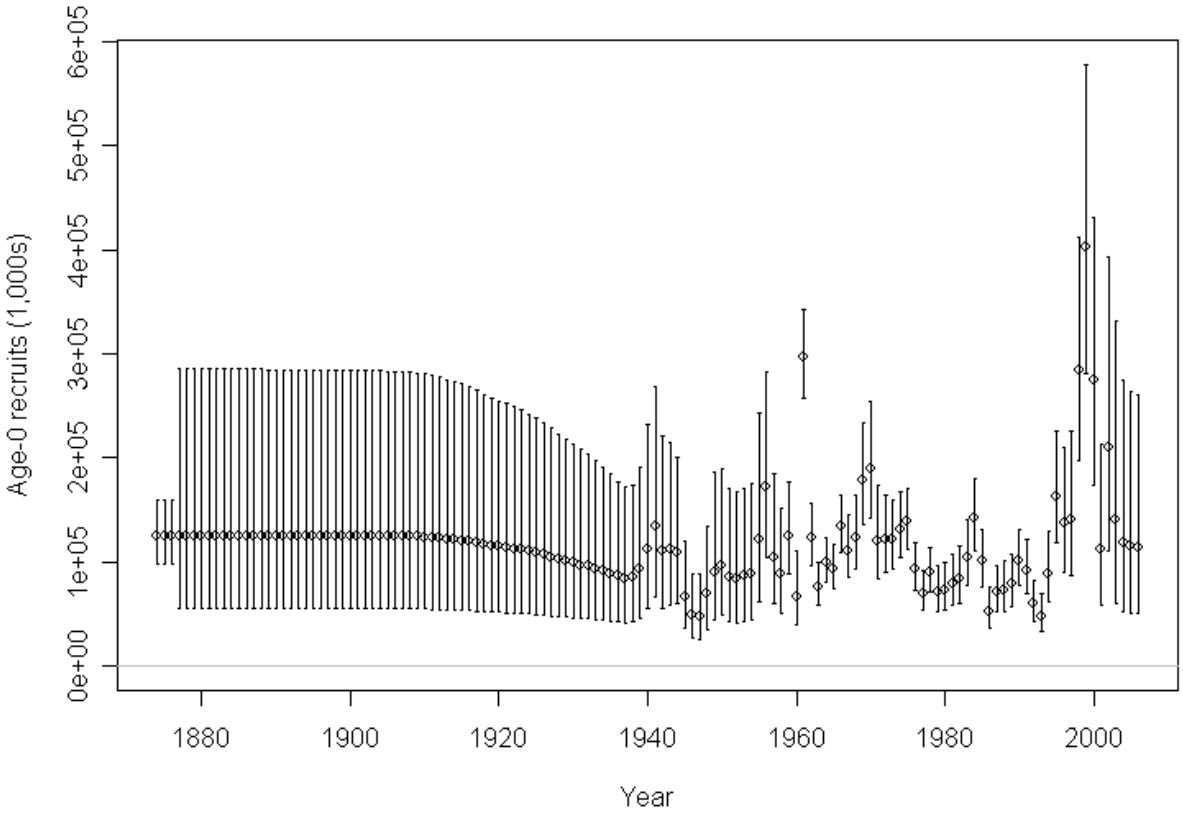

Figure d. Time-series of estimated English sole recruitments with approximate asymptotic 95% confidence interval.

Reference points

As was the case in the 2005 assessment, there are two types of reference points reported in this assessment: those based on the growth and maturity parameters at the beginning of the modeled time period and those based on the most recent time period in a 'forward projection' mode of calculation. All strictly biological reference points (e.g.,

unexploited spawning biomass) are calculated based on the unexploited conditions at the start of the model, whereas management quantities (*MSY*, SB_{msy}, etc.) are based on the current growth and maturity schedules and are marked throughout this document with an asterisk (*).

Unexploited equilibrium English sole spawning biomass (SB_0) was estimated to be 36,012 mt (~ 95% confidence interval: 27,219-44,805), with a mean expected recruitment of 124,990 thousand age-0 English sole. The $SB_{40\%}$ management proxy for target spawning biomass was estimated to be 14,405 mt (10,888-17,922), producing a landed catch of 2,523 and a total yield of 3,452 mt (2,986-3,918). The model-based estimate of retained *MSY* was 2,487* mt, which corresponds to a total mortality of 4,252 mt (~ 95% confidence interval: 2,687-5,816). The apparent increased discard rate at *MSY* is due to the interaction of size-based retention and the truncation of the size structure of the modeled population. The estimate of *MSY* is only slightly larger than the average estimated total catch from the period 1916-1991 of 3,701 mt, indicating the stock has been exploited at near optimal levels for most of the time-series, but levels have been much lower in recent years. The spawning stock biomass expected to produce *MSY* catch levels was 6,526* mt (*1*-13,654, the symmetric approximation of the 95% confidence interval included zero and was therefore rounded up), or 18.1% of SB_0. This level of exploitation was estimated to result in a spawning potential ratio (SPR) of 25.9%*. The overfished threshold for English sole was estimated to be 9,003 mt. These reference point estimates are very close to the values reported in the 2005 assessment.

Exploitation status

The estimated spawning potential ratio (SPR) for English sole fluctuated above and below the proxy target of 40% for flatfish from the late 1940s to the early 1990s. Since 1992 the intensity of exploitation has been less than that of the target, resulting in higher SPR levels. This corresponds to a relative exploitation rate (catch/biomass of age 3 and older fish) history that is high from the late 1940s to the early 1990s, and steadily declining to very low levels over the last 15 years. The stock appears to have never been exploited at the rate (0.27) that would reduce the stock to SPR levels estimated to produce *MSY*, 0.259, during the time-series. The fishery has exceeded the relative exploitation rate that results in fishing at the SPR target of 40% of 0.17 in only a few years of the historical series.

Table d. Recent trend in spawning potential ratio (SPR) and relative exploitation rate (catch/biomass of age 3 and older fish).

Year	Estimated SPR	Relative exploitation rate
1997	0.55	0.11
1998	0.63	0.07
1999	0.69	0.05
2000	0.76	0.04
2001	0.76	0.04
2002	0.76	0.03
2003	0.86	0.02
2004	0.87	0.02
2005	0.89	0.02
2006	0.90	0.02

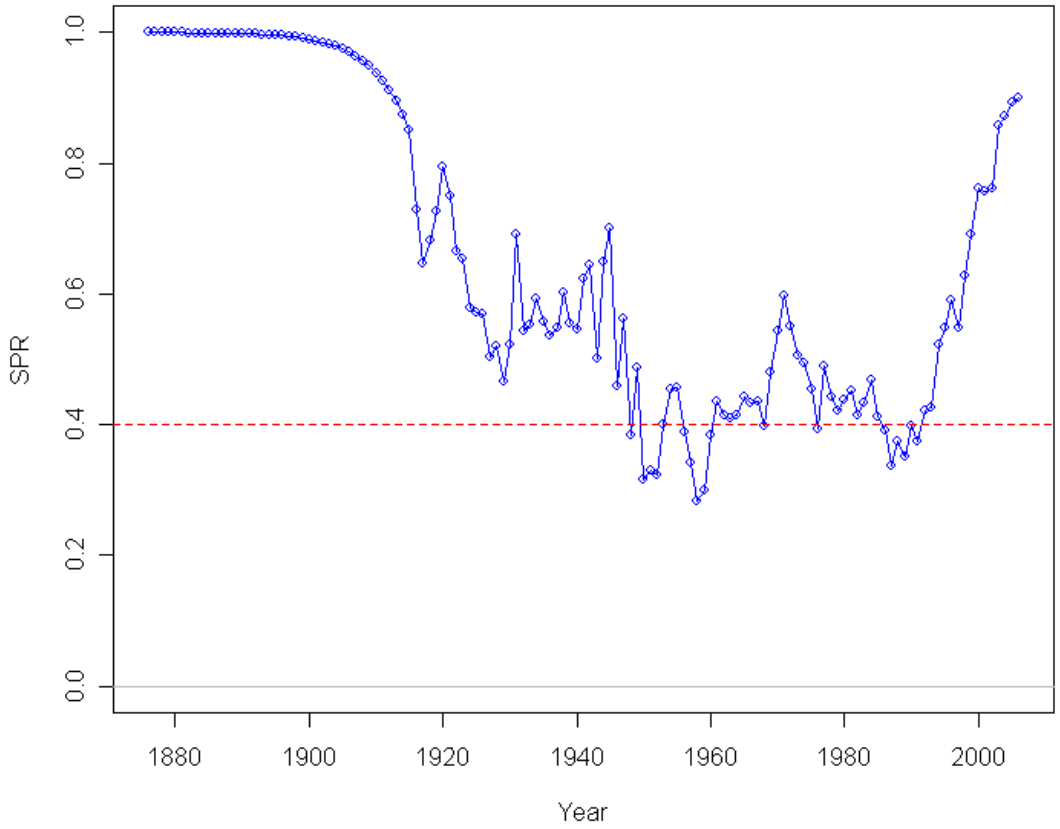

Figure e. Time-series of estimated spawning potential ratio 1876-2006.

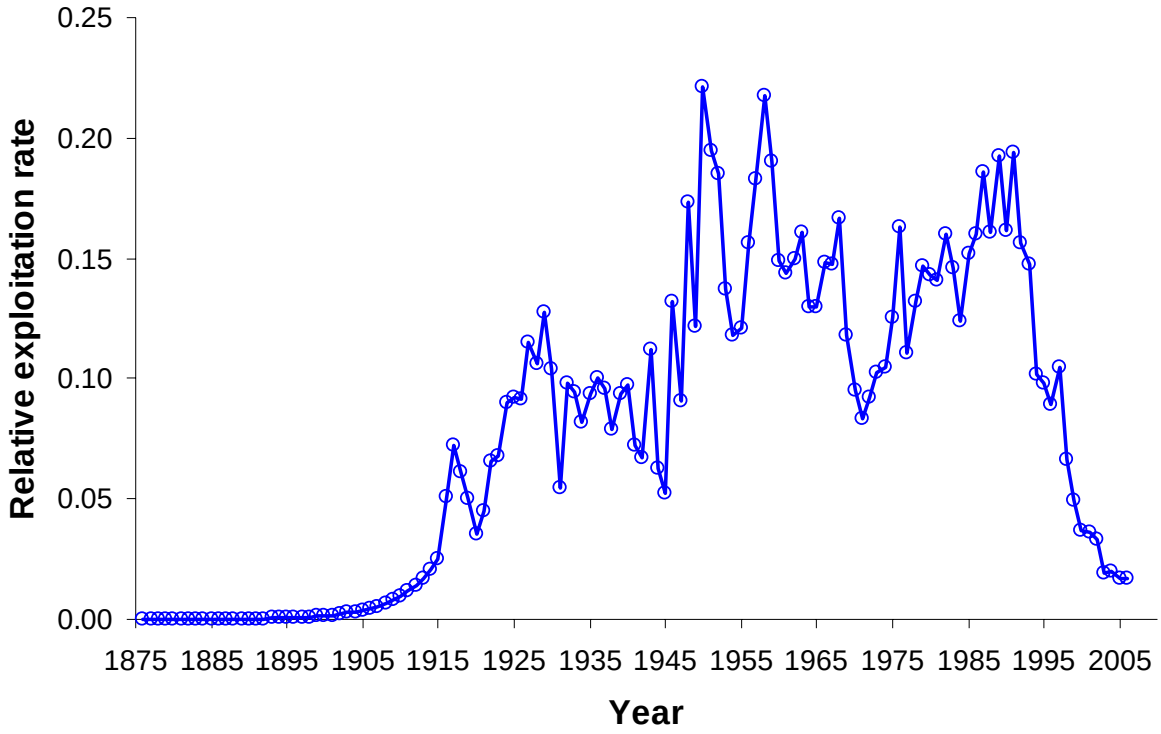

Figure f. Time-series of relative exploitation rate (catch/biomass of age 3 and older fish) 1876-2006.

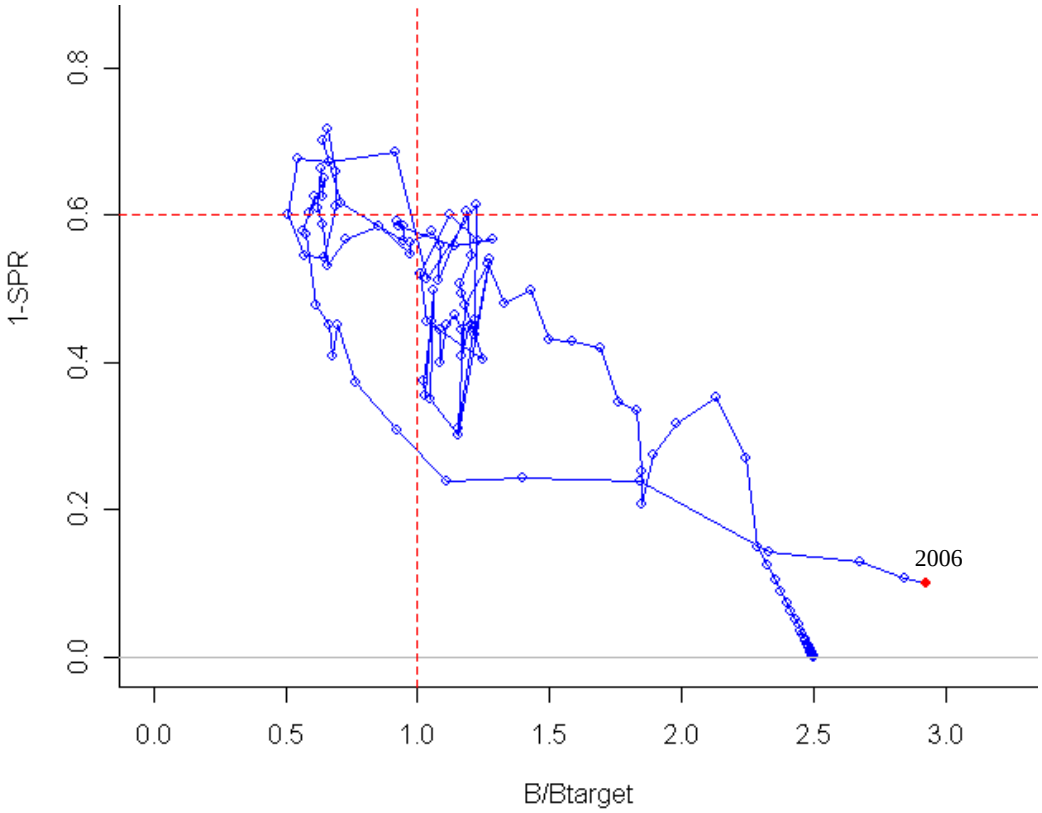

Figure g. Estimated spawning potential ratio relative to the proxy target of 40% vs. estimated spawning biomass relative to the proxy 40% level. Higher biomass occurs on the left side of the x-axis, higher exploitation rates occur on the upper side of the y-axis.

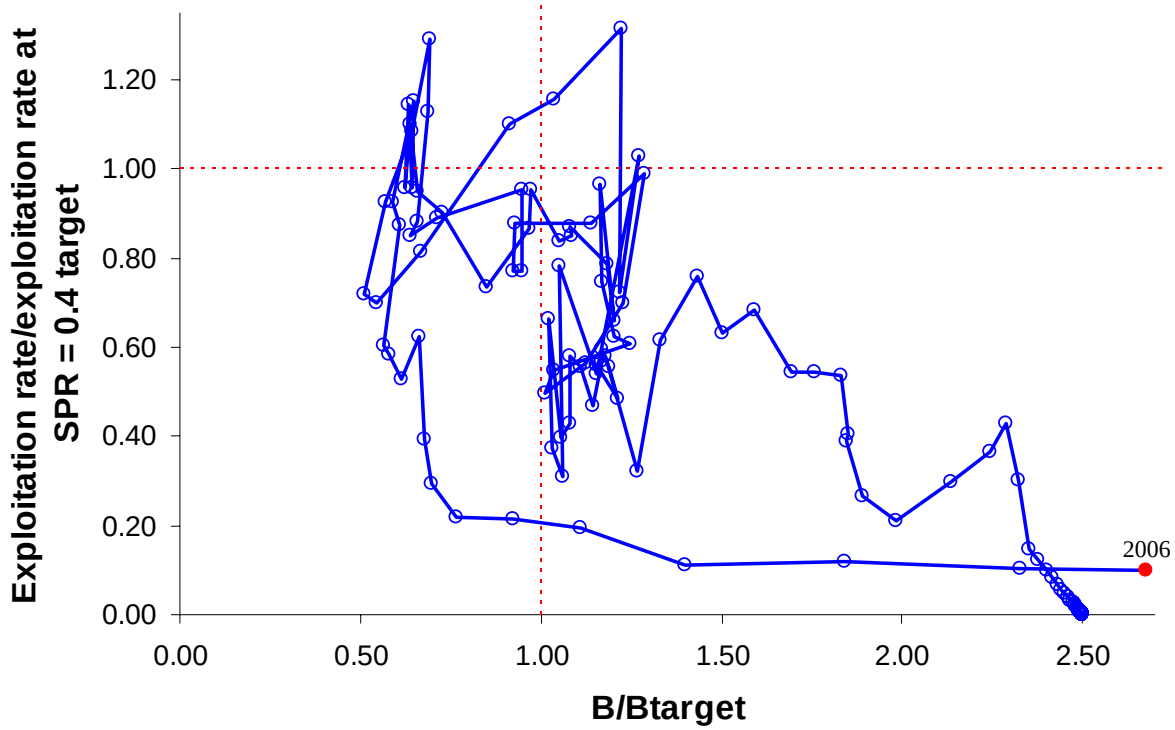

Figure h. Relative exploitation rate/exploitation rate at SPR = 0.4 target vs. estimated spawning biomass relative to the proxy 40% level.

Management performance

Recent English sole landings and estimated discards have been below both the coast-wide ABC of 3,100 mt and the estimated *MSY* harvest level of 4,080 mt.

Table e. Recent trend in estimated total English sole catch and landings (mt)

Year	Landings (mt)	Estimated total catch (mt)	Coast-wide ABC
1997	1,406	1,911	3,100
1998	1,021	1,441	3,100
1999	853	1,245	3,100
2000	734	1,061	3,100
2001	942	1,363	3,100
2002	1,154	1,683	3,100
2003	787	1,125	3,100
2004	916	1,218	3,100
2005	888	1,115	3,100
2006	886	1,078	3,100

Unresolved problems and major uncertainties

This update uses the same approach to address uncertainty as the 2005 assessment: asymptotic variance estimates, sensitivity testing and retrospective analysis of the maximum likelihood estimates for parameters and predictions of stock status. Confidence intervals for population parameters were generally wide, indicating substantial uncertainty in the time-series of spawning biomass, recruitment and relative depletion level for English sole. Three specific areas of uncertainty were selected to

reflect new sensitivity testing for this update using all available data in 2007, while maintaining those areas still relevant from the 2005 assessment:

1) This assessment allows the maturity schedule to change over time to match the large reduction in the length at 50% maturity observed between samples from the 1950s and 1995. Although it is likely that maturity does change over time, it is not clear whether these two values represent endpoints of a relatively smooth decline (as modeled), stochastic, or environmentally driven variability. With only two observations, there is little ability to explore these hypotheses in detail, so two sensitivities were performed using only the 1950s maturity curve and only the 1995 curve.
2) Because this is an update assessment, the NWFSC survey data, including indices of abundance, length- and age-frequency data for both the north and the south could not be included in the base case. A sensitivity analysis of the effect of adding these data was performed.
3) Changes in fishery selectivity and retention appear to have occurred over time and between fleets. Selectivity was allowed to change over time in the base case model (as in the 2005 assessment), however, sparse data on the discarded fraction of the catch and for the landed catch over certain time periods results in the need for the modeled patterns of fishery selectivity and retention to be very simple, likely underestimating the uncertainty in population dynamics. An effort was made to explore these simple assumptions through sensitivity testing, but further analysis should be done during the next full assessment.

As was concluded in the 2005 assessment, current spawning biomass is estimated to exceed the target level ($B_{40\%}$) throughout exploration of these major sources of uncertainty, as well as other sensitivity analyses included.

Forecasts

Forecasts were generated assuming the average landings over the period 2004-2006 would be removed in 2007 and 2008 before the results of this updated assessment would be used for management. This value was 897 metric tons, of which 79 mt would be landed in the south (Conception and Monterey areas) and 818 mt in the north (Eureka, Columbia and Vancouver areas). Beginning in 2009, the maximum potential catch would be removed under the 40:10 harvest control rule. A 10-year average of the relative F contribution from the southern and northern fleets was used for this projection. This ratio was 8.8% for the southern fleet to 91.2% for the northern fleet. An extremely large potential catch (>13 times recent average values) is predicted to be possible in 2009 based on the ABC from the $F_{40\%}$ harvest rate proxy because the stock is projected to be above unexploited spawning biomass level. Subsequent landings remain very high relative to those observed in the historical time-series for the duration of the 10-year projection. Due to the implausibility of the removals in this forecast scenario, alternates are used for the decision table analysis presented below.

Table f. Projection of potential English sole catch, landings, spawning biomass and depletion for the base case model under the 40:10 harvest control rule.

Year	Total catch (mt)	~95% interval	Total landings (mt)	Age 3+ biomass (mt)	Spawning biomass (mt)	~95% interval	Depletion	~95% interval
2007	1,069	NA	897	62,172	41,907	31,046-52,766	116%	83-149%
2008	1,053	NA	897	59,444	40,559	29,827-51,291	113%	82-143%
2009	14,326	10,473-18,179	12,303	56,494	38,711	28,203-49,219	107%	79-136%
2010	9,745	7,049-12,441	8,057	42,894	26,321	28,203-49,219	73%	54-92%
2011	7,158	5,042-9,275	5,616	35,259	19,585	18,839-33,803	54%	39-70%
2012	5,790	3,913-7,667	4,315	31,137	16,136	13,474-25,696	45%	31-59%
2013	5,095	3,307-6,882	3,660	28,843	14,420	10,528-21,742	40%	26-54%
2014	4,630	2,516-6,743	3,263	27,429	13,523	9,016-19,822	38%	24-52%
2015	4,388	2,484-6,293	3,072	26,517	13,053	8,307-18,739	36%	23-49%
2016	4,235	2,476-5,994	2,960	25,850	12,749	8,319-17,787	35%	23-48%
2017	4,122	2,461-5,784	2,880	25,335	12,527	8,364-17,134	35%	22-48%
2018	4,036	2,435-5,637	2,819	24940	12,362	8,387-16,668	34%	21-47%

Decision table

In the 2005 assessment, the strength of recent year classes was identified the primary "axis of uncertainty" was therefore selected for inclusion in the decision table. This choice reflected the lack of age data from fishery or survey sources with which to reliably estimate the strength of those year classes. Because there is now much more data informing large recruitment estimates from 1998-2000, sensitivity analysis was performed to update the dominant sources of uncertainty for inclusion in the decision table. Those sensitivity runs that appeared to show the greatest uncertainty in current stock status and recent trend included: 1) modeling the stock as if the maturity schedule had not changed since the 1950s, and 2) for comparative purposes only (because this is an update assessment) including the NWFSC trawl survey index, length and age information (2003-2006). As in 2005, given the large current stock size, the focus of the decision table is on an alternate model with a lower stock size than the base case. The spawning biomass estimated from the base case model was 41,907 mt at the beginning of 2007, with an approximate 95% confidence interval including the range of 31,046-52,766 mt. Constraining the maturity schedule to the values observed in the 1950s resulted in an estimate of current spawning biomass reduced to 28,610 mt. Including the NWFSC trawl

survey data resulted in an estimated 2007 spawning biomass of 46,140 mt. Together, these two alternate models represent "much less likely" and "less likely" scenarios bracketing the 2007 base case results. The relative probability is also described via the location in the approximate probability distribution (via the asymptotic approximation) for the base case model result. In this context, the estimate of current spawning biomass from the 1950s maturity schedule sensitivity was smaller than all but 1% of the density from the base case, while the sensitivity with NWFSC survey data resulted in a spawning biomass larger than all but 22% of the density from the base case. The English sole stock is predicted to remain above the 40% spawning biomass target for all states of nature and management options presented for the next 5 years and close to it as far into the future as 2018.

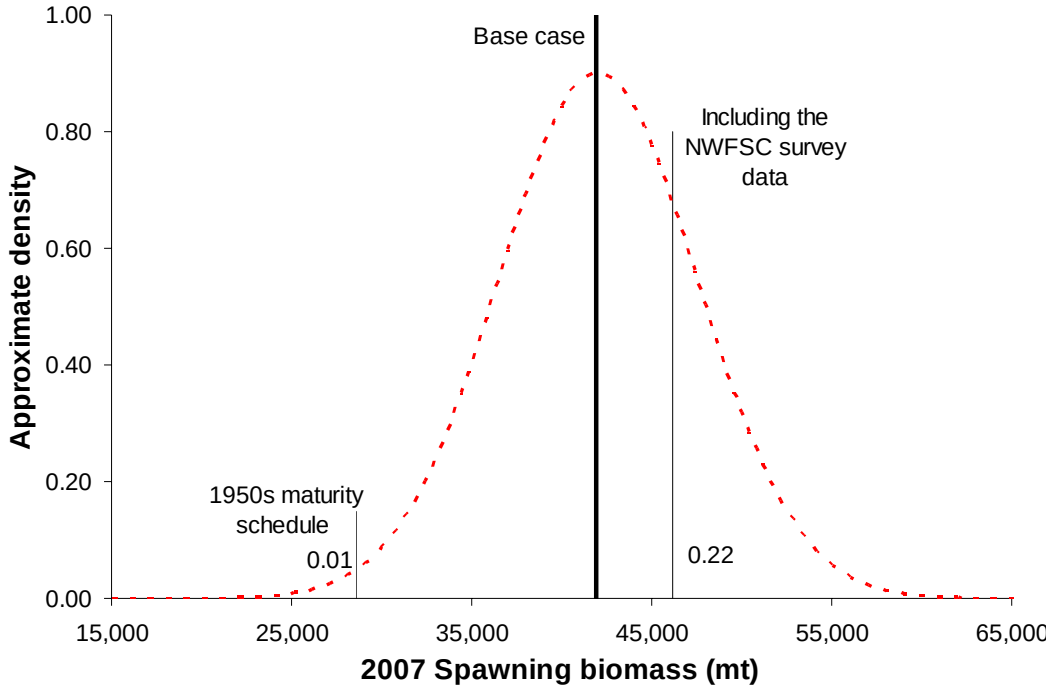

Figure i. Approximate distribution of uncertainty in estimated 2007 spawning biomass from the base case model (dashed line) density function based on the normal approximation. Bold vertical line indicates the maximum likelihood estimate from the base case, light lines the less likely alternate model including the 1950s maturity and, for comparative purposes, the alternate including NWFSC survey data.

Table g. Decision table of 10-year projections (years 1-5, 10 shown) for alternate models (columns) and management options (rows) beginning in 2009. Landings for 2007-2008 are the average in 2004-2006. The alternate model including the NWFSC survey data is presented for comparative purposes only.

			State of nature		**Comparison only**
			1950s maturity	Base case	With NWFSC survey data
Relative probability			Less likely	Most likely	Less likely
~ probability state of nature is > base case			0.01	0.5	0.78
Management decision	**Quantity**	**Year**			
3-year average landings (2004-2006) South = 79 mt, North = 818 mt	Depletion	2009	85%	107%	117%
		2010	81%	102%	111%
		2011	76%	98%	105%
		2012	71%	94%	101%
		2013	67%	90%	97%
		2014	64%	88%	94%
		2018	56%	81%	85%
	Spawning biomass (1000s mt)	2009	27,696	38,711	43,165
		2010	26,220	36,822	41,001
		2011	24,585	35,147	39,009
		2012	23,067	33,724	37,270
		2013	21,776	32,541	35,800
		2014	20,717	31,571	34,583
		2018	18,191	29,183	31,607
200% of 3-year average landings (2004-2006) South = 158 mt, North = 1,636 mt	Depletion	2009	85%	107%	117%
		2010	78%	100%	109%
		2011	72%	93%	101%
		2012	65%	88%	95%
		2013	60%	83%	90%
		2014	55%	79%	86%
		2018	45%	70%	75%
	Spawning biomass (1000s mt)	2009	27,696	38,711	43,165
		2010	25,506	35,997	40,183
		2011	23,239	33,618	37,494
		2012	21,185	31,607	35,177
		2013	19,449	29,936	33,231
		2014	18,024	28,560	31,625
		2018	14,562	25,062	27,580
3,100 mt total catch (current ABC; requested by GMT in 2005) South = 273 mt, North = 2,827 mt	Depletion	2009	85%	107%	117%
		2010	76%	98%	106%
		2011	67%	89%	97%
		2012	60%	82%	90%
		2013	53%	76%	83%
		2014	48%	72%	78%
		2018	36%	60%	65%
	Spawning biomass (1000s mt)	2009	27,696	38,711	43,165
		2010	24,806	35,197	39,382
		2011	21,929	32,146	36,011
		2012	19,379	29,593	33,142
		2013	17,260	27,498	30,763
		2014	15,549	25,792	28,822
		2018	11,539	21,522	23,980
	Landings (mt)	2009	2,674	2,662	2,672
		2010	2,664	2,653	2,673
		2011	2,638	2,628	2,655
		2012	2,603	2,597	2,628
		2013	2,568	2,566	2,600
		2014	2,534	2,538	2,573
		2018	2,429	2,457	2,497

Research and data needs

The following research would substantially improve the ability of this assessment to reliably and precisely model English sole population dynamics in the future. In order of priority (author's personal opinion):

1) Collection of maturity data on an ongoing basis from survey or fishery sources that could be used to track future changes affecting modeled spawning stock biomass.
2) This assessment contains little data on the length frequency of the discarded portion of the commercial catch of English sole. This would be valuable data to add to the discard fractions and average individual weights currently being collected. Based on changes to sampling protocols beginning with 2006, observer data will soon be available in much greater quantities and should be used in the next full assessment.
3) Because the U.S.-Canada border does not appear to be a meaningful biological boundary for the English sole population, extension of this assessment to include Canadian waters may be necessary to better capture population trends. Further, the use of explicitly spatial models for English sole (e.g., Stewart 2006) should be explored to better account for regional differences in recruitment and exploitation intensity.
4) The next full assessment can make use of the recently completed cross-method study of ageing comparing interopercular bones and otoliths that will allow revision of the ageing error matrix. This will be necessary, as otoliths are now being collected on a routine basis by the NWFSC survey and Oregon port samplers.
5) Despite much effort in the 2005 assessment, there is still uncertainty in some parts of the historical landings series. Specifically needed are: 1) a method for reconstructing landings in Washington prior to 1956 from U.S. waters, 2) landings data from Oregon from 1954-1955 and 3) a thorough study of the mink food fishery in Oregon and California including estimates of the total volume and length- or age-structure of catches associated with this fishery.
6) As part of the next full assessment, a re-evaluation of the weighting of data sources should be performed, perhaps weighting by a function of the number of fish and samples instead of just the un-tuned number of samples following the method of Stewart and Miller presented at the 2006 Data and Modeling workshop (NWFSC 2007).
7) Based on the relatively poor and biased fit to the age-at-length data from the 1995 triennial survey, the next full assessment should either find a way to fit these data better or remove them from the assessment.
8) The evaluation of uncertainty performed for the 2005 assessment and maintained in this update relies heavily on asymptotic variance estimates and sensitivity testing. A more thorough Bayesian approach to parameter and model uncertainty could be completed.
9) As recommended by the 2005 STAR panel, sex-specific natural mortality rates and selectivity curves should be explored in the next full assessment.

Rebuilding projections

The stock of English sole off the United States was not found to be currently overfished, and therefore does not require rebuilding projections.

Table h. Summary of recent trends in English sole exploitation and stock levels; all values reported at the beginning of the year. Quantities based on the current growth and maturity schedules and are marked with an asterisk (*) and are not comparable to those based on unfished conditions.

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Landings (mt)	1,021	853	734	942	1,154	787	916	888	886	NA
Estimated discards (mt)	420	392	327	421	529	338	302	227	192	NA
Estimated total catch (mt)	1,441	1,245	1,061	1,363	1,683	1,125	1,218	1,115	1,078	NA
ABC (mt)	3,100	3,100	3,100	3,100	3,100	3,100	3,100	3,100	3,100	3,100
OY	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
SPR*	0.63	0.69	0.76	0.76	0.76	0.86	0.87	0.89	0.90	NA
Exploitation rate (catch/age 3+ biomass)	0.07	0.05	0.04	0.04	0.03	0.02	0.02	0.02	0.02	NA
Age 3+ biomass (mt)	21,727	25,113	28,627	37,538	51,026	59,605	61,226	64,401	64,165	62,172
Spawning biomass (mt)	11,022	13,290	16,006	20,120	26,545	33,548	38,534	41,029	42,193	41,907
~95% interval	7,920-14,124	9,756-16,824	11,924-20,088	15,201-25,039	20,167-32,923	25,386-41,710	29,057-48,011	30,767-51,289	31,445-52,939	31,046-52,766
Recruitment (1000s)	284,960	403,290	274,080	111,850	209,360	140,690	118,760	115,140	114,440	124,990
~95% interval	195,739-414,849	279,399-582,116	172,836-434,631	57,834-216,315	109,931-398,721	58,711-337,140	50,558-278,965	49,545-267,577	49,350-265,380	54,067-288,949
Depletion	31%	37%	44%	56%	74%	93%	107%	114%	117%	116%
~95% interval	NA	NA	NA	NA	NA	NA	NA	NA	83-151%	83-149%

Table i. Summary of English sole reference points. Quantities based on the current growth and maturity schedules and are marked with an asterisk (*) and are not comparable to those based on unfished conditions. The symmetric approximation of the 95% confidence interval included zero for some quantities, the lower limit is therefore rounded up and in italics.

Quantity	Estimate	~95% Confidence interval
Unfished spawning stock biomass (SB_0, mt)	36,012	27,219-44,805
Unfished 3+ biomass (mt)	59,944	NA
Unfished recruitment (R_0, thousands)	124,990	97,519-160,199
Reference points based on $SB_{40\%}$		
MSY Proxy Spawning Stock Biomass ($SB_{40\%}$)	14,405	10,888-17,922
SPR resulting in $SB_{40\%}$ ($SPR_{SB40\%}$)	0.49	0.38-0.60
Exploitation rate resulting in $SB_{40\%}$	0.13	NA
Yield with $SPR_{SB40\%}$ at $SB_{40\%}$ (mt)	3,452	2,986-3,918
Reference points based on SPR proxy for MSY		
Spawning Stock Biomass at SPR (SB_{SPR})(mt)	11,411	10,157-12,665
$SPR_{MSY\text{-}proxy}$	0.40	NA
Exploitation rate corresponding to SPR	0.17	NA
Yield with $SPR_{MSY\text{-}proxy}$ at SB_{SPR} (mt)	3,877	3,443-4,311
Reference points based on estimated MSY values		
Spawning Stock Biomass at *MSY* (SB_{MSY}) (mt)	6,526	*1*-13,654
SPR_{MSY}	0.26	*0.01*-0.54
Exploitation Rate corresponding to SPR_{MSY}	0.27	NA
MSY (mt)	4,252	2,687-5,816

Agenda Item E.6.a
Attachment 6
June 2007

Status and Future Prospects for the Pacific Ocean Perch Resource in Waters off Washington and Oregon as Assessed in 2007

by

Owen S. Hamel

DRAFT May 18, 2005

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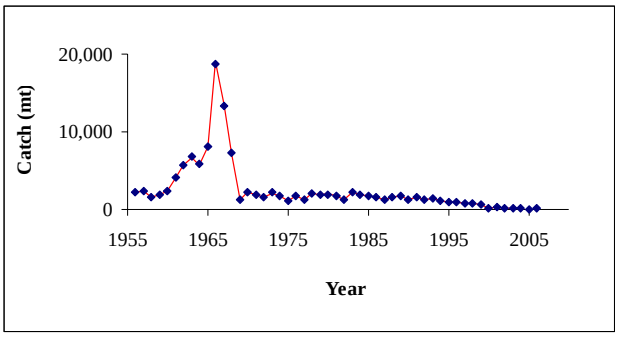
Status and Future Prospects for the Pacific Ocean Perch Resource in Waters off Washington and Oregon as Assessed in 2007

This assessment update applies to the Pacific ocean perch (*Sebastes alutus*) (POP) species of rockfish for the combined US Vancouver and Columbia INPFC areas. Catches are characterized by large removals of between 5,000 and 20,000 mt during the mid-1960's, primarily by foreign vessels. The fishery proceeded with more moderate removals of between 1,100 and 2,200 metric tons per year from 1969 through 1994, with the foreign fishery ending in 1977. Management measures further reduced landings to below 900 metric tons by 1995, with subsequent landings falling steadily until reaching between 60 and 150 metric tons per year from 2002 through 2006.

Catch history from 1956-2006



Catch estimates for past 10 years including discard

Year	*Catch*
1997	*751*
1998	*739*
1999	*593*
2000	*171*
2001	*307*
2002	*179*
2003	*151*
2004	*146*
2005	*75*
2006	*83*

This assessment is an update and uses the same model as in the 2003 and 2005 assessments, a forward projection age-structured model (Hamel 2005, Hamel et al. 2003).

New data and changes to the data used in the previous assessment are as follows. Catch data for 2003 and 2004 were updated, and new catch data were added for 2005 and 2006. Fishery age compositions from 1999-2004 were updated, with new 2005 and 2006 age compositions added. The 1999-2004 NWFSC slope survey biomass indices and age compositions were recalculated based upon changes in stratum area estimates and any updates in the database, with the 2005 and 2006 NWFSC slope survey biomass indices and age compositions added.

A number of sources of uncertainty are explicitly included in this assessment. For example, allowance is made for uncertainty in natural mortality, the parameters of the stock-recruitment relationship, and the survey catchability coefficients. However, sensitivity analyses based upon alternative model structures / data set choices in the 2003 and 2005 assessments suggest that the overall uncertainty may be greater than that predicted by a single model specification. There are also other sources of uncertainty that are not included in the current model. These include the degree of connection between the stocks of Pacific ocean perch off British Columbia and those in PFMC waters; the effect of the PDO, ENSO and other climatic variables on recruitment, growth and survival of Pacific ocean perch; gender differences in growth and survival; a possible non-linear relationship between individual spawner biomass and effective spawning output and a more complicated relationship between age and maturity.

A reference case was selected which adequately captures the range for those sources of uncertainty considered in the model. Bayesian posterior distributions based on the reference case were estimated for key management and rebuilding variables. These distributions best reflect the uncertainty in this analysis, and are suitable for probabilistic decision making.

Retrospective of past 10 years

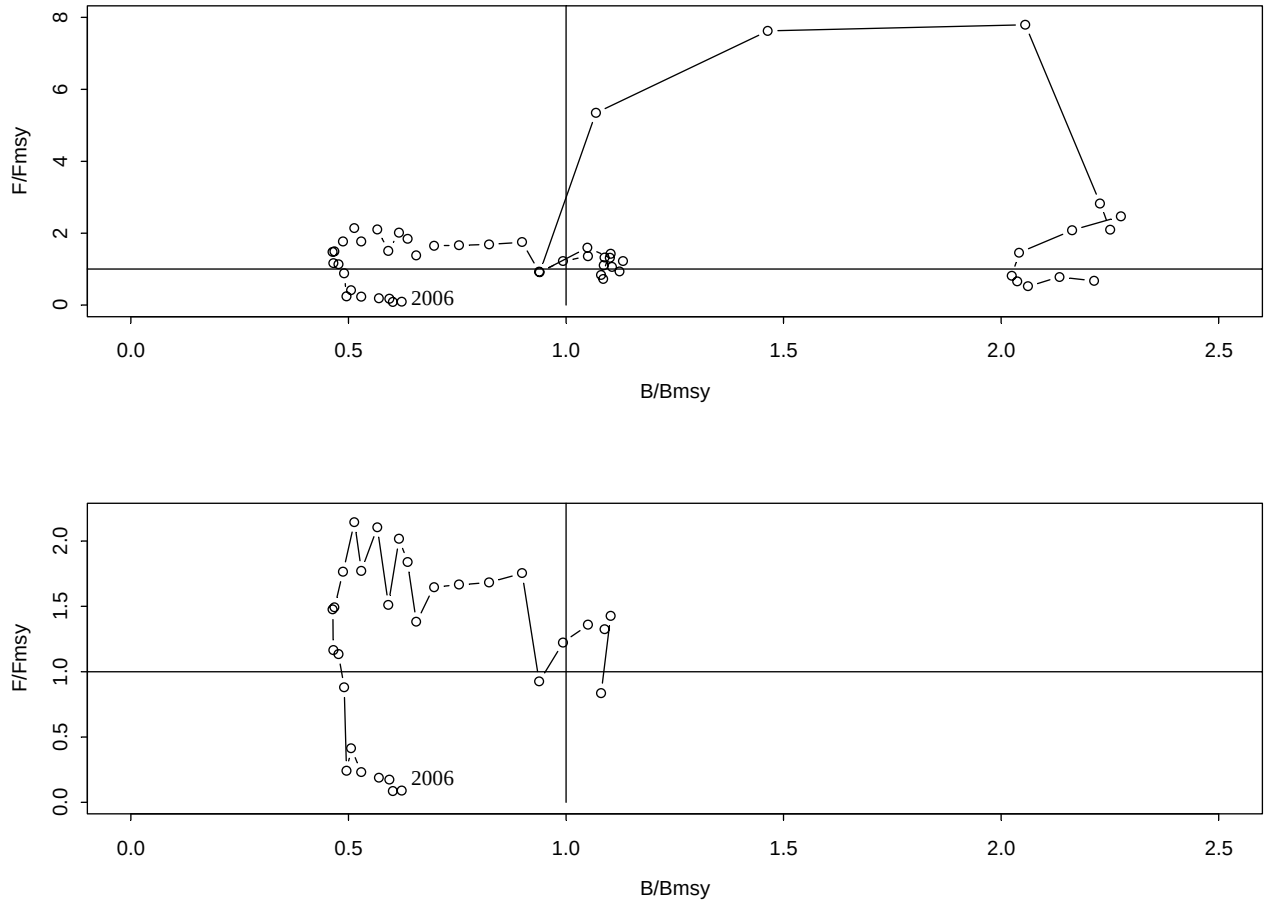
Year	*1997*	*1998*	*1999*	*2000*	*2001*	*2002*	*2003*	*2004*	*2005*	*2006*	*2007*
Total Catch	751	739	593	171	307	179	151	146	75	83	
Discards	120	118	95	27	49	29	24	24	12	13	
Landings	631	621	498	144	258	150	127	122	63	70	
ABC			695	713	1541	640	689	980	988	733	765
OY (HG)	(750)	(750)	595	270	303	350	377	444	447	366	382
F	0.0445	0.0434	0.0336	0.0093	0.0158	0.0089	0.0072	0.0067	0.0033	0.0035	
Expl. Rate	0.0420	0.0407	0.0327	0.0094	0.0163	0.0087	0.0068	0.0062	0.0030	0.0032	
3+ Biomass	17809	18214	18178	18231	18760	20582	22142	23508	24618	25658	26544
Biom. sd	2326	2452	2519	2583	2663	3008	3314	3599	3847	4080	4310
Biom. cv	0.13	0.13	0.14	0.14	0.14	0.15	0.15	0.15	0.16	0.16	0.16
Sp Biomass	6882	7055	7249	7331	7489	7826	8428	8791	8910	9210	10168
Sp Bio. sd	907	954	1006	1038	1055	1107	1194	1251	1273	1325	1506
Sp Bio. cv	0.13	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.14	0.15
Recruitment	5.07	3.69	0.53	0.82	1.69	10.47	5.35	3.13	1.61	1.48	
Rec. sd	1.15	0.96	0.32	0.39	0.67	2.75	2.05	1.53	1.27	1.33	
Rec. cv	0.23	0.26	0.61	0.47	0.39	0.26	0.38	0.49	0.79	0.90	
Depletion	0.186	0.191	0.196	0.198	0.202	0.212	0.228	0.238	0.241	0.249	0.275
Depl. sd	0.031	0.032	0.034	0.035	0.035	0.037	0.040	0.042	0.043	0.045	0.051
Depl. cv	0.17	0.17	0.17	0.17	0.17	0.18	0.18	0.18	0.18	0.18	0.19

The point estimate (maximum of the posterior density function, MPD) for the depletion of the spawning biomass at the start of 2007 is 27.5%. The ABC for 2007 based on the MPD point estimate is 1009 mt. The OY for 2007 based upon the 40-10 rule is 588 mt (The ABC and OY for 2007 in the above table are based on current management and the 2005 assessment). For West Coast rockfish, a stock is considered overfished when it is below 25% of virgin spawning biomass, and recovered when it reaches 40% of virgin spawning biomass. Overfishing for POP is considered to be occurring when F is above Fmsy = 0.0382 according to the current assessment base model. Based on this assessment, POP on the West Coast are recovering, and overfishing is not occurring.

POP are essentially managed on a regional basis, as they occur almost exclusively off of Oregon and Washington for the West Coast. Management and assessment of stock status might be improved through greater cooperation with British Columbia, as the stock extends northward into Canadian waters.

Major quantities from assessment

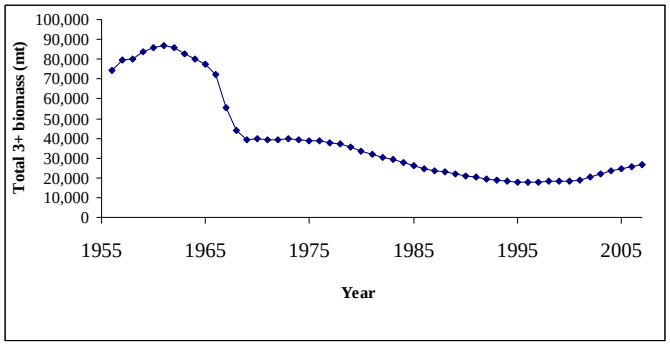
	Value	*sd*	*cv*
SB_0	36,983	4,863	0.13
B_0	82,052	11,001	0.13
R_0	4.97	0.97	0.20
SBmsy	14,793	2,462	0.17
Fmsy	0.0382	0.0123	0.32
Basis for above	F at equilibrium 40% biomass with S-R curve		
Exploitation rate at MSY	0.0388	0.0107	0.28
MSY	1411	348	0.25



F/Fmsy versus B/Bmsy for all years of catch data and the last 30 years

The point estimates of summary (age 3+) biomass show an upward trend over the past ten years, increasing by nearly 50% in that time.

3+ Biomass Levels from 1956 to 2007



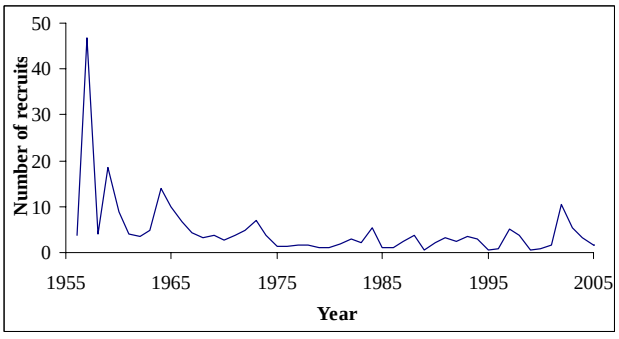
Biomass estimates for the past 10 years

Year	*Total 3+ biomass(mt)*
1998	*18,214*
1999	*18,178*
2000	*18,231*
2001	*18,760*
2002	*20,582*
2003	*22,142*
2004	*23,508*
2005	*24,618*
2006	*25,658*
2007	*26,544*

The recruitment pattern for POP is similar to that of many rockfish species. Recent decades have provided rather poor year-classes compared with the 1950s and 1960s, although the 1999 year class (the 2002 recruitment year) appears to be larger than has occurred since the 1960's, and the 2000 year class appears to be relatively large as well.

The first year for which there are age-composition data to support an estimate of recruitment is 1956, which also happens to be the first year for which catch data are available. The estimates of recruitment for the years prior to 1956 are close to the equilibrium estimate from the stock-recruitment relationship. The first few years with recruitment estimates that are informed by data are, however, still highly uncertain. The extremely large recruitment for 1957 may therefore partly reflect slightly higher average recruitment over the years 1935-56. Only by the early to mid-1960's are the estimates of recruitment reliable. Recent (1997-2006 in the table below) estimates of recruitment are highly variable by year, and lower on average than those for 1960-74, though higher on average than those for 1975-1994. The estimate of recruitment for 2006 is based on very limited information.

Recruitment estimates (1935-2006)

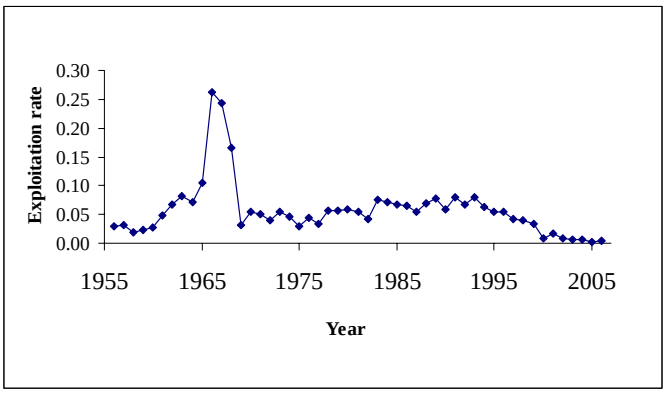


Recruitment estimates for the past 10 years (millions of age-3 recruits)

Year	*Recruitment*
1997	*5.07*
1998	*3.69*
1999	*0.53*
2000	*0.82*
2001	*1.69*
2002	*10.47*
2003	*5.35*
2004	*3.13*
2005	*1.61*
2006	*1.48*

The exploitation rate (percent of biomass taken) on fully-selected animals peaked near 25% in the mid-1960's when foreign fishing was intensive. The exploitation rate dropped by the late 1960's, but increased slowly and steadily from 1975 to the early 1990's, due to decreasing exploitable biomass. Over the past 10 years the exploitation rate has fallen from over 4% to under 0.5%.

Exploitation rate estimates (1956-2007) ***Exploitation estimates for the past 10 years***



Year	*Exploitation rate*
1997	0.0420
1998	0.0407
1999	0.0327
2000	0.0094
2001	0.0163
2002	0.0087
2003	0.0068
2004	0.0062
2005	0.0030
2006	0.0032

Near term projections show a slow monotonic increase in exploitable biomass. These were calculated with a new module within the assessment model using fishing morality rates of 0.01 and 0.02. This module projects recruitment from the estimated spawner recruit curve.

Catch, Spawning Biomass and Depletion MPD projections with F = 0.01 and 0.02

	F=0.01			F=0.02		
Year	Catch	Sp. Bio.	Depletion	Catch	Sp. Bio.	Depletion
2007	257	10168	0.275	510	10168	0.275
2008	272	11399	0.308	535	11273	0.305
2009	295	12218	0.330	573	11961	0.323
2010	320	12612	0.341	615	12217	0.330
2011	334	12781	0.346	635	12244	0.331
2012	340	13007	0.352	640	12329	0.333
2013	342	13367	0.361	638	12554	0.339
2014	349	13765	0.372	644	12824	0.347
2015	359	14175	0.383	658	13110	0.354
2016	371	14595	0.395	675	13408	0.363
2017	382	15023	0.406	691	13715	0.371
2018	393	15455	0.418	707	14025	0.379

To create three different possible states of nature for the two fishing morality rates, we took the medians of the lowest 25%, the middle 50% and the highest 25% for each quantity and year from the 2400 saved model runs from the MCMC analysis. These projections are based upon the estimated spawner recruit curve and current spawning biomass and age composition estimates. A more thorough analysis will be done for the rebuilding analysis, upon which management actions will be based, which will likely result in different projections than those seen here.

Catch, Spawning Biomass and Depletion MCMC projections with F = 0.01

	Catch (mt)	Spawning biomass	Depletion

	0-25%	25-75%	75-100%	0-25%	25-75%	75-100%	0-25%	25-75%	75-100%
2007	225	271	328	8936	10778	13133	0.245	0.312	0.395
2008	239	288	352	9999	12166	15022	0.275	0.353	0.450
2009	256	312	384	10686	13107	16334	0.294	0.380	0.488
2010	274	337	420	10986	13556	16966	0.303	0.393	0.507
2011	286	354	445	11102	13771	17281	0.306	0.400	0.516
2012	293	364	458	11269	14024	17613	0.311	0.407	0.525
2013	296	369	463	11555	14382	18031	0.319	0.418	0.537
2014	301	375	470	11872	14763	18462	0.328	0.429	0.549
2015	309	384	480	12191	15147	18891	0.336	0.441	0.560
2016	317	395	492	12513	15538	19318	0.345	0.453	0.571
2017	326	405	503	12841	15932	19741	0.354	0.465	0.582
2018	334	415	513	13168	16326	20160	0.364	0.476	0.593

Catch, Spawning Biomass and Depletion MCMC projections with F = 0.02

	Catch (mt)			Spawning biomass			Depletion		
	0-25%	25-75%	75-100%	0-25%	25-75%	75-100%	0-25%	25-75%	75-100%
2007	447	538	653	8936	10778	13133	0.245	0.312	0.395
2008	469	566	691	9889	12033	14863	0.272	0.349	0.445
2009	497	606	748	10460	12836	16006	0.288	0.373	0.478
2010	527	647	808	10640	13139	16462	0.293	0.381	0.492
2011	544	673	847	10634	13206	16592	0.293	0.383	0.495
2012	551	686	863	10680	13311	16740	0.295	0.386	0.499
2013	551	688	865	10852	13524	16977	0.300	0.393	0.505
2014	556	694	870	11059	13769	17237	0.305	0.400	0.512
2015	566	705	881	11273	14023	17504	0.311	0.408	0.519
2016	577	718	895	11493	14286	17774	0.317	0.416	0.525
2017	589	732	909	11717	14556	18045	0.324	0.425	0.532
2018	600	745	922	11938	14827	18318	0.330	0.433	0.538

Research and data needs for future assessments include information on the relationship of individual female age and biomass to maturity, fecundity and survival of offspring; information on the accuracy of POP ageing; information on the relative density of POP in trawlable and untrawlable areas and difference in age and/or length compositions between those areas; and information on the status of the British Columbia stock of POP and its relationship to that off of Oregon and Washington.

Agenda Item E.6.a
Attachment 7
June 2007

Status of the widow rockfish resource in 2007
An Update

(Draft)

Xi He, Donald E. Pearson, E.J. Dick, John C. Field,
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May 2007

Executive Summary

Stock: This assessment applies to widow rockfish (*Sebastes entomelas*) located in the territorial waters of the U.S., including the Vancouver, Columbia, Eureka, Monterey, and Conception areas designated by the International North Pacific Fishery Commission (INPFC). The stock is assumed to be a single mixed stock and subject to four major fisheries (see figure below).

Catches: The earliest records of foreign landings of widow rockfish were in 1966. U.S. catches of widow rockfish began in 1973, peaking in 1981. Since the 1981 peak there has been a steady decline in the landings of widow rockfish to 28 mt in 2003 and to 70 mt in 2006 (2006 catch estimates are preliminary). Catches were mostly from commercial fisheries. Catches from recreational fisheries ranged from less than 2 mt in 2003 to 375 mt in 1982. The dominant gear type historically has been the midwater trawl. During the early 1990s, bottom trawl catches nearly matched the midwater trawl catches.

Table E1. Recent landings (mt) of widow rockfish by four fisheries from 1990 to 2006.

Year	Vancouver, Columbia	Oregon Midwater Trawl	Oregon Bottom Trawl	Eureka, Monterey, and Conception	Total
1990	2241	3214	2167	2652	10274
1991	1176	1816	1935	1375	6301
1992	946	1149	2632	1324	6052
1993	1747	1755	3386	1348	8236
1994	1074	1678	2382	1248	6384
1995	1087	1394	2295	1926	6703
1996	965	1464	2137	1528	6094
1997	1016	1523	2245	1707	6492
1998	563	759	1330	1304	3956
1999	525	1721	796	901	3943
2000	380	2276	16	1141	3814
2001	302	966	39	505	1812
2002	65	155	6	51	276
2003	16	8	0	5	28
2004	31	12	2	28	74
2005	43	59	1	10	113
2006	46	11	2	11	70

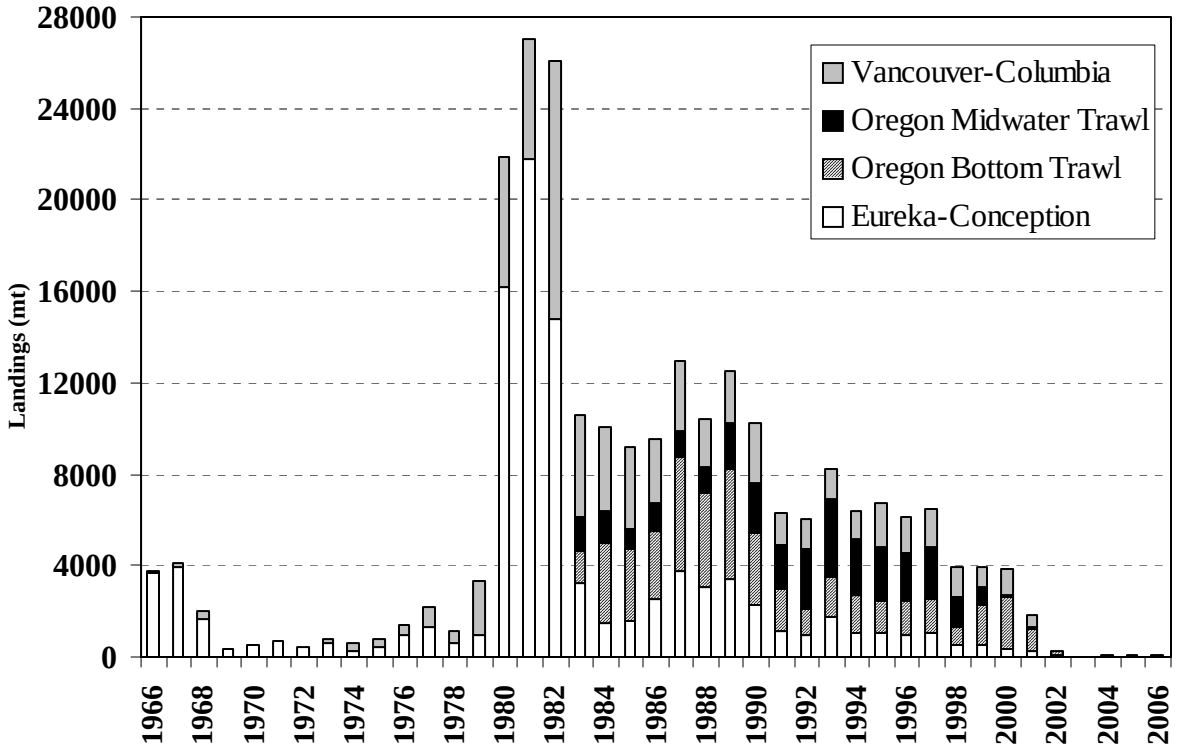


Figure E1. Total landings of widow rockfish from 1966 to 2006

Data and assessment: The last assessment of widow rockfish was conducted in 2005 using an age-based population model (written in ADMB, He et al. 2006). All fishery data, including landings, age composition, and logbook catch rates, were recently downloaded from the PacFIN, CALCOM, and NORPAC databases, or provided by state agencies. Since this assessment is an update assessment, the same assessment model and data compiling procedures were used in this assessment. New data from 2005 and 2006, including catches, age composition, and CPUE time series, were included in this assessment.

Unresolved problems and major uncertainties:

1. The primary source of information on trends in abundance of widow rockfish comes from the Oregon bottom trawl logbook data, which is a questionable source of information for widow rockfish. In addition, no information after 1999 in the Oregon bottom trawl logbook data can be used in the assessment because the catch rates were very low due to trip limits and other management regulations. Based on a recommendation by the 2003 STAR panel, triennial survey indices have been used in this assessment as an additional abundance index.
2. Natural mortality was fixed at 0.15 in previous assessments. The 2005 STAR panel recommended natural mortality to be fixed at 0.125, but the validity of this estimate is still uncertain.
3. There exist uncertainties in estimating stock-recruitment relationships. Similar to other rockfish species in the area, the biomass of widow rockfish has decreased steadily since the early 1980s and recruitment during early 1990s is estimated to have been

considerably smaller than before the mid 1970s. The reason for the lower recruitment during the period could be due to lower spawning stock biomass, but it could also be due to a lower productivity regime. However, there is evidence that recruitment of many rockfish species since 1999 has been higher than the average of the 1990s. This is also supported by the most recent juvenile survey data and age composition data.

4. The uncertainties in stock-recruitment relationship would lead to greater uncertainties in the rebuilding analysis because it largely depends on how future recruitments are generated.
5. There was considerable discussion about the appropriate use of the Santa Cruz juvenile survey data in the 2003 and 2005 STAR Panel reviews. It was noted that the survey indices are highly variable, that the index has not always identified strong year-classes, and that power transformation of this index has some influences on the results. It has been suggested that the area coverage of the Santa Cruz juvenile survey might not be sufficient to monitor coast-wide distribution of widow rockfish and oceanographic conditions. The Pre-recruit Survey Workshop held in September 2006 suggested using only coast-wide pre-recruit survey indices, which are only available from 2001 to 2006. Since the assessment model uses 3 to 20+ age groups, only pre-recruit data from 2001 to 2003 can be used in the assessment model. It is a very short time series data. Nevertheless, a model run with only 2001-2006 coast-wide pre-recruit survey indices is included for reference (Appendix B).
6. Stock structure issues, in particular the relationship to the Canadian stock, remain an important source of uncertainty.

Reference points: The percentage ratio of spawning output in 2006 to unfished spawning output (B_0) is the population status ("depletion rate"). A depletion rate below 25% indicates an overfished stock, and depletion rates between 25% and 40% indicate a precautionary zone. A depletion rate over 40% is a healthy stock. The following reference points were obtained from the assessment model:

Table E2. Estimated reference points from the assessment.

Quantity	Value
Unfished spawning output (B_0)(millions of eggs)	50434
Current spawning output (B_t) (millions of eggs)	18253
Depletion rate ($100*B_t/B_0$)	36.19
Spawning output at MSY (B_{msy}) (millions of eggs)	20174
Basis for B_{msy}	$B_{40\% proxy}$
F_{msy}	0.1204
Basis for F_{msy}	$F_{50\% proxy}$

Stock biomass: Stock biomass has shown a steady decline between 1977 and 2000, soon after the fisheries for widow rockfish began. Since 2001, stock biomass has shown an increasing trend. The following table and figure show time series of estimated catches, discards, stock biomass, fishing mortality, and recruitments from the assessment model.

Table E3. Estimated biomass, recruitment, discard, and other annual parameters from the stock assessment from 1990 to 2006.

Year	Total biomass (mt)	Spawning biomass (mt)	Recruitment (*1000)	Landing (mt)	Discard (mt)	Fishing Mortality	Exploitation rate	Depletion (%)
1990	142592	64146	24392	10266	1955	0.1792	0.1593	49.0
1991	131250	59804	15815	6305	1201	0.1185	0.1080	46.4
1992	124337	57274	15831	6055	1153	0.1225	0.1139	44.8
1993	121627	54294	29367	8223	1566	0.1875	0.1691	42.8
1994	121884	50045	44745	6365	1212	0.1605	0.1450	39.5
1995	117194	47413	13786	6684	1273	0.1794	0.1652	37.2
1996	112361	45594	15639	6079	1158	0.1663	0.1520	35.2
1997	107001	45345	13476	6475	1233	0.1601	0.1466	34.5
1998	99128	44928	7464	3956	754	0.0930	0.0875	34.3
1999	94005	44712	7687	3948	752	0.1023	0.0915	34.5
2000	89023	43250	9908	3824	728	0.1099	0.0955	33.9
2001	87315	41083	22708	1814	346	0.0568	0.0505	32.7
2002	88329	39770	18260	276	53	0.0096	0.0084	31.9
2003	105387	39801	67067	28	5	0.0010	0.0009	31.8
2004	111365	40759	16013	74	14	0.0022	0.0022	32.1
2005	116772	43782	17196	113	22	0.0033	0.0029	33.4
2006	120989	48370	16395	70	13	0.0014	0.0014	36.2

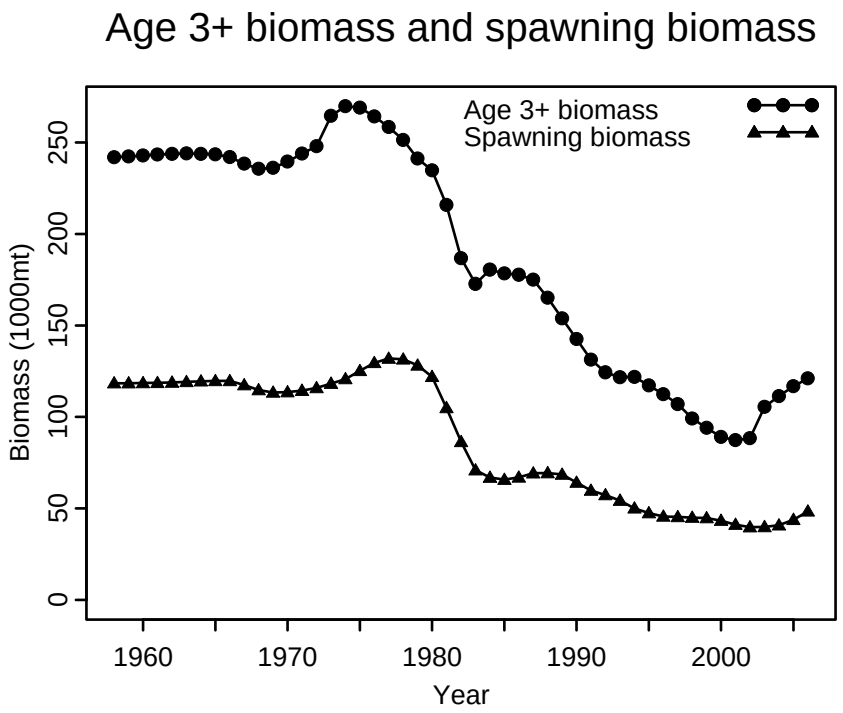


Figure E2. Age 3+ biomass (1000mt) and spawning biomass (1000mt) from 1958 to 2006 estimated from the assessment model.

Recruitment: The model estimated time series of recruitment of age 3 fish from 1958 to 2001. The highest recruitment occurred in 1972. Recruitments remained generally low in the early 1990s as compared to the long-term average, but showed an increasing trend in recent years. The following figure shows that recruitment of age 3 in 2003 (born in 2000) is relatively high. This relative strong recruitment class is one of main reasons that the current spawning biomass is higher than that in the 2005 assessment. However, there are uncertainties about how strong this recruitment class really is. One reason is that we have small ageing samples from the most recent years to better measure this recruitment class.

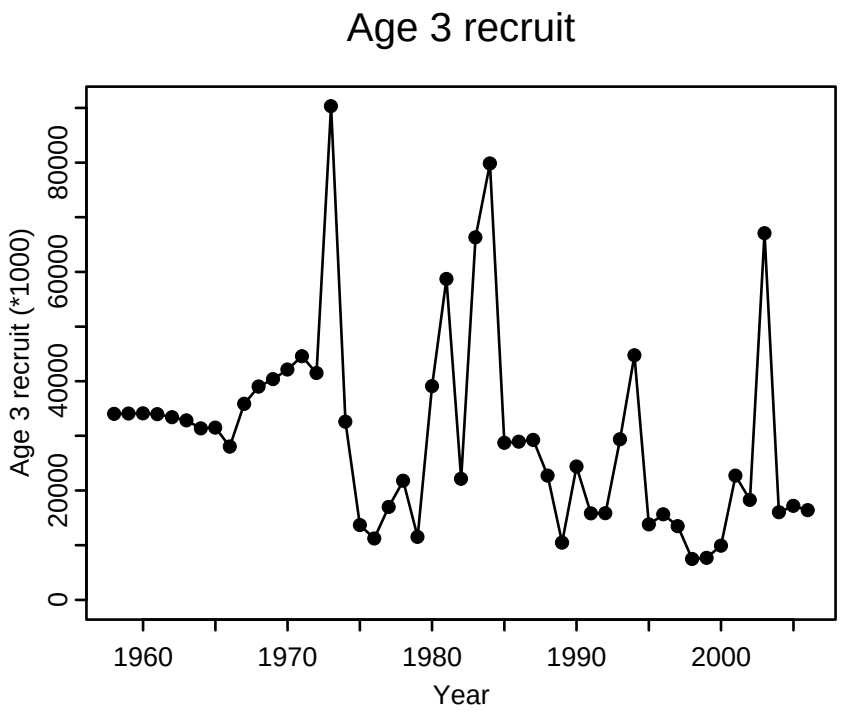


Figure E3. Age 3 recruits (*1000) from 1958 to 2006 estimates from the assessment model.

Exploitation status: The point estimate of the current spawning output is at 36.2% of the unfished level (see table above).

Management Performance: See below.

Table E4. Management performance from 1989 to 2007.

Year	Harvest Guideline	Allowable Biological Catch	Landings
1989	12100	12400	12486
1990	12400	8900	10274
1991	7000	7000	6301
1992	7000	7000	6052
1993	7000	7000	8236
1994	6500	6500	6384
1995	6500	7700	6703
1996	6500	7700	6094
1997	6500	7700	6492
1998	5090	5750	3956
1999	5090	5750	3943
2000	5090	5750	3814
2001	2300	3727	1812
2002	856	3727	276
2003	832	3871	28
2004	284	3460	74
2005	285	3218	113
2006	289	3059	70
2007	368	5334	

Forecasts: The estimated current depletion rate is 36.1% of unfished (virgin) spawning output with 95% confidence level ranged from 23.53% to 48.85. It is estimated that the population will recover to the target (40% of unfished spawning output) in 2009. Forecasts of future biomass at five constant catch levels (ranged from 500mt to 4000mt each year) are presented in the following tables and figures. They show that the biomass will not fall below the target biomass (40% of unfishing level) if future catches remain at or below 2000mt per year.

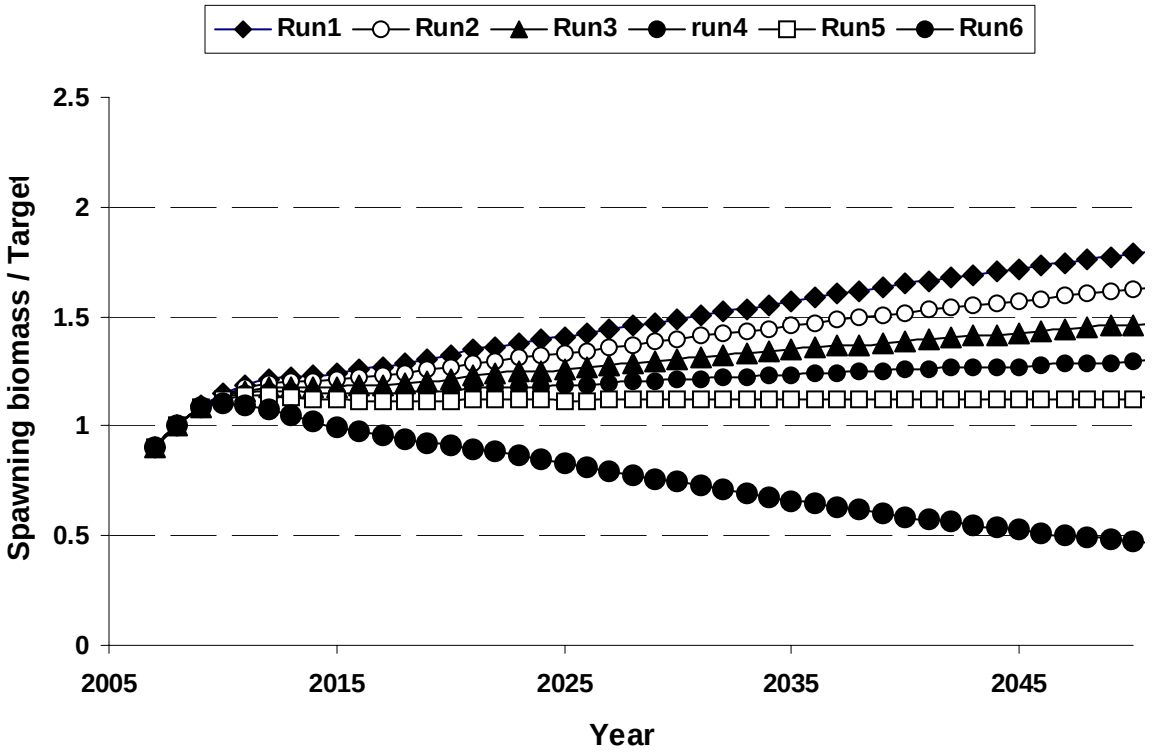
Table E5. Specifications of six rebuilding simulation runs based on different annual catch for future years. Future recruitments are generated using the stock-recruitment relationship estimated in the stock assessment. Maximum fishing mortalities for all future years are set to *Fmsy*.

Run name	Start Year	Catch time series
Run1	2007	368 mt of catch in 2007, and then no catch thereafter
Run2	2007	368 mt of catches in 2007 and 2008, 500 mt thereafter
Run3	2007	368 mt of catches in 2007 and 2008, 1000 mt thereafter
Run4	2007	368 mt of catches in 2007 and 2008, 1500 mt thereafter
Run5	2007	368 mt of catches in 2007 and 2008, 2000 mt thereafter
Run6	2007	368 mt of catches in 2007 and 2008, 4000 mt thereafter

Table E6. Proposed future catches (mt) and estimated exploitable biomass (mt) for six rebuilding runs from 2009 to 2018. The estimated target exploitable biomass is about 26,668 mt, which is roughly corresponding to 40% of virgin spawning output. The population is estimated to recover in 2009. SPR rates and fishing mortalities are average values from 2007 to 2018.

	Run1		Run2		Run3		Run4		Run5		Run6	
Probability of recovery	1.0		1.0		1.0		1.0		1.0		1.0	
Recovery time	2009		2009		2009		2009		2009		2009	
SPR rate	1.000		0.9417		0.8853		0.8307		0.7780		0.6168	
Fishing mortality	0.0000		0.0084		0.0171		0.0263		0.0358		0.0791	
	Catch	Biomass	Catch	Biomass	Catch	Biomass	Catch	Biomass	Catch	Biomass	Catch	Biomass
2009	0	68148	500	67656	1000	67454	1500	67253	2000	67049	4000	66231
2010	0	66767	500	65947	1000	65383	1500	64826	2000	64252	4000	61991
2011	0	64220	500	63145	1000	62287	1500	61477	2000	60571	4000	57142
2012	0	61557	500	60294	1000	59212	1500	58133	2000	57048	4000	52717
2013	0	59533	500	58128	1000	56871	1500	55676	2000	54370	4000	49353
2014	0	58344	500	56848	1000	55454	1500	54147	2000	52672	4000	47106
2015	0	57945	500	56352	1000	54869	1500	53440	2000	51885	4000	45847
2016	0	58175	500	56488	1000	54896	1500	53130	2000	51686	4000	45179
2017	0	58784	500	56968	1000	55251	1500	53273	2000	51792	4000	44731
2018	0	59369	500	57415	1000	55558	1500	53501	2000	51815	4000	44145

Figure E4. Time series of spawning biomass over target for proposed six simulation runs. Note that only Run6 (annual catch of 4000mt) results in the spawning biomass fell below the target level (spawning biomass over target equals to 1).



Recommendations:

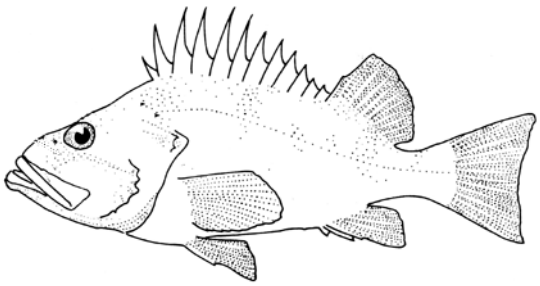
1. There are increasingly fewer reliable abundance indices for widow rockfish. Recent management measures have undermined the ability to continue fishery dependent time series of relative abundance from the Oregon bottom trawl fishery and Pacific whiting fishery since 1999. The constant flux of the management regime suggests that there is little likelihood that meaningful CPUE indices can be developed from these fisheries in the future. More analysis should be done to either calibrate or compare triennial survey results with those from the NWFSC Combined survey.
2. Long-term recruitment index is a key datum series in the stock assessment. Continuation of the midwater juvenile trawl survey and recent increases in sampling intensity and spatial coverage will improve estimation confidence and data quality. Comparison and possibly integration of the existing juvenile survey results with a recently initiated survey by the fishing industry (See Report on Pre-recruit Survey Workshop, September 2006) could also broaden the spatial extent of this index. The ability to infer direct and indirect estimates of year class strengths from surveys and other sources, as well as to better understand the relationship between environmental conditions in the California Current

System, should improve short-term forecasts of productivity, biomass levels and allowable catches from stock assessments.

3. Preliminary information from recent bycatch monitoring suggest that discards may have decreased substantially compared to the assumed 16% currently used. New discard data should be analysed and, if warranted, past discard estimates should be adjusted.
4. The utility of hydro-acoustic surveys on widow rockfish abundance should be evaluated in future assessments.
5. Sample sizes for existing age-collection programs (by fishery and survey) should be increased substantially.
6. The age-composition for the triennial survey should be determined by applying year-specific age-length keys to the survey length-frequencies, and included in future assessments as a basis for estimating survey selectivity.

Agenda Item E.6.a
Attachment 8
June 2007

Status of cowcod, *Sebastes levis*, in the Southern California Bight



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DRAFT
May 24, 2007

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45	Appendix B: Stock Synthesis 2 files (starter.ss2, moo3.dat, moo3.ctl, forecast.ss2)

Cowcod line drawing from CDF&G Fish Bulletin No. 157 (1972)

Executive Summary

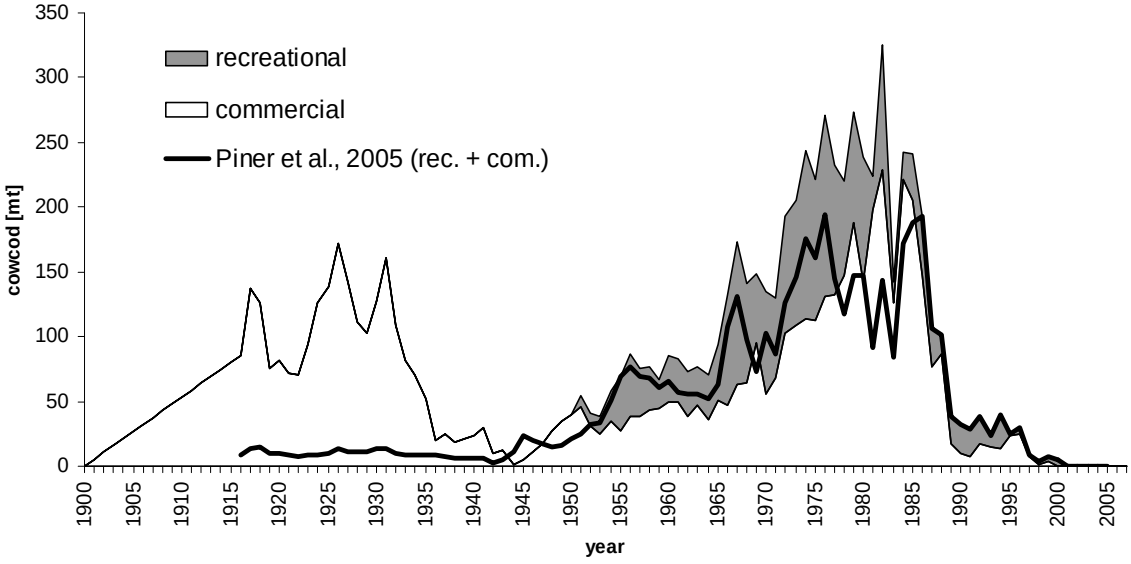
Stock: This stock assessment updates the last full assessment (Piner et al., 2005) of *Sebastes levis* in the Southern California Bight (SCB), defined as U.S. waters off California and south of Point Conception. Waters north and south of the SCB are not considered in this assessment due to sparse data and possible differences in abundance trends (Piner et al., 2005). The assumption of an isolated stock remains untested, and no information is available regarding dispersal across the northern or southern stock boundaries.

Catch: Retention of cowcod is currently prohibited. Recreational landings in this assessment are identical to those in the previous assessment, but estimates of commercial landings have been updated to reflect three additional data sources: 1) recovered port samples from Southern California (1983-1985), 2) regional summaries of total rockfish landings (1928-1968) provided by the NMFS SWFSC Environmental Research Division, and 3) California rockfish landings by region (1916-1927), published in CDF&G Fish Bulletin No. 105 (1958). From 2001 to the present, we assume a discard rate of 0.5 metric tons per year for the commercial and recreational fisheries combined (Table ES1).

Table ES1: Recent landings [metric tons] of cowcod in the Southern California Bight

Year	Commercial	Recreational	Total
1997	7.30	1.85	9.15
1998	1.21	2.81	4.03
1999	3.47	3.77	7.24
2000	0.45	4.49	4.94
2001	--	--	0.5
2002	--	--	0.5
2003	--	--	0.5
2004	--	--	0.5
2005	--	--	0.5
2006	--	--	0.5

Figure ES1: Estimated cowcod landings, 1900-2006



Data and assessment: The model structure and data inputs are very similar to the 2005 assessment. It is an age-structured production model, with three estimated parameters: virgin recruitment (R_0), catchability for the CPFV logbook index, and catchability for the visual survey biomass estimate. In the 2005 assessment, the selectivity curves for the fishery and CPFV index were inadvertently set equal to female fecundity. In this update, length-based selectivities for the fishery and logbook index are set equal to the female maturity schedule, as was the intention of Piner et al. (2005). Changes to the historical catch data are summarized above, and described in detail in the "Updated data sources" section. The length-at-age relationship was slightly adjusted based on evidence that lengths recorded during the ageing process were total length rather than fork length. The logbook index from the Commercial Passenger Fishing Vessel (CPFV) fishery and the estimate of cowcod biomass in 2002 from the submersible line-transect survey are identical to the previous assessment (no new data). Steepness of the Beverton-Holt stock-recruitment curve was fixed, but model outputs are reported for three values (0.4, 0.5, 0.6). In the base model steepness is fixed at 0.5 and natural mortality is fixed at 0.055. The period modeled in the 2005 assessment (1916-2007) was extended by a linear ramp in catch from 1900-1916. The software used to fit the base model was Stock Synthesis 2 (SS2), version 2.00c.

Unresolved problems and major uncertainties: Uncertainty analyses show that estimates of steepness (h) and the natural mortality rate (M) are highly uncertain, and both parameters are treated as fixed and known. The CPFV time series of relative abundance ends in 2000, and no abundance indices are currently available to inform recent trends. Together, these characteristics imply that conclusions regarding rebuilding success are highly uncertain.

Reference points: For *Sebastes*, the PFMC currently uses $F_{50\%}$ as a proxy for the fishing mortality rate that achieves maximum sustainable yield (F_{MSY}). Estimates from the current model indicate that cowcod is currently overfished, with spawning biomass (SB) in 2007 between 6.4% and 8.0% of the unfished level. Retention of cowcod is prohibited and bycatch is thought to be minimal, so it is unlikely that overfishing is currently an issue.

Table ES2: Reference points

	Assumed value of steepness			
Reference Point	**h = 0.4**	**h = 0.5**	**h = 0.6**	**units**
Unfished summary (age-1+) biomass	5836	5466	5205	metric tons
Unfished spawning biomass (SB_0)	5489	5141	4895	metric tons
Unfished recruitment (R_0)	121	114	108	1000s of fish
40% of SB_0 (proxy for SB_{MSY})	2196	2056	1958	metric tons
Exploitation rate at $F_{50\%}$ (proxy for F_{MSY})	2.9%	2.9%	2.9%	percent
Spawning biomass in 2007 (SB_{2007})	353	367	392	metric tons
SB_{2007} / SB_0	6.4%	7.1%	8.0%	percent

Stock biomass: Estimates of 2007 spawning stock biomass, based on the three assumed values of steepness, have declined to 353-392 mt in 2007 from an unfished biomass of 4895-5489 mt.

Figure ES2: Time series of spawning biomass

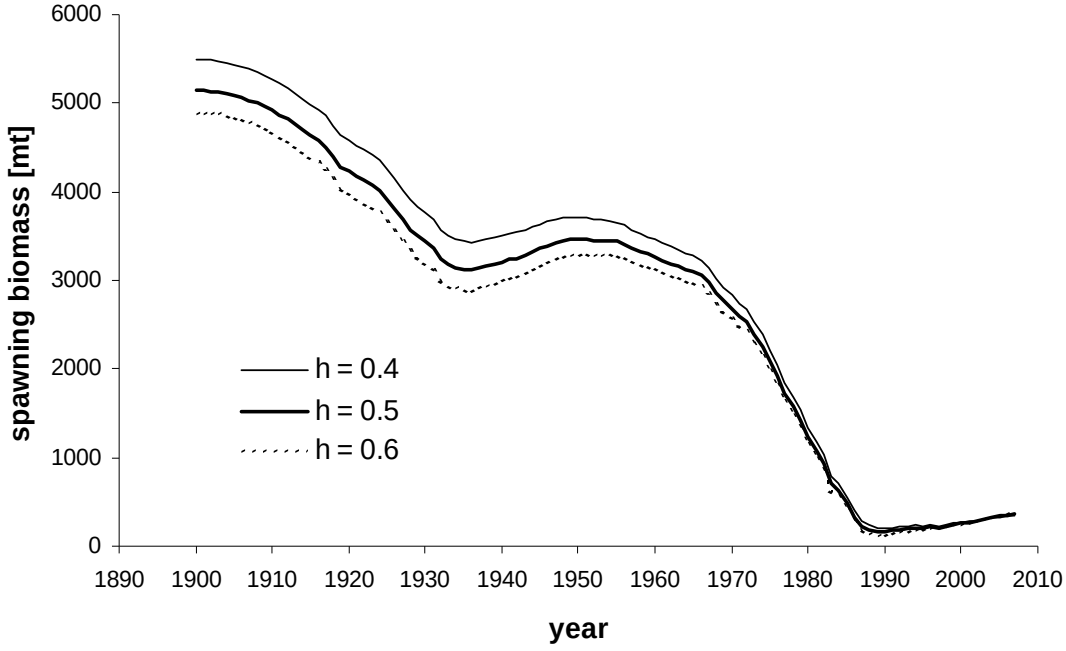
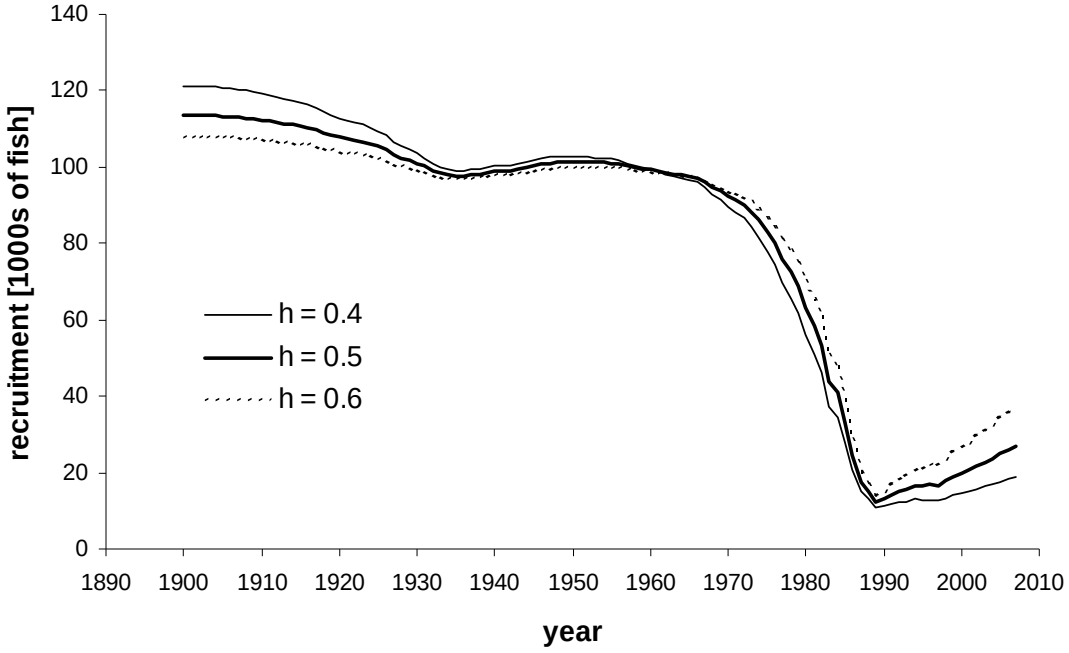


Table ES3: Recent trends in cowcod biomass and depletion

	h = 0.4			h = 0.5			h = 0.6		
year	Age 1+ biomass [mt]	SB [mt]	SB/SB_0	Age 1+ biomass [mt]	SB [mt]	SB/SB_0	Age 1+ biomass [mt]	SB [mt]	SB/SB_0
1998	282	241	4.4%	274	226	4.4%	273	218	4.5%
1999	294	256	4.7%	289	243	4.7%	292	237	4.8%
2000	303	266	4.8%	301	256	5.0%	307	253	5.2%
2001	313	277	5.0%	315	270	5.2%	325	270	5.5%
2002	328	291	5.3%	332	287	5.6%	347	290	5.9%
2003	341	305	5.5%	350	303	5.9%	370	310	6.3%
2004	355	317	5.8%	368	320	6.2%	392	330	6.7%
2005	368	330	6.0%	385	336	6.5%	415	351	7.2%
2006	381	342	6.2%	403	351	6.8%	439	371	7.6%
2007	393	353	6.4%	421	367	7.1%	464	392	8.0%

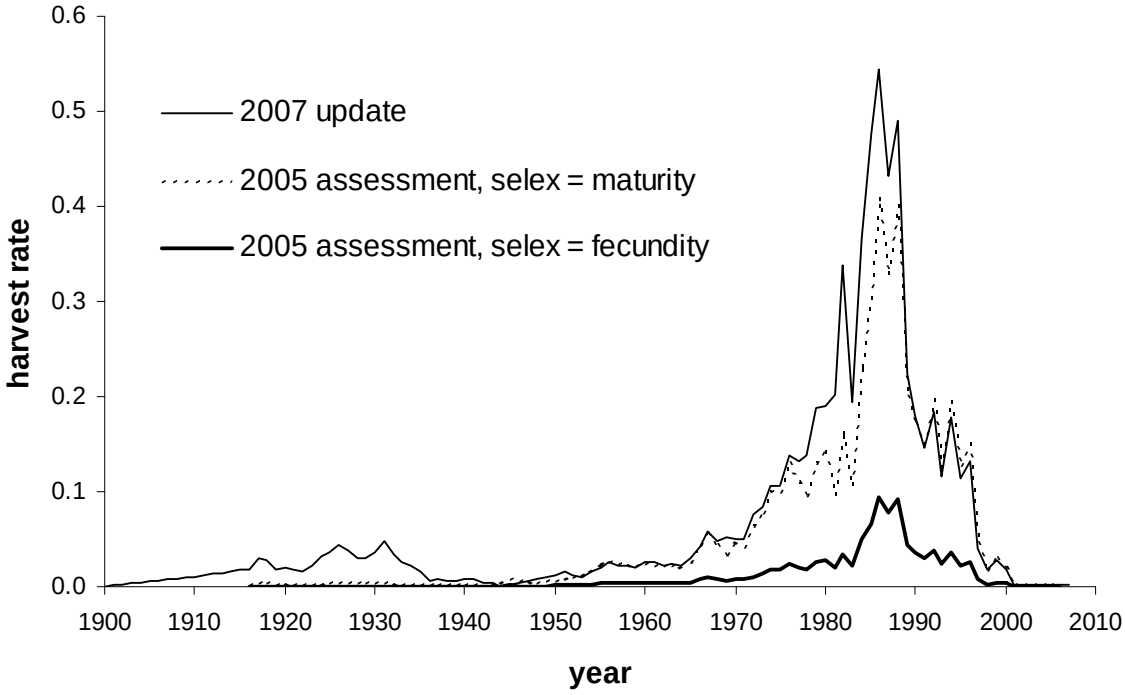
Recruitment: Predicted recruitments were taken directly from the assumed stock-recruitment relationship, estimating only virgin recruitment. The updated models suggest that recruitment declined rapidly from about 1965-1990, followed by an increasing trend (Fig. ES3).

Figure ES3: Time series of estimated recruitment



Exploitation status: The 2005 assessment with the corrected selectivity curve (no other changes) generates harvest rates over 13 times the rate at MSY (Fig. ES4). The revised landings and growth estimates in the 2007 update assessment amplify this effect.

Figure ES4: Estimated annual harvest rates (h = 0.5)



The history of exploitation according to the update model (steepness fixed at 0.5) is summarized here with two phase diagrams. Figure ES5(a) shows annual harvest rates relative to the target harvest rate ($F_{50\%}$), plotted against spawning biomass relative to 40% of unfished spawning biomass ($SB_{40\%}$). Figure ES5(b) replaces harvest rates with spawning potential ratios (SPR), the ratio of equilibrium spawning output per recruit under fished conditions to spawning output per recruit in the virgin population.

Figure ES5(a): Phase diagram of cowcod exploitation history (relative harvest rates)

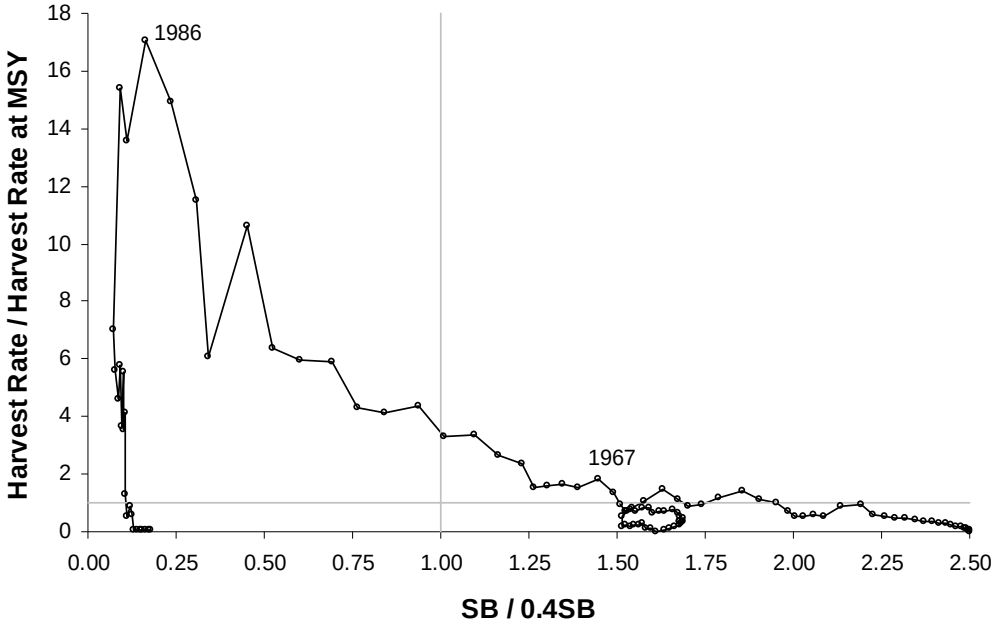
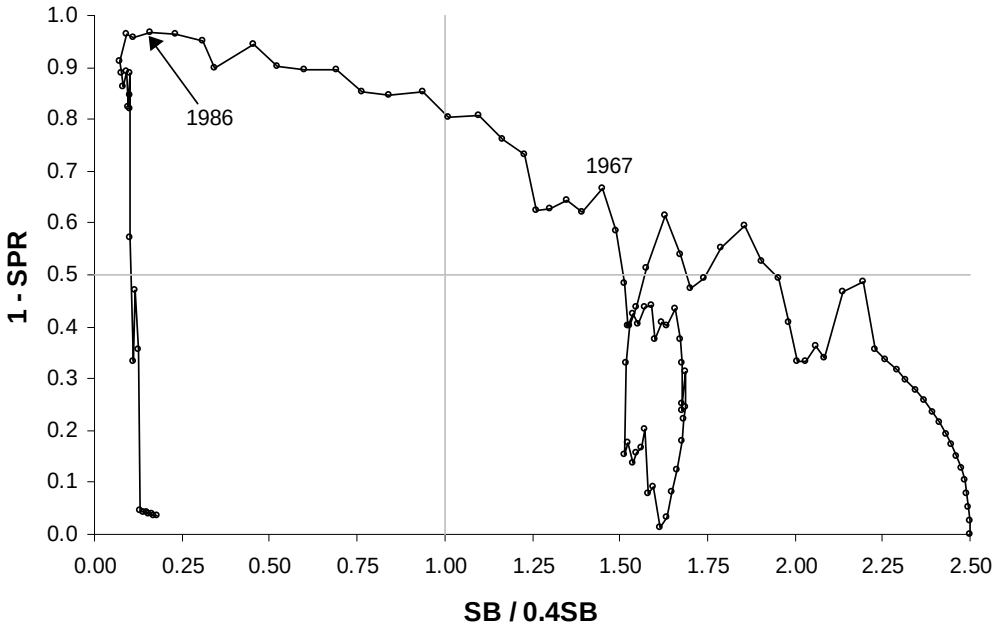


Figure ES5(b): Phase diagram of cowcod exploitation history (SPR)



Management performance: Retention of cowcod is currently prohibited. Piner et al. (2005) and Butler et al. (1999) describe the recent history of management measures.

Table ES4: Recent management performance

Years	ABC [mt]	OY [mt]	Catch [mt]
2001-2004	5	2.4	< 1
2005-2006	5	2.1	< 1

Forecasts: We used SS2 to generate 60-year forecasts for three fixed values of steepness (0.4, 0.5, 0.6), assuming no retention and a total discard rate of 0.5 metric tons per year.

Table ES5: 60-yr forecasts of age 1+ biomass and depletion (SB/SB_0)

	h = 0.4		h = 0.5		h = 0.6	
year	age 1+ biomass	depletion	age 1+ biomass	depletion	age 1+ biomass	depletion
2008	406	6.6%	439	7.4%	489	8.4%
2009	418	6.8%	457	7.8%	514	8.9%
2010	430	7.0%	476	8.1%	541	9.4%
2011	443	7.2%	495	8.4%	568	9.8%
2012	455	7.4%	514	8.7%	597	10.3%
2013	468	7.6%	534	9.0%	626	10.8%
2014	480	7.8%	554	9.4%	656	11.4%
2015	493	8.0%	575	9.7%	687	11.9%
2016	506	8.2%	596	10.1%	719	12.5%
2017	519	8.4%	618	10.5%	753	13.1%
2018	533	8.7%	641	10.9%	787	13.7%
2019	546	8.9%	664	11.3%	822	14.4%
2020	560	9.1%	688	11.7%	859	15.0%
2021	575	9.3%	713	12.1%	896	15.7%
2022	589	9.6%	738	12.5%	935	16.4%
2023	604	9.8%	764	13.0%	975	17.1%
2024	619	10.1%	791	13.4%	1016	17.9%
2025	635	10.3%	818	13.9%	1057	18.7%
2026	650	10.6%	846	14.4%	1100	19.4%
2027	667	10.9%	875	14.9%	1144	20.3%
2028	683	11.1%	904	15.4%	1189	21.1%
2029	700	11.4%	934	16.0%	1234	21.9%
2030	717	11.7%	965	16.5%	1281	22.8%
2031	735	12.0%	997	17.1%	1329	23.7%
2032	753	12.3%	1029	17.6%	1377	24.6%
2033	771	12.6%	1062	18.2%	1426	25.5%
2034	790	12.9%	1095	18.8%	1476	26.5%
2035	809	13.2%	1130	19.4%	1527	27.4%
2036	828	13.5%	1165	20.0%	1578	28.4%
2037	848	13.8%	1200	20.7%	1630	29.4%
2038	868	14.2%	1237	21.3%	1682	30.4%
2039	888	14.5%	1274	22.0%	1735	31.4%
2040	909	14.9%	1311	22.6%	1789	32.4%
2041	930	15.2%	1349	23.3%	1843	33.4%
2042	952	15.6%	1388	24.0%	1897	34.5%
2043	974	15.9%	1428	24.7%	1952	35.5%
2044	996	16.3%	1467	25.4%	2007	36.6%
2045	1019	16.7%	1508	26.1%	2062	37.7%
2046	1042	17.1%	1549	26.9%	2118	38.7%
2047	1066	17.5%	1591	27.6%	2173	39.8%
2048	1089	17.9%	1633	28.4%	2229	40.9%
2049	1114	18.3%	1675	29.2%	2284	42.0%
2050	1138	18.7%	1718	29.9%	2340	43.0%
2051	1163	19.1%	1762	30.7%	2395	44.1%
2052	1189	19.5%	1805	31.5%	2451	45.2%
2053	1215	19.9%	1849	32.3%	2506	46.3%
2054	1241	20.4%	1894	33.1%	2561	47.4%
2055	1267	20.8%	1939	33.9%	2615	48.4%
2056	1294	21.3%	1984	34.8%	2670	49.5%
2057	1321	21.7%	2029	35.6%	2724	50.5%
2058	1349	22.2%	2075	36.4%	2778	51.6%
2059	1377	22.7%	2121	37.3%	2831	52.6%
2060	1405	23.1%	2167	38.1%	2884	53.7%
2061	1434	23.6%	2213	38.9%	2936	54.7%
2062	1463	24.1%	2260	39.8%	2988	55.7%
2063	1492	24.6%	2306	40.6%	3039	56.7%
2064	1522	25.1%	2353	41.5%	3090	57.7%
2065	1552	25.6%	2399	42.3%	3140	58.7%
2066	1582	26.1%	2446	43.2%	3189	59.7%
2067	1612	26.6%	2492	44.1%	3238	60.7%

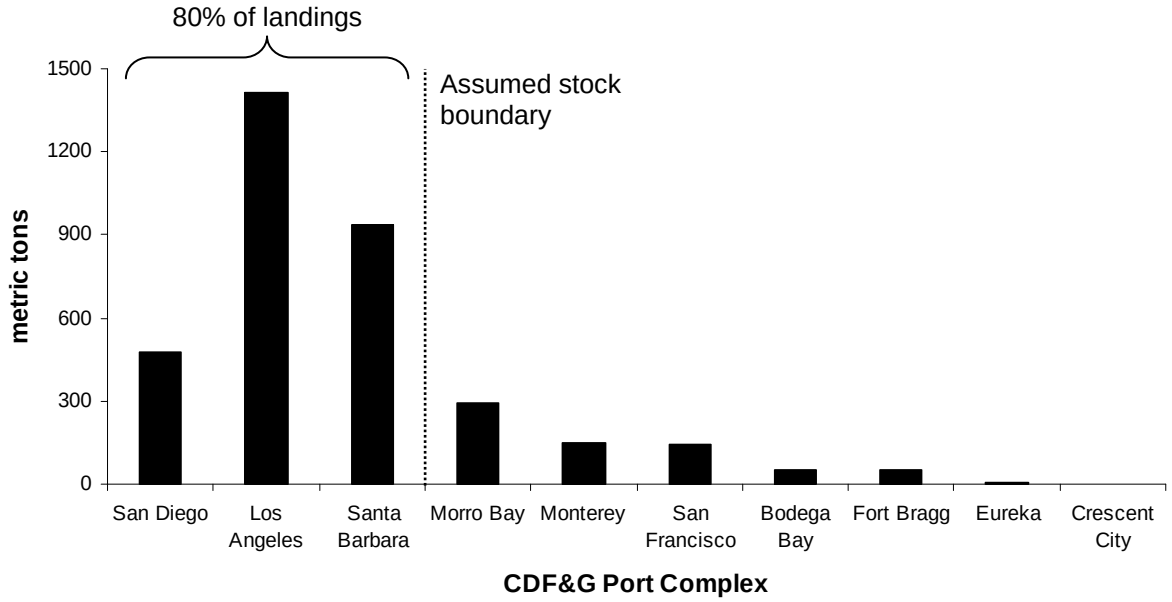
Decision table: [tbd]

Research and data needs: There is an urgent need for an informative abundance index that monitors the recovery of this stock. The submersible line-transect survey (Yoklavich et al., in review) included in this assessment is a direct measure of cowcod abundance and was formally reviewed in 2004. A pilot study for an acoustical-optical survey (D. Demer, pers. comm.) has estimated cowcod abundance by first estimating rockfish biomass using echosounders, and then apportioning that biomass to species based on video and still camera images. These types of non-lethal surveys could potentially monitor the recovery of cowcod, and given the projected length of time to recovery, it may be sufficient to conduct the surveys on a less than annual basis.

Rebuilding projections: [tbd]

Regional management: The current model assumes that cowcod in the Southern California Bight are isolated from cowcod north of Point Conception and south of the U.S.-Mexico border. This assumption remains untested. Cowcod landings in California (1969-2005) primarily occur within the current stock boundaries (Fig. ES6).

Figure ES6: Cowcod Landings by California Port Complex, 1969-2005



Agenda Item E.6.a
Attachment 9
June 2007

Update to the status of yelloweye rockfish (*Sebastes ruberrimus*) off the U.S. West Coast in 2007

by

John R. Wallace

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Executive Summary

Stock

This assessment update reports the status of the yelloweye rockfish (*Sebastes ruberrimus*) resource off the west coast of the United States, from the Mexican border to the Canadian border. The assessment on which this update is based (Wallace, et al. 2006) contained both a coast-wide model and area models for Washington, Oregon, and California. This update only looks at the coast-wide model, on which management is currently based.

Catches

For this update, new catch data were added for 2006, based on the Groundfish Management Team's Bycatch Scorecard, and catch histories for all fleets were refreshed for the period 1983-2005. Catches prior to 1983 are taken from Wallace, et al. (2006). Annual total catch of yelloweye rockfish peaked around 1980, and remained above 200 mt throughout the mid-1990s. Catch declined sharply between 1997 and 2001.

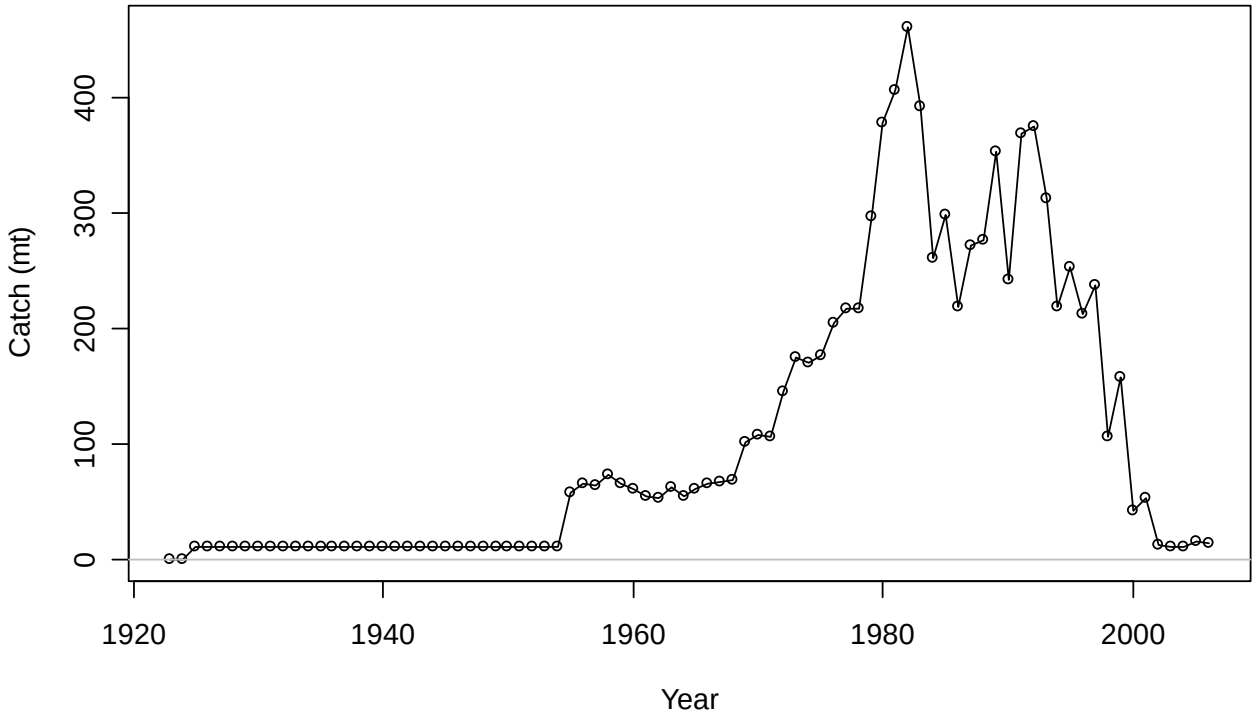

Figure ES1. Reconstructed historical catch (mt) by year and fleet, 1925-2006.

Table ES1. Updated (perhaps to the same value) recent commercial fishery catches by state and fishery. Fleets in the model combine trawl and line for all years in California and Oregon, and from 1923 to 1999 in Washington. Line gear in Washington from 1999 to 2006 is modeled as a separate fleet. (For values not updated see Wallace et al. 2006.)

	California			Oregon			Washington		
Year	Trawl	Line	Sport	Trawl	Line	Sport	Trawl	Line	Sport
1997	6.0	56.4	15.1	71.4	44.1		6.5		
1998	4.0	16.8	5.5	20.8	20.6		4.8		
1999	8.7	13.6	12.6	7.1	54.2		9.9		
2000	0.7	3.3	7.5	0.3	3.3		0.2		
2001	0.6	3.9	4.6	0.7	5.5		0.8		
2002	0.2	0.0	2.1	0.4	0.3		0.4	2.2	
2003	0.0	0.0	3.7	0.2	0.0		0.2	0.3	
2004	0.3	0.1	0.8	0.8	0.1	2.4	1.0	0.9	3.7
2005	0.1	0.0	1.6	0.3	0.1	4.1	0.4	3.0	5.2
2006	0.0	0.3	3.5	0.3	0.6	2.5	0.3	5.2	1.7

Data and Assessment

The most recent assessment for yelloweye rockfish was conducted using SS2, version 1.21 in 2006 by Wallace, et al. Fishery-independent data used in that assessment included a CPUE index and size-compositions from the longline survey conducted by the International Pacific Halibut Commission. Catch data, as well as age and size compositions, were included for commercial and recreational fisheries off Washington, Oregon, and California. CPUE indices were also constructed from recreational data from each state.

In the process of refreshing data for use in this updated assessment, several errors were uncovered in the data and input files used for the previous assessment. These include the misspecification of the age- and length-bin values in the SS2 input file and the inclusion of Washington trawl ages in constructing age-composition inputs for the Washington hook and line fishery. These problems were corrected in developing the 2007 base model. Since the corrected bin values were lower than those used in the previous assessment and the Washington trawl data contained a higher proportion of old fish, all three of these corrections led to downward revisions in the amount of spawning biomass and the level of depletion, relative to the 2006 assessment.

In converting the model to SS2c, the prior assessment's old SS1 "super-year" approach for dealing with small sample sizes for age and size compositions in some years was updated using the recommended SS2 method. This change had little effect on model results. Additionally, during the 2006 STAR Panel review, a representative from the Canadian Department of Fisheries and Oceans, who was present, reported that the estimated value for yelloweye natural mortality (M) off British Columbia was 0.033. This information led the Panel to recommend lowering the value of M in the U.S. model from 0.045 (as used in 2005) to 0.036. Subsequently, it has been discovered that the actual estimated value of M for the B.C. stock is 0.043 (for females). The Chair of the STAR Panel has conveyed that if the correct value had been available during the review, it would likely have recommended for use, rather than the 0.036 value (Owen Hamel, personal communication). Additionally, sensitivity analysis conducted across a range of M values, as part of the current assessment, indicates a substantial degradation in model fit with M=0.036, relative to values of M in the 0.043-0.046 range. As a result, current and projected biomass and depletion levels for an alternative base case (with M=0.043) are also reported in this document.

For comparative purposes, the depletion level for 2006, using the 2006 base model was 17.7%. The 2007 base model estimates depletion in 2006 as 14%. The alternative base model, with M=0.043, estimates the 2006 depletion level as 15.8%.

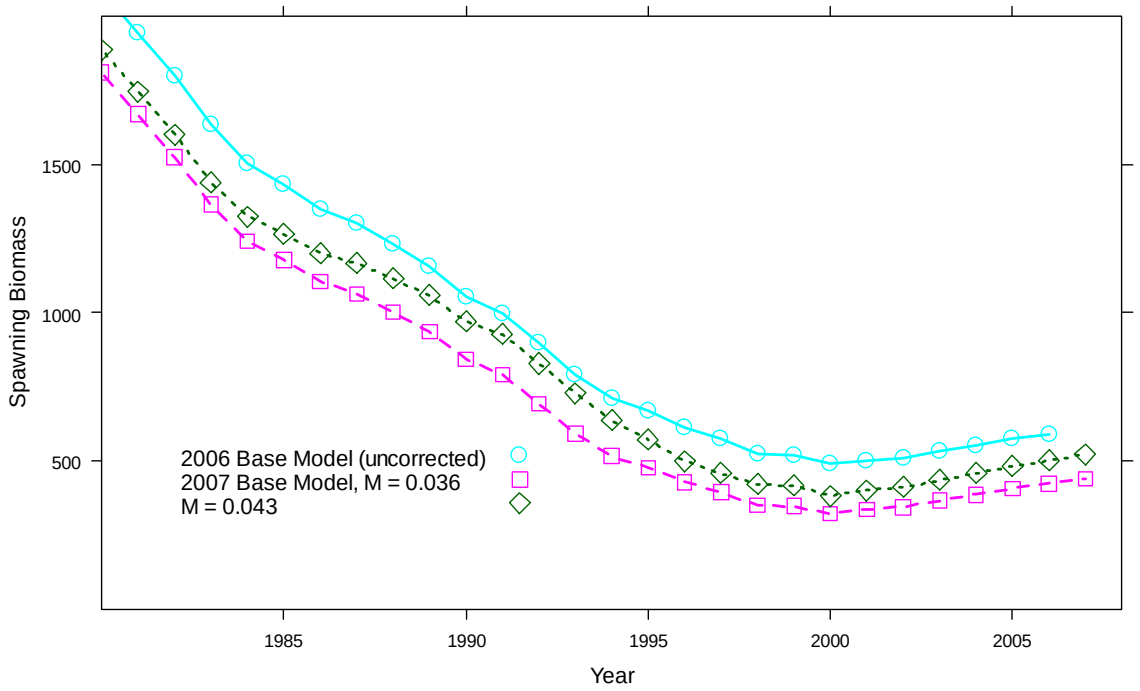

Figure ES2. Comparison of spawning biomass estimates for 1) the uncorrected 2006 coast-wide base model, 2) the 2007 base model, including corrected length- and age-composition specifications and adaptation of the "super-year" method for use with SS2, and 3) the 2007 base model run with natural mortality (M) fixed at 0.043 instead of 0.036. All models were run in SS2c.

Stock Biomass and Reference Points

The long-term biomass trajectory in this assessment is very similar to that in the 2006 assessment. Spawning biomass declined steadily and rather rapidly, beginning in the early-1970s, with no indication of increase until roughly 2001. The amount of spawning biomass in all years is lower in the current base model than in the previous assessment, due to the correction of data/input errors discussed above. Figure ES3 shows the complete spawning biomass trajectory for the 2007 base model. Table ES2 reports the estimated amounts of spawning biomass and depletions levels for the last 10 years. Figure ES4 shows the history of estimated depletion levels for the entire assessment period.

The unfished spawning stock biomass is estimated to be 3,019 mt in the base model, and 3,062 mt in the alternative (M=0.043) model (Table ES3). The spawning biomass targets for these models are 1,208 mt and 1,225 mt, respectively. The overfished biomass levels for these models are 755 mt and 766 mt, respectively. The current spawning biomass is estimated to be 422 mt with the base model and 485 mt with the alternative model. Current depletion estimates for these models are 14.5% and 16.4%, respectively.

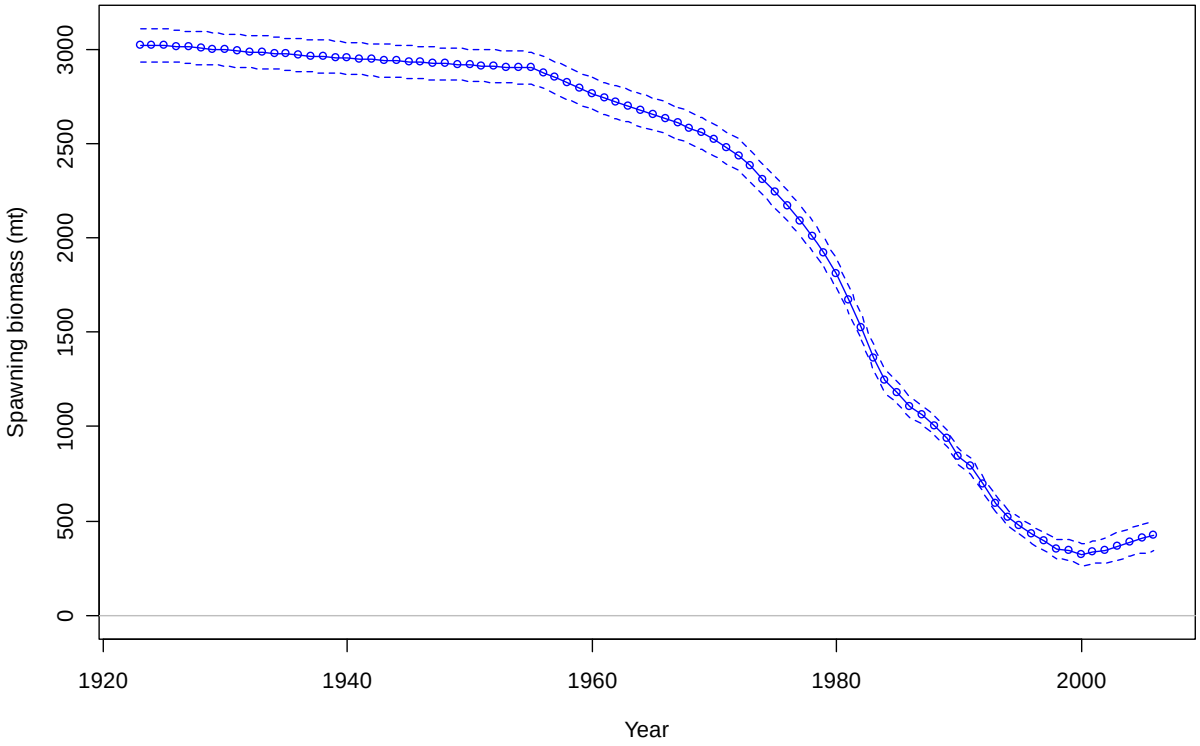

Figure ES3. Estimated spawning biomass time-series with approximate asymptotic 95% confidence interval, using the 2007 base model.

Table ES2. Recent trend in yelloweye spawning biomass and depletion level, using the 2007 base model.

Year	Estimated spawning biomass (mt)	~95% confidence interval	Estimated depletion	~95% confidence interval
1998	349	298-399	11.6%	NA
1999	346	292-400	11.5%	NA
2000	322	264-380	10.6%	NA
2001	336	274-398	11.1%	NA
2002	344	278-410	11.4%	NA
2003	365	295-435	12.1%	NA
2004	386	312-459	12.8%	NA
2005	406	328-483	13.4%	NA
2006	422	342-503	14.0%	11.4-16.6%
2007	438	355-522	14.5%	11.8-17.2%

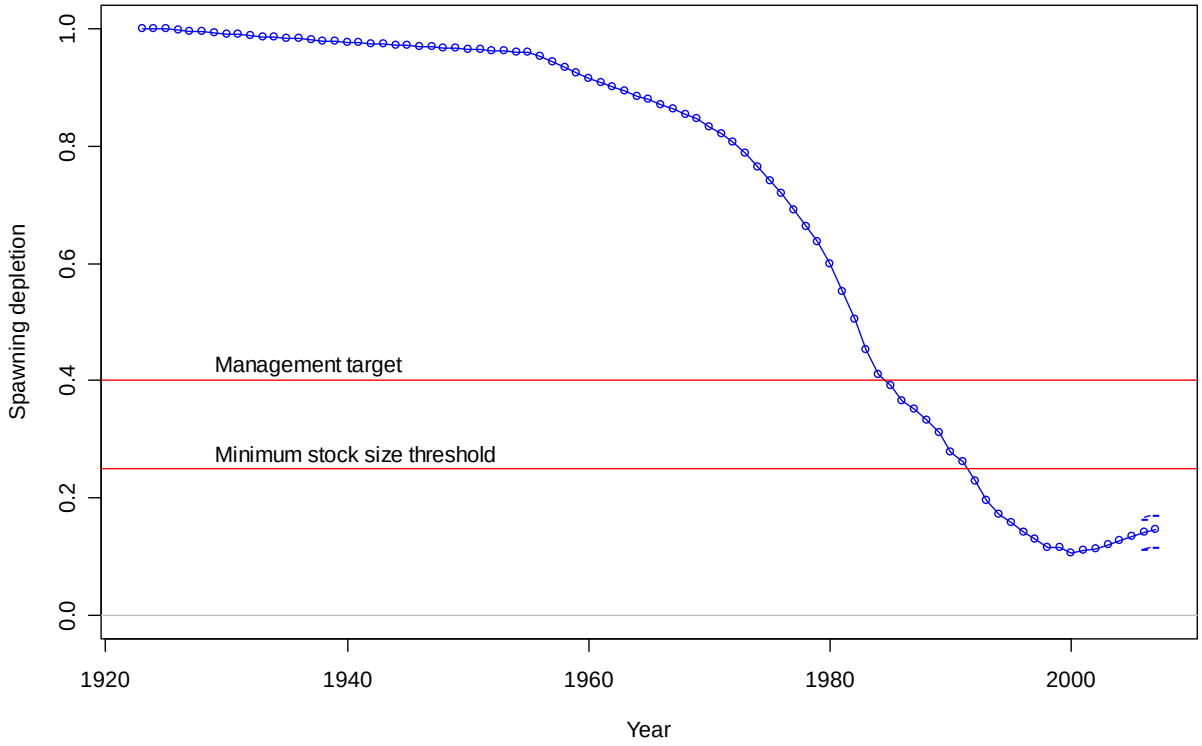

Figure ES4. Time-series of estimated depletion level, 1925-2007 with approximate asymptotic 95% confidence interval for 2006 and 2007, using the 2007 base model.

Table ES3. Benchmarks for comparison of the coast-wide 2006 base model to the 2007 base and alternative models.

Reference Point	2006 Base Model	2007 Base model, with all corrections to age- and size-composition data	2007 Alternative model with M = 0.043
[1/]Unfished Spawning Stock Biomass (SSB_0)	3,322	3,019	3,062
Unfished Exploitable Biomass (B0)	7,448	6,811	7,044
Unfished Recruitment (log(R0))	4.85	4.76	4.76
[1/]SSB_{2006}	588	422	485
Depletion Level (2006)	17.7%	14.0%	15.8%
Depletion Level (2007)		14.5%	16.4%

[1/] These values are expressed in female biomass (one-half of the single-sex model's SSB_0).

Recruitment

As in the 2006 assessment, the level of recruitment is deterministic from the start of the modeled time-period through 1967. From 1968 through 1992, the model estimates very large recruitments in four of the years, and recruitments below the initial level in all other years (Figure ES6). Recruitments after 1992 are taken from the stock-recruit curve. The last 10 years of these amounts are reported in Table ES4.

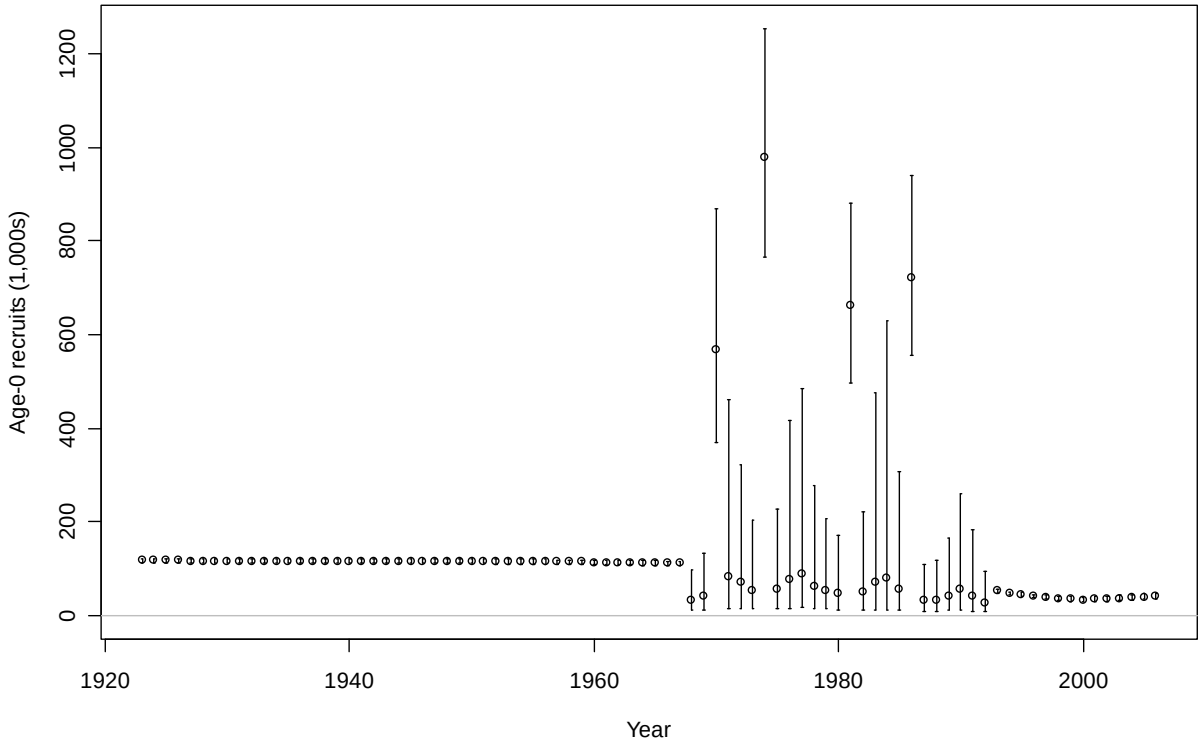

Figure ES6. Time-series of estimated yelloweye recruitments with approximate asymptotic 95% confidence interval.

Table ES4. Recent estimated trend in yelloweye recruitment, using the 2007 base model

Year	Estimated recruitment (1000's)	~95% confidence interval
1998	34.8	30.6 - 39.5
1999	34.5	30.1 - 39.6
2000	32.6	27.9 - 38.2
2001	33.7	28.8 - 39.6
2002	34.4	29.2 - 40.5
2003	36.1	30.7 - 42.4
2004	37.6	32.1 - 44.2
2005	39.1	33.4 - 45.8
2006	40.4	34.5 - 47.2
2007	41.5	16.3 - 105.8

Exploitation status

The estimated spawning potential ratio (SPR) for yelloweye rockfish first dropped below the proxy target of 50% in the early 1970s, where it remained until 2002 (Figure ES7). Throughout the 1980s and 1990s, SPR was below 20%.

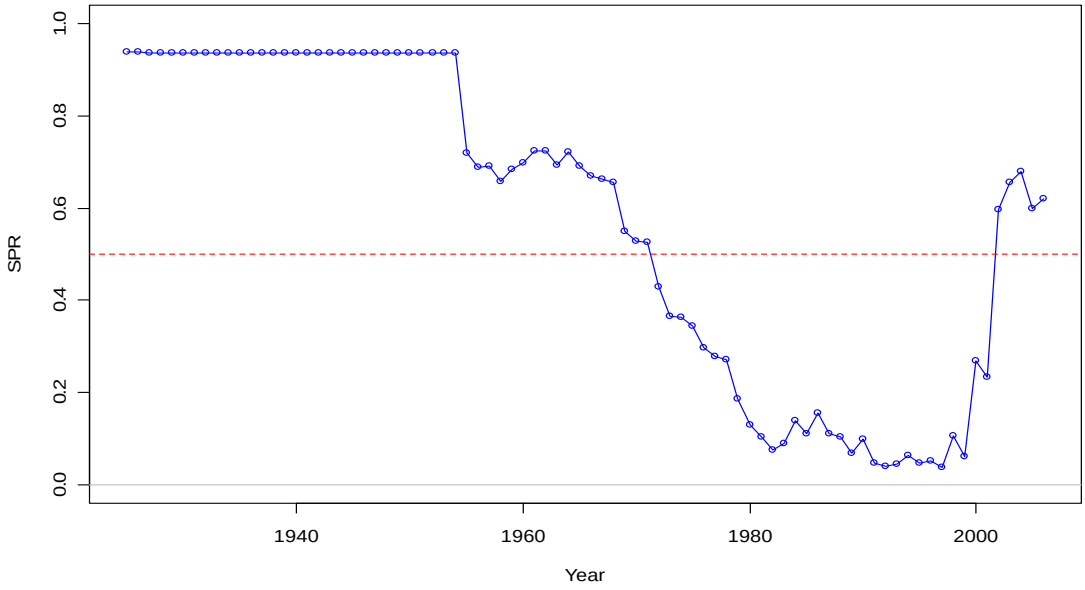

Figure ES7. Time-series of estimated spawning potential ratio 1925-2006.

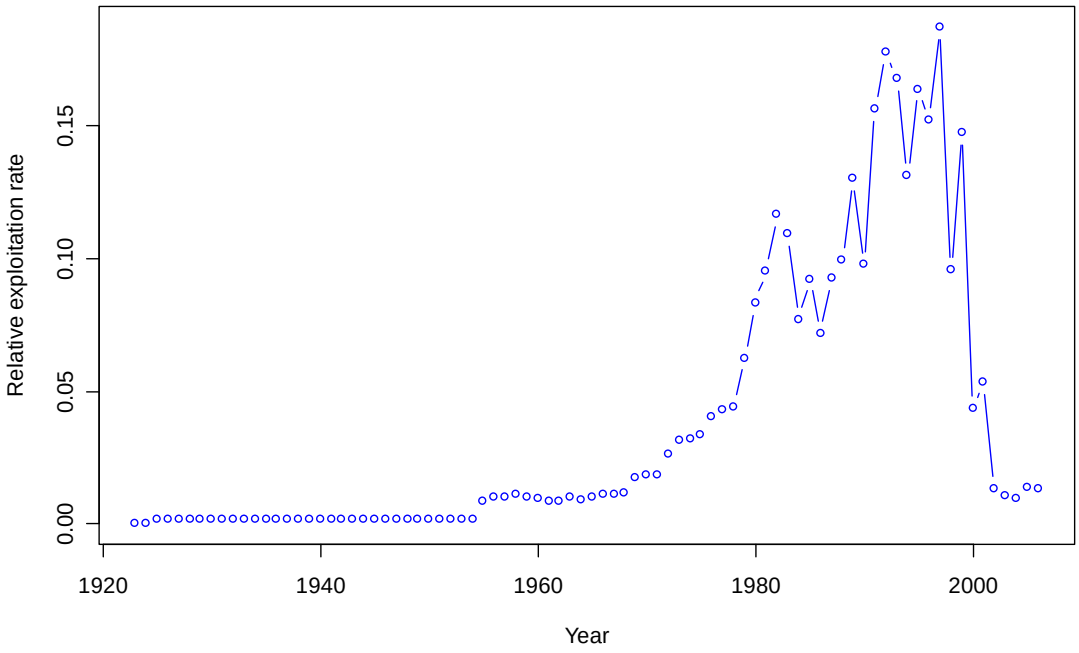

Figure ES8. Time-series of relative exploitation rate (catch/biomass of age 3+ fish) 1925-2006.

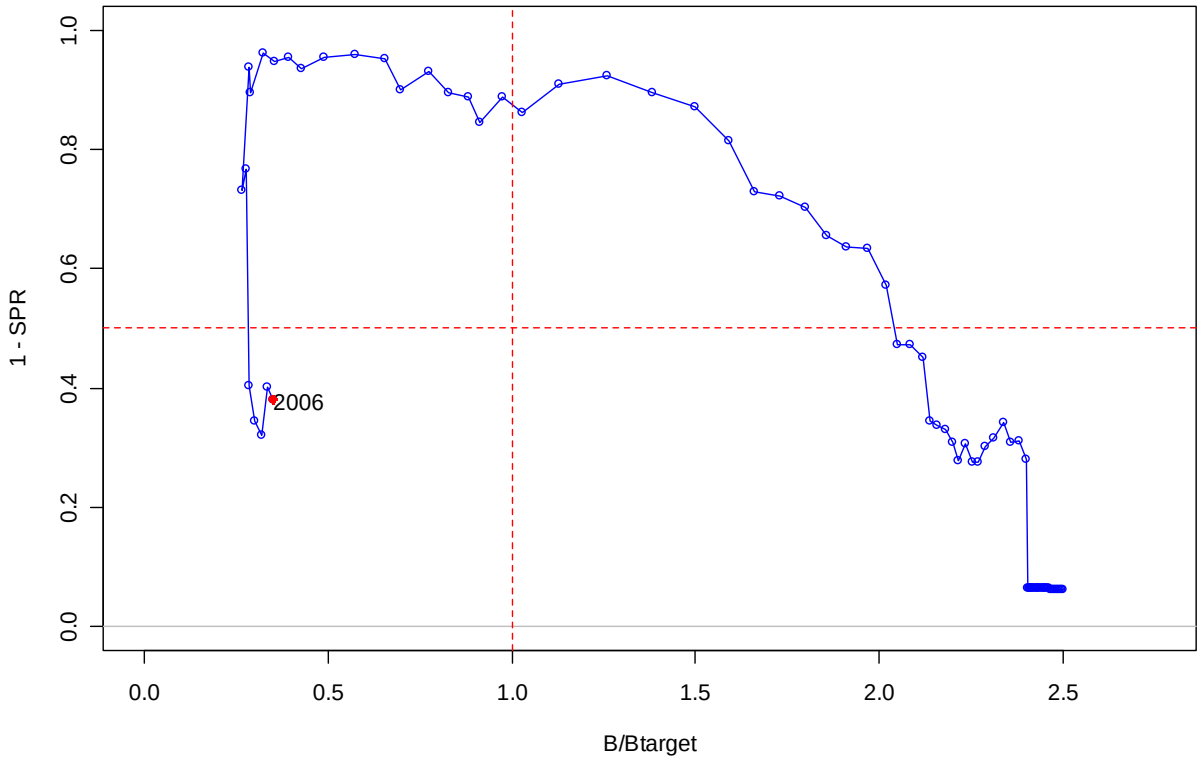

Figure ES9. One minus the estimated spawning potential ratio relative to the proxy target of 50% vs. estimated spawning biomass relative to the proxy 40% level. Higher biomass occurs on the left side of the x-axis, higher exploitation rates occur on the upper side of the y-axis.

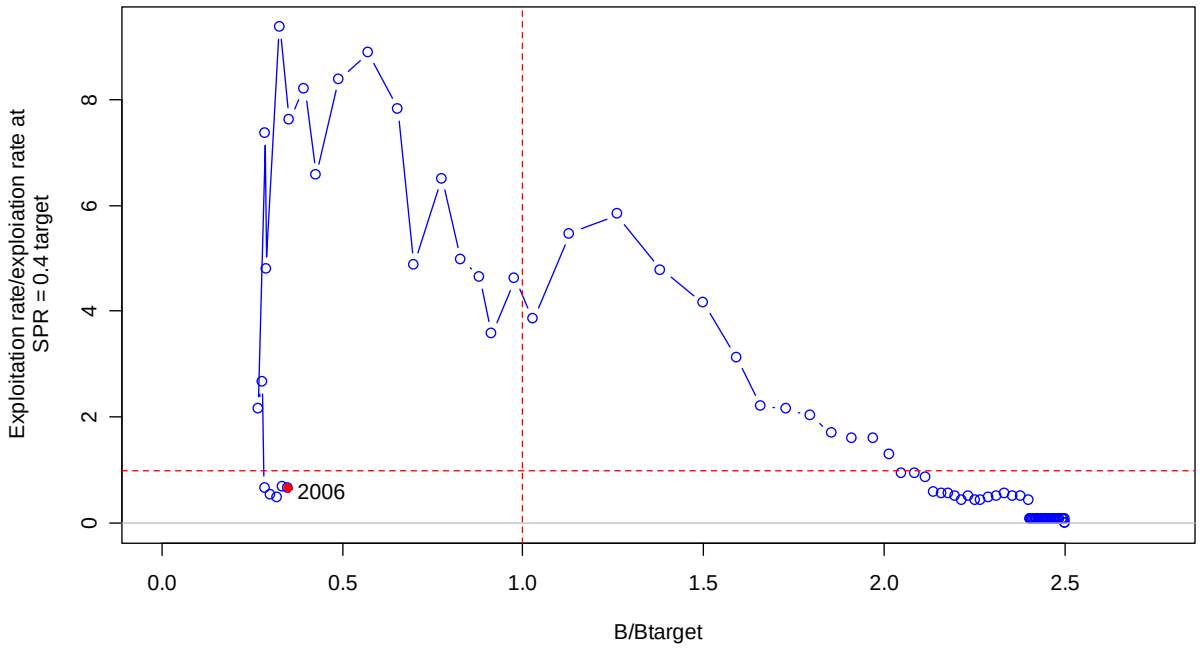

Figure ES10. Relative exploitation rate/exploitation rate at SPR = 0.5 target vs. estimated spawning biomass relative to the proxy 40% level.

Management Performance
Total catches of yelloweye rockfish have been below the specified OYs and ABCs since individual specifications were first established for this species in 2002.

Table ES5. Yelloweye rockfish management performance.

	Total Catch mt	OY mt	ABC mt
2002	13.0	22	52
2003	10.8	22	52
2004	15.7	22	52
2005	15.7	26	54
2006	14.4	27	55

Unresolved problems and major uncertainties (*from Wallace, et al., 2006*)
As in the previous assessments, the sparseness of the size and age composition data and the lack of a relevant fishery-independent survey has limited the model's ability to properly assess the status of the resource... Further, due to catch restrictions since 2002, catch-per-unit-effort (CPUE) data no longer reflect the real changes in population abundance, and discard estimates are highly uncertain.

The landings data are basically derived from total landings of unclassified rockfish times an estimated fraction that are yelloweye. In recent years, actual samples are available in many areas, but because yelloweye are rare in the overall catch and that species composition estimates derived from mixed rockfish categories is limited, substantial substitution for missing cells is required. In earlier years (prior to 1983), estimates of fraction yelloweye had to be borrowed from remote years and areas. The consequence of these estimation steps is that the catch is known only with considerable uncertainty and the current version of SS2 does not allow for uncertainty measurements of landings. This makes it nearly impossible to evaluate the true uncertainty of model results. Internal estimates of standard error on depletion estimates were on the order of 2-2.5% and are likely to be serious underestimates of uncertainty.

Research and Data Needs (*from Wallace, et al., 2006*)
Additional effort to collect age and maturity data is essential for improved population assessment. Collection of these data can only be accomplished through research studies and/or by onboard observers because this species is now prohibited. In 2006, IPHC and WDFW scientists are conducting a study to increase our knowledge of current stock biomass off Washington coast. Loss of the study due to declining OY will have significant detrimental effects on our ability to adequately assess this stock in the future. We strongly urge Management to make this study the highest priority. Increased effort toward habitat mapping and in-situ observation of behavior will provide information on the essential habitat and distribution for this species.

Alternative survey such as the in-situ 2002 US Vancouver submersible survey in untrawlable habitat is required for future assessment of yelloweye rebuilding status. This study has

demonstrated that submersible visual transect surveys can provide a unique alternative method for estimating demersal fish biomass in habitats not accessible to conventional survey tools. For example, because of the low frequency of yelloweye rockfish encountered in the NMFS shelf trawl survey tows, those data were not considered a reliable indicator of abundance and were not used in the 2002 yelloweye stock assessment for PFMC (Methot et al. 2002). Results from this study support this conclusion and illustrate the need for large-scale surveys to assess bottomfish densities in habitats that are not accessible to trawl survey gear. Further, stratified random sampling designs should be employed with sample sizes sufficient to ensure acceptable levels of statistical power (Jagielo et al. 2003). At present, the in-situ visual transect submersible survey method appears to be a useful tool for this purpose, and the utility of this method will likely improve further with technological advances such as the 3-Beam Quantitative Mensuration System (QMS).

Forecasts

Ten-year forecasts were generated for the base and alternative models. In both cases, harvests for 2007-2010 were fixed at the ramped-down amounts adopted by the Council in the 2006 yelloweye rebuilding plan. OY amounts for 2011-2018 were estimated through application of the harvest rate (SPR=71.9%) adopted for 2011 and beyond in existing rebuilding plan. Given these specifications, both models exhibit increases in depletion percentage throughout the forecast period. However, in the base model, the projected OY for 2011 declines from 14 mt (the 2010 ramp-down amount) to 10.3 mt (Table ES6). In the alternative model, with M=0.043, the 2011 OY is 13.7 mt.

Table ES6. Forecast for yelloweye rockfish. OY for 2007-2010 represents the currently adopted ramp-down; 2011-2018 represents fishing at SPR = 71.9% to mimic rebuilding plan.

Year	Summary Biomass	Spawning Biomass	Depletion	Recruitment (age-0)	OY (mt) Ramp-down SPR=71.9 (mt)	ABC
2007 Base model with M = 0.036						
2007	1134	877	0.15	41.5	23	
2008	1150	899	0.15	42.3	20	
2009	1168	922	0.15	43.1	17	22.9
2010	1187	944	0.16	43.9	14	23.3
2011	1208	967	0.16	44.7	10.3	
2012	1231	991	0.16	45.5	10.5	
2013	1254	1013	0.17	46.2	10.7	
2014	1276	1034	0.17	46.9	10.9	
2015	1298	1053	0.17	47.5	11.1	
2016	1319	1071	0.18	48.1	11.3	
2017	1339	1089	0.18	48.6	11.5	
2018	1360	1105	0.18	49.2	11.6	
2007 Alternative model with M = 0.043						
2007	1327	1007	0.16	61.8	23	
2008	1348	1034	0.17	63.0	20	
2009	1371	1061	0.17	64.2	17	30.4
2010	1396	1087	0.18	65.4	14	31.0
2011	1423	1115	0.18	66.5	13.7	
2012	1449	1140	0.19	67.6	14.0	
2013	1474	1163	0.19	68.5	14.2	
2014	1499	1185	0.19	69.4	14.5	
2015	1523	1205	0.20	70.2	14.7	
2016	1547	1224	0.20	71.0	15.0	
2017	1570	1242	0.20	71.7	15.2	
2018	1593	1260	0.21	72.4	15.4	

Table ES7. Summary of recent trends in yelloweye exploitation and stock levels; all values reported at the beginning of the year.

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Landings (mt)	106.6	157.6	42.3	52.7	13.0	10.8	10.1	14.8	14.4	NA
Estimated Discards (mt)	0	0	0	0	0	0	0	0	0	NA
Estimated Total Catch	106.6	157.6	42.3	52.7	13.0	10.8	10.1	14.8	14.4	NA
Exploitation Rate (catch/age 3+ biomass)	0.096	0.148	0.043	0.054	0.013	0.011	0.010	0.014	0.013	NA
Age 3+ Biomass (mt)	1110.0	1068.2	975.0	984.8	984.2	1016.8	1049.7	1082.1	1108.8	1134.4
Base with M = 0.036										
Spawning Biomass (mt)	348.7	345.9	321.9	335.6	343.8	364.9	385.6	405.5	422.5	438.4
~95% Interval	298.4-399	291.9-399.8	264.2-379.7	273.8-397.5	277.9-409.7	295.0-434.8	311.9-459.4	328.2-482.8	341.9-503.1	354.8-521.9
Recruitment (1000's)	34.8	34.5	32.6	33.7	34.4	36.1	37.6	39.1	40.4	41.5
~95% Interval	30.6-39.5	30.1-39.6	27.9-38.2	28.8-39.6	29.2-40.5	30.7-42.4	32.1-44.2	33.4-45.8	34.5-47.2	16.3-105.8
Depletion	11.6	11.5	10.7	11.1	11.4	12.1	12.8	13.4	14.0	14.5
~95% Interval	NA	NA	NA	NA	NA	NA	NA	NA	11.4-16.6	11.8-17.2
Alternative model with M = 0.043										
Spawning Biomass (mt)	392.5	391.9	369.8	386.3	396.9	420.7	443.9	466.2	485.3	503.4
~95% Interval	334.3-450.8	329.9-453.9	303.8-435.8	316.0-456.5	322.4-471.4	342.0-499.3	361.4-526.4	380.1-552.2	396.0-574.6	411.2-595.6
Recruitment (1000's)	51.2	51.2	48.9	50.6	51.7	54.1	56.3	58.4	60.2	61.8
~95% Interval	45.0-58.3	44.7-58.6	42.0-57.0	43.4-59.1	44.2-60.5	46.3-63.1	48.4-65.6	50.3-67.8	51.9-69.8	24.3-157.4
Depletion	12.8	12.8	12.1	12.6	13.0	13.7	14.5	15.2	15.8	16.4
~95% Interval	NA	NA	NA	NA	NA	NA	NA	NA	13.0-18.7	13.5-19.3

Table ES8. Summary of yelloweye reference points. The symmetric approximation of the 95% confidence interval included zero for some quantities, the lower limit is therefore rounded up.

Quantity	Estimate	~95% Confidence interval
Unfished spawning stock biomass (SB_0, mt)	3,019	2,933 - 3,105
Unfished 3+ biomass (mt)	6,810	NA
Unfished recruitment (R_0, thousands)	116.2	111.4 – 121.0
Reference points based on $SB_{40\%}$		
MSY Proxy Spawning Stock Biomass ($SB_{40\%}$)	1,208	1,173 - 1,242
SPR resulting in $SB_{40\%}$ ($SPR_{SB40\%}$)	0.583	0.583 - 0.583
Exploitation rate resulting in $SB_{40\%}$	0.015	NA
Yield with $SPR_{SB40\%}$ at $SB_{40\%}$ (mt)	43.7	42.3 – 45.0
Reference points based on SPR proxy for MSY		
Spawning Stock Biomass at SPR (SB_{SPR})(mt)		
$SPR_{MSY\text{-}proxy}$		
Exploitation rate corresponding to SPR		
Yield with $SPR_{MSY\text{-}proxy}$ at SB_{SPR} (mt)		
Reference points based on estimated MSY values		
Spawning Stock Biomass at *MSY* (SB_{MSY}) (mt)	1,164	1,130 – 1,198
SPR_{MSY}	0.573	0.573 - 0.574
Exploitation Rate corresponding to SPR_{MSY}	0.016	NA
MSY (mt)	43.7	42.4 - 45.1

Status of the Sablefish Resource off the Continental U.S. Pacific Coasts in 2007

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EXECUTIVE SUMMARY

Status: This assessment finds the overall status of the West Coast sablefish stock to be improved relative to the previous assessment. Estimates of biomass are made from the U.S./Canada border, continuing south to Point Conception (34.5° latitude). As indicated by the base model, both the depletion (≈ 38%) and the ending year biomass (≈ 93k mt) are greater than those reported in the previous 2005 assessment. This increase can be attributed in part to the continued progression of the strong 1999 and 2000 year-classes into the population, as well as into the spawning stock biomass. However, based on somewhat erratic levels of estimated recruitment from 2001-2006, the previously mentioned increasing trend should be viewed with caution. Furthermore, because of a series of poor recruitments in the mid- to late-1990's, if fished at the full OY level, depletion is forecasted to decrease for the next five years. Evidence continues to suggest that larval survival is modulated in part by climate change as expressed by annual fluctuations in the California Current System. Forecasts of the possible future status of the stock beyond the year 2006 do not take into account any possible future trends in either climate change or conditions of the California Current System.

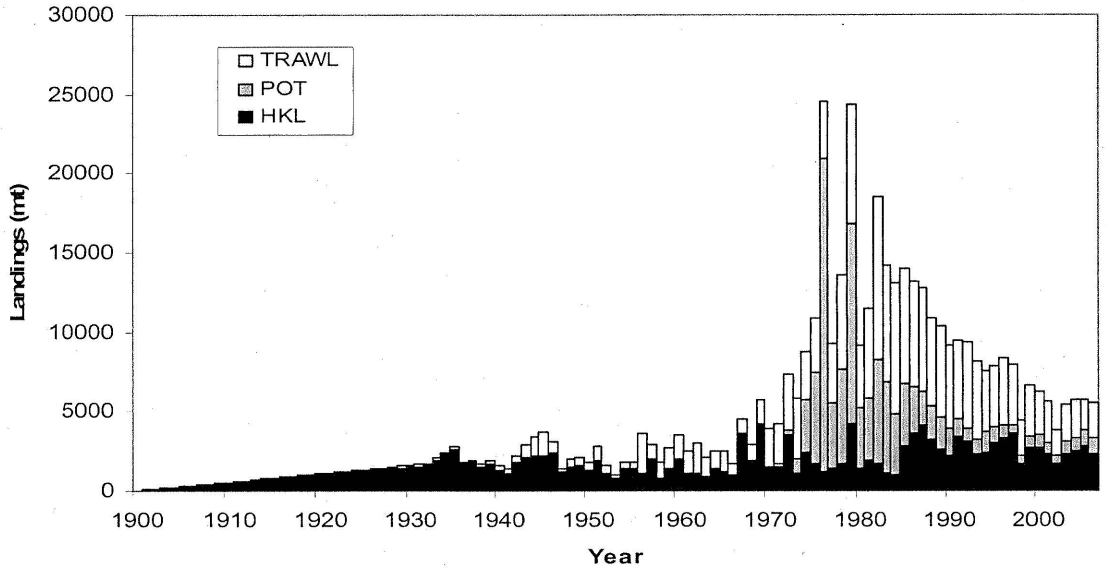


Figure ES- 1. *Total landings of sablefish off the US West Coast by gear, 1900-2006*

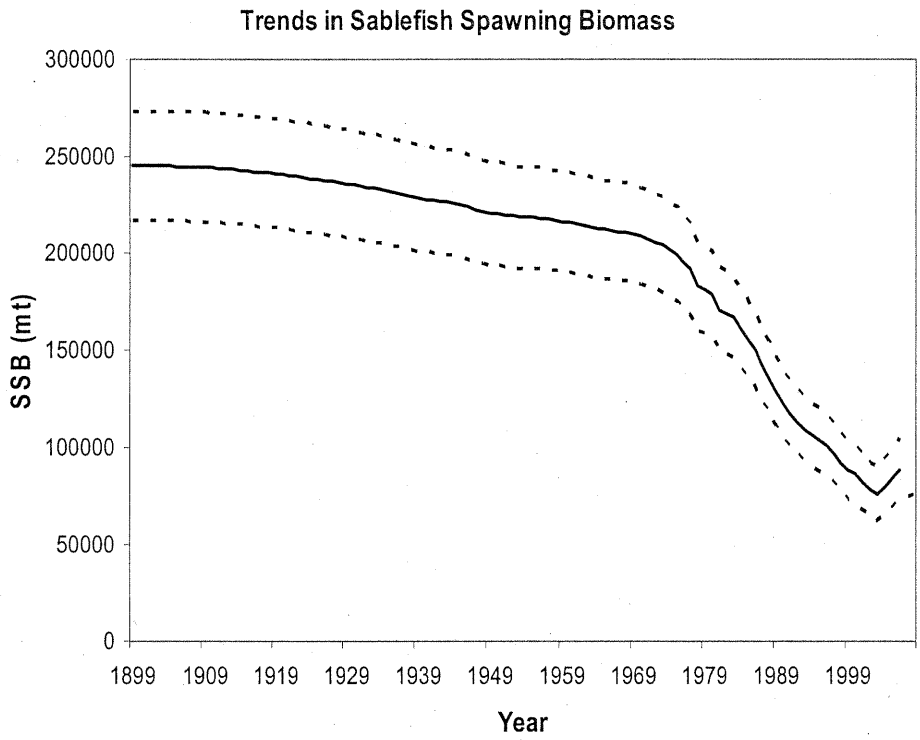
Stock: Sablefish, or blackcod, (*Anoplopoma fimbria*) are distributed in the Northeastern Pacific Ocean from the southern tip of Baja California, northward to the north-central Bering Sea and in the Northwestern Pacific Ocean from Kamchatka, southward to the northeastern coast of Japan. In this assessment, the West Coast sablefish population was modeled as single stock extending from the southern border of the Conception INPFC area through the northern border of the U.S. Vancouver INPFC area.

Catch: Catches of sablefish from waters off Oregon, Washington, and California are classified into three gear types: hook and line, pot, and trawl. Catch estimates by gear type were available starting in 1915. Catches in the assessment model began at zero in the year 1900 and were increased linearly through the year 1915. Data were generally available for the years from 1916 through 1932, though landings were estimated through interpolation for years without data. Landings in 1933 were reported to be approximately 2,000 metric tons and stayed at this level until approximately 1967 when they began increasing to more recent levels.

***ES-1**. Recent sablefish catches (mt) by INPFC area and gear type*

	Vancouver-Columbia			Eureka-Monterey			Conception			Combined			
Year	HKL	POT	TWL	HKL	POT	TWL	HKL	POT	TWL	HKL	POT	TWL	TOTAL
1992	1997	363	2649	989	249	2504	93	187	301	3079	798	5457	9366
1993	1743	613	2729	499	180	1965	85	55	266	2328	847	4959	8147
1994	1498	1048	2075	761	309	1582	115	13	161	2375	1370	3822	7579
1995	1982	749	1872	882	315	1761	115	2	213	2978	1065	3848	7905
1996	1920	522	2121	1309	227	1876	125	1	214	3354	750	4211	8318
1997	2105	356	1872	1372	227	1743	107	1	154	3585	584	3771	7943
1998	1190	384	1097	468	63	978	99	0	115	1757	448	2191	4401
1999	1909	628	1726	712	125	1365	96	2	83	2717	755	3175	6649
2000	1944	661	1449	683	190	1148	83	1	37	2711	852	2727	6291
2001	1634	508	1639	612	163	945	111	1	29	2357	672	2624	5655
2002	1173	307	830	444	154	715	128	11	50	1745	472	1597	3817
2003	1568	569	1226	609	219	1001	127	12	79	2304	799	2331	5435
2004	1933	527	1415	504	269	789	87	16	80	2524	811	2447	5785
2005	1995	649	1081	730	336	815	78	12	55	2803	996	1955	6212
2006	1657.	678	1293	611	272	834	66	87	9	2334	1037	2137	5861

Data and Assessment. Landings and age- and length-composition data for this assessment were obtained from the Sablefish Port (SPORT) database, maintained by the North West Fisheries Science Center (NWFSC). Historic landings were derived from Pacific Marine Fisheries Commission, Bulletin Number 3. This year's assessment (2007) utilized several indices of abundance: the 1980-2004 Alaska Fisheries Science Center (AFSC) and NWFSC Triennial shelf survey; the 1997-2001 AFSC slope survey; the 1998-2006 NWFSC "slope survey" (i.e. deep tows from the NWFSC bottom trawl survey); the 2003-2006 NWFSC "shelf survey" (i.e. shallow tows from the NWFSC survey years with expanded depth coverage); sea surface height (SSH) data, 1925-2006; and zooplankton abundance data, 1979-2001. Sea-surface height and zooplankton data were used to index recruitment deviations from the estimated stock-recruitment function. These multiple data sources were combined in a maximum likelihood statistical framework using the Stock Synthesis Model 2 (SS2, version 2.00b, March 22, 2007).



Reference Points. For sablefish, the proxy for BMSY is calculated as 40% of the unfished spawning stock biomass (SSB). The stock is declared overfished if the current SSB is estimated to be below 25% of the unfished SSB. The MSY-proxy harvest rate for sablefish is SPR = F45%. The current assessment estimates that sablefish can support maximum sustainable yield (MSY) of approximately 6,328 mt using the SB40% proxy, 4,871 mt when using the SPR proxy, and 6,303 mt when using the actual estimated values instead of proxies.

Recent estimated trend in spawning stock biomass and depletion

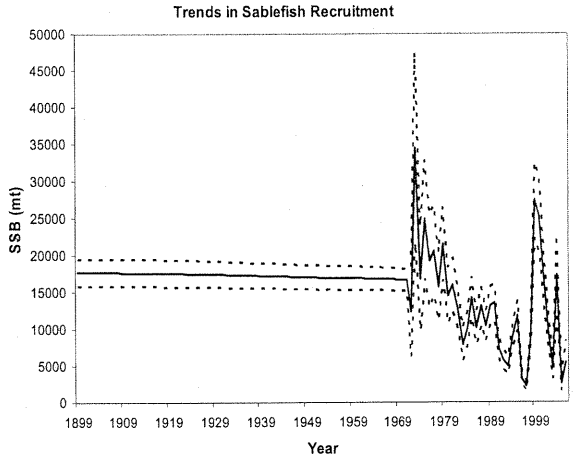
Year	SSB	95% CI	Depletion	95% CI
1997	92,013	76,991 - 107,035	37.5%	NA
1998	88,345	73,554 - 103,136	36.0%	NA
1999	86,227	71,640 - 100,814	35.2%	NA
2000	82,288	67,986 - 96,590	33.6%	NA
2001	78,176	64,188 - 92,164	31.9%	NA
2002	76,171	62,302 - 90,040	31.1%	NA
2003	79,264	64,934 - 93,594	32.3%	NA
2004	83,826	68,636 - 99,014	34.2%	NA
2005	88,632	72,398 - 104,866	36.1%	NA
2006	91,686	74,559 - 108,813	37.4%	32.1% - 44.5%
2007	93,895	75,968 - 111,822	38.3%	32.4% - 45.4%

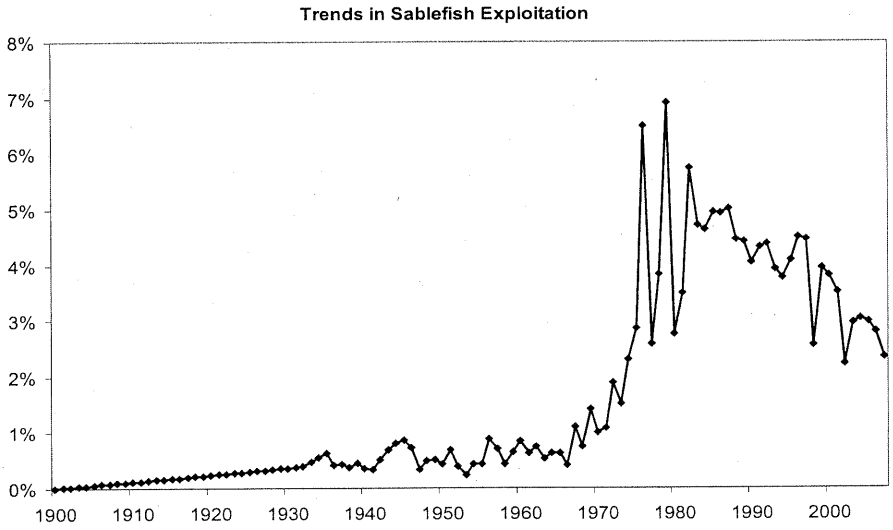
Stock Biomass. As modeled here, sablefish SSB steadily declined during the period 1900-2002. Increases in SSB since 2002 are primarily the result of two recent strong year classes (1999 and 2000) recruiting into the population.

Recruitment. Two strong year classes, one in 1999 and another in 2000 have punctuated the past twenty years of sablefish recruitment. A significant relation was observed between second quarter (April, May, and June) sea surface height in the northern coast (44-48 degrees latitude) and age-0 sablefish survivorship. A weaker, yet still significant, relationship was found between recruitment deviations and zooplankton species composition. While SSH is thought to affect sablefish recruitment at the physical oceanographic level, zooplankton species composition is thought to affect survival at a more basic biological level. The SSH and zooplankton index were significantly related, suggesting they are acting in concert on overall survivorship.

Recent estimated trend in sablefish recruitment

Year	Recruitment (1000s)	95% CI
1997	2,103	360 - 2,516
1998	8,828	804 - 6,167
1999	27,369	1,925 - 19,080
2000	25,330	2,138 - 19,728
2001	16,747	1,502 - 11,287
2002	9,698	1,045 - 6,546
2003	4,726	635 - 3,011
2004	17,357	1,770 - 8,783
2005	2,609	584 - 1,986
2006	5,343	1,545 - 2,447

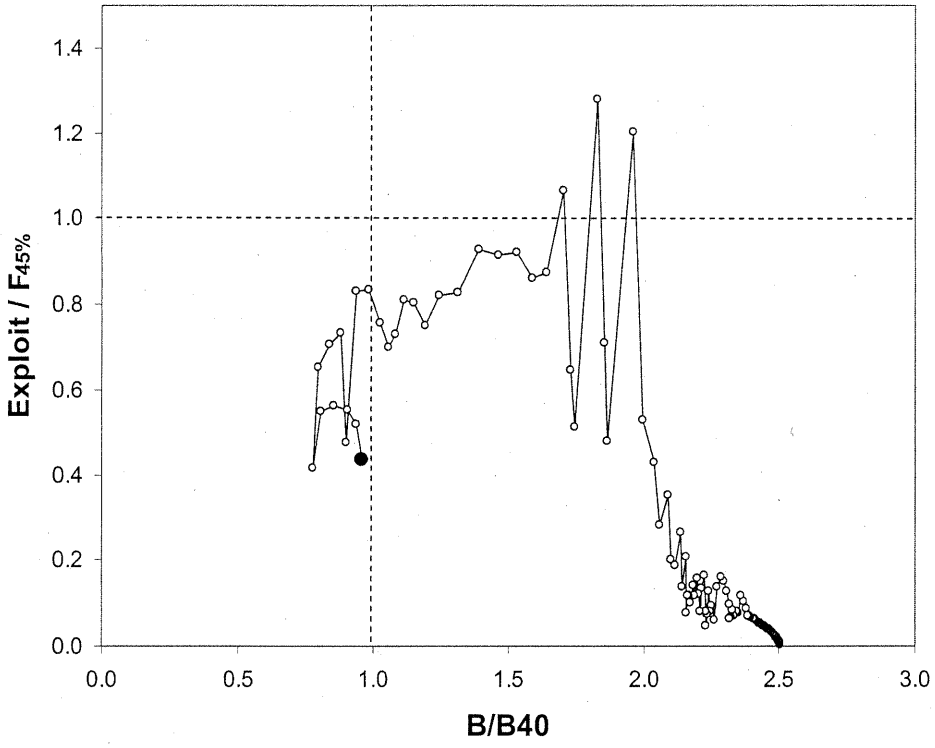




Exploitation Status: The base model for sablefish produces an estimated unfished SSB of 244,688 mt (~95% confidence interval: 216,898 - 273,542) with a mean expected recruitment of 17,656 thousand age-0 fish. The current SSB is estimated to be 93,895 mt (~95% CI: 75,968 - 111,822). Therefore, with this model configuration, the current depletion level for the year 2007 is estimated to be 38.3% (~95% CI: 32.4 - 45.4). Historical exploitation rates peaked in the late-1970s at over 6%. The current total exploitation rate in 2007 is estimated to be 2.35%.

Recent trends in Sablefish exploitation

1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
4.47%	2.57%	3.95%	3.81%	3.52%	2.24%	2.97%	3.03%	2.98%	2.80%	2.35%



Management Performance. Sablefish catch (landings plus estimated/assumed discards) has been below the ABC for the past ten years.

Forecasts. Forecasts of the possible future status of the sablefish stock were generated for the base case model, with future selectivity equal to the average of 2005-2007, catch being allocated between the three gear types in approximately the same manner as prescribed by the Pacific Fishery Management Council, and recruitments taken directly from the estimated stock-recruitment function. Based on the current estimates of recruitment strength in recent years, the depletion level is projected to fall from 38.3% to 32.1% by 2019, assuming full harvest of future OYs assuming the "40/10" harvest policy

Projected potential sablefish catch, landings, spawning stock biomass and depletion for base model

Year	ABC Catch	OY Catch	SSB	95% CI	Depletion	95% CI
2008	6,058	5,933	95,389	76,791 - 113,987	38.9%	32.4% - 45.4%
2009	9,914	9,795	94,686	75,646 - 113,726	38.6%	31.8% - 45.4%
2010	9,217	8,988	91,285	73,113 - 109,457	37.2%	30.7% - 43.7%
2011	8,808	8,484	88,354	70,802 - 105,906	36.0%	29.7% - 42.4%
2012	8,623	8,225	86,164	68,786 - 103,542	35.1%	28.7% - 41.6%
2013	8,567	8,110	84,561	66,988 - 102,134	34.5%	27.8% - 41.1%
2014	8,564	8,058	83,316	65,377 - 101,255	34.0%	27.1% - 40.9%
2015	8,569	8,019	82,264	63,936 - 100,592	33.5%	26.3% - 40.7%
2016	8,562	7,973	81,317	62,640 - 99,994	33.2%	25.7% - 40.6%
2017	8,538	7,914	80,434	61,465 - 99,403	32.8%	25.2% - 40.4%
2018	8,501	7,843	79,600	60,390 - 98,810	32.5%	24.6% - 40.3%
2019	8,454	7,765	78,810	59,398 - 98,222	32.1%	24.2% - 40.1%

Research and Data Needs. Despite a long history of scientific investigations, there remain many questions with regard to sablefish biology, the fishery (past and present) and the possible current and future status of the stock:

(1) While the significant relation between the SSH index and sablefish age-0 survival demonstrates that this should be a reliable (at least near term) index, the zooplankton index may support the underlying biological mechanism as to exactly WHY this relationship is being observed. Investigations into the food habits of age-0 fish, especially during the spring months, could help with this understanding. The date of the Spring Transition also shows promise as an early indicator of recruitment strength and should be investigated further. Also, further research should be conducted to evaluate alternative methods for incorporating ecosystem metrics into the assessment. For example, should the two current indices be combined into one index by way of a principal component analysis or should the current (or similar) multivariate method be used. The simulation work conducted for the recent B-zero Workshop should be continued and should address issues of this nature.

(2) Consistency in the manner in which the three states collect port samples of length-and age-composition data should be a goal. Given the problems associated with grading, samples should not sub-sampled by these categories. Furthermore, at-sea observer collection of otolilths from fixed-gear vessels that land their fish headed should be continued.

(3) While well under way, continued observer coverage of both trawl and fixed gears is critical to estimating the quantity and length composition of the discarded catch. Field-oriented work to investigate discard mortality rates should be conducted to compliment the existing lab work.

Rebuilding Projections. The stock of sablefish of the Continental United States was not found to be currently overfished, and therefore does not require rebuilding projections.

Regional Management Concerns. While sablefish growth has been shown to differ from Washington to California, it is doubtful that the existing amount of fishing effort in the south warrants managing the sablefish as two separate stocks. More interesting is the possibility of developing a transboundary stock assessment covering U.S. West Coast and the waters off southern Vancouver Island in Canada. Many of the recent recruitment trends observed in each area show a great deal of similarity.

Unresolved Problems and Major Uncertainties. The major sources of uncertainty in this stock assessment are (1) survey catchability (Q), and (2) discard quantity and length composition, and, in a very inter-related manner, discard mortality. When freely estimated, the value was $Q = 0.36$). However, based on the framework suggested by the STAR Panel during the meeting, survey catchability was fixed at a

value of 0.56 for the base-run. Values that went into the estimation framework were arrived at via consensus of those in attendance. Given the steep descending limb of the NWFSC "slope" survey selectivity curve, a Q of 0.56 most correctly can be said to apply only to those fish of a total length of 53 cm., the peak of the integrated length/age selectivity curve. The shape of this curve still allows for the ability of fish larger than 53 cm. to out-swim the trawl gear (as has been presumed) and for the smaller fish to escape capture based on size and age. Although discard quantity and length-composition data were available from the NWFSC Observer Program, these data only cover a short, recent time period. Still unknown are the discard rates for the three gear types for the vast majority of the time period covered by the assessment. Depending on the discard mortality rate of discarded sablefish (which presumably differs by depth, time of year, time on deck, etc.), assumed historic discard rates may or may not be have a significant influence on the estimated current status of the stock. Finally, there is a great deal of uncertainty surrounding the estimate of virgin spawning stock biomass (*B0*). This assessment assumes that there is a significant relation between climatic conditions of the California Current System (CCS) and survival of age-0 sablefish. Sea surface height data going back to 1925 suggests that there may have been a fundamental shift in the mean SSH around the year 1961. If this is the case, it is difficult to estimate how or even if, this shift may have affected the productivity of the stock. Furthermore, the variability of productivity of the CCS prior to 1925 are unknown. Consequently, the concept of a static "virgin" biomass is challenged by one in which an unfished sablefish population would exhibit substantial variability in response to long-term oscillation in environmental conditions. Without a longer time series of environmental data, it is not possible to determine if environmental conditions near 1925 represent a reasonable long-term average state, relative to the productivity for the sablefish stock.

Overall Perspectives. A unification of sablefish recruitment, climate change, and the factors that affect the California Current System is suggested: as goes climate change, so goes sablefish recruitment. If future climate change results in a more erratic California Current System, as predicted by some models, the results may be more erratic sablefish recruitment. Should this happen, the fishery may end up being supported by fewer, less frequent, strong year classes rather than by a greater number of "average" strength year classes.

At present, the strong 1999 and 2000 years classes are fully within the fishery. Whether these two year classes are due to past management actions or merely favorable oceanographic conditions is not clear. Caution should be exercised when using the apparent high abundance of these two year classes as an index of overall stock health. Although the two year classes are estimated to be the strongest in recent history, adjacent year classes do not appear to be as strong.

STAT Response to Issues Raised in the STAR Panel Report

The STAT found many of the concerns raised in the report to be either totally unfounded or too general to be of any help to the process. The STAT made written mention of these generalities and inaccuracies during the report writing process, but the final report failed to address many of the STAT concerns and maintained many of its original criticisms and extremely ambiguous tone. As a result, the STAT feels compelled to address several Panel comments in this document.

As catch estimates are made further into the future, the use of environmental indicators to help forecast recruitment strength will become more important. The environmental indices used are and exactly the same as those used in the previous assessment and extremely similar to those published in Schirripa and Colbert (2004). Despite statements made in the STAR Panel report, this publication does indeed do a type of validation that was fully accepted by the peer reviewers of the documents. Given the low p-values of the regression ($p = 0.00004191$) and the biology supporting the index, it is highly unlikely that the relationship is spurious. There was an obvious difference of philosophy between the STAR Panel and the

STAT as to the importance of including these data. While the report terms the use of such indices as "fashionable", the STAT challenges this characterization by pointing out that no other assessment on the west coast is currently using environmental data to help determine and/or forecast recruitment.

The STAR Panel's conclusion that the complexity of the model was not justified given the likely information content of the data was not supported by any specific details or examples of consequence. In fact, the STAT made large strides to decrease the complexity of previous model configurations by reducing the number of fisheries to both one and two gear types, partitioning the commercial and survey data into fewer units, doing away with the "super year" approach to the biomass estimates, and utilizing a "swept-area" estimation procedure for biomass estimates to make survey catchability easier to interpret.

The STAR Panel's conclusion that "many of the data sets had not been scrutinized or analyzed enough" was not accompanied by any specific examples of data sets to which they were referring. The Panel's conclusion is especially puzzling to the STAT for two reasons, (1) following careful examination of the data, the STAT's base model had fully dismissed 6 of the 12 previously used data sets (including lengths and ages) and partially dismissed one other. Furthermore, the STAT spent a great of time and effort reviewing the commercial landings data with a designated industry representative until a mutually agreed upon resolution was reached. This left only the survey data, which is known to be highly scrutinized on an ongoing basis.

The STAR Panel report is inaccurate in its use of the terms "ad hoc methods" and "smoothing" to get the model working. As was explained during the STAR panel, some lengths at L-infinity were mistakenly left in the data file, however there was no predetermined intention of leaving the data in this condition, as "smoothing" would suggest. The report fails to mention that the values were all at L-infinity and as such had very little, if any, influence on model outcomes.

Finally, the reference to model runs made by the STAR Panel itself was somewhat troubling and does not seem to adhere to procedures outlines in the Terms of Reference. While the STAT sees no problem with, in fact encourages, examination of the assessment input files, it seems irregular to have the STAR do it's own model runs and then bring those results to the meeting, even if not for consideration as a final run.

Summary tables for Sablefish

	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Landings (mt)	4396	6647	6290	5653	3814	5434	5782	5754	5508	4600
Estimated Discards (mt)	8.42	4.64	4.93	231.24	112.52	16.6	16.02	3.91	16.37	
Estimated Total Catch (mt)	4404	6652	6295	5884	3927	5451	5798	5758	5524	4600
ABC (mt)	5200	9700	9700	7900	5000	8500	8500	8400	8200	6200
OY * (if different from ABC) (mt)	5200	7900	7900	7000	4600	6800	7800	7800	7600	4600
SPR	61.4%	47.6%	48.6%	49.9%	64.3%	58.8%	61.0%	63.7%	66.0%	70.5%
Exploitation Rate (total catch/summary biomass)	2.6%	3.9%	3.8%	3.5%	2.2%	3.0%	3.0%	3.0%	2.8%	2.3%
Summary Age "x+" Biomass (B) (mt)	170,075	163,427	156,921	160,923	170,558	180,956	187,899	189,613	195,783	194,425
Spawning Stock Biomass (*SB*) (mt)	88,345	86,227	82,288	78,176	76,171	79,264	83,826	88,632	91,686	93,895
Uncertainty in Spawning Stock Biomass estimate (SD)	7,395	7,293	7,151	6,994	6,935	7,165	7,594	8,117	8,564	8,963
Recruitment at age "x"	8,828	27,369	25,330	16,747	9,698	4,726	17,357	2,609	5,343	9,564
Uncertainty in Recruitment estimate (SD)	1,013	2,531	2,510	1,909	1,276	780	2,578	576	1,506	5,805
Depletion (SB/SB0)	36.0%	35.2%	33.6%	31.9%	31.1%	32.3%	34.2%	36.1%	37.4%	38.3%
Uncertainty in Depletion estimate	-	-	-	-	-	-	-	-	3.1%	3.3%

	Point Estimate	Uncertainty in estimates (If Available)		
Unfished Spawning Stock Biomass (SB_0) (mt)	244,688	216,898	-	273,542
Unfished Summary Age 2+ Biomass (B_0) (mt)	464,652	NA		NA
Unfished Recruitment (R_0) at age 0	17,656	15,802	-	19,510
Reference points based on $SB_{40\%}$				
MSY Proxy Spawning Stock Biomass ($SB_{40\%}$)	97,919	86,604	-	109,234
SPR resulting in $SB_{40\%}$ ($SPR_{SB40\%}$)	60.2%	51.8%	-	68.5%
Exploitation rate resulting in $SB_{40\%}$	3.13%	NA		NA
Yield with $SPR_{SB40\%}$ at $SB_{40\%}$ (mt)	6,328	4,607	-	8,048
Reference points based on SPR proxy for MSY				
Spawning Stock Biomass at SPR (SB_{SPR})(mt)	41,544	2,096	-	80,992
$SPR_{MSY\text{-}proxy}$	45.00%			
Exploitation rate corresponding to SPR	5.40%	NA		NA
Yield with $SPR_{MSY\text{-}proxy}$ at SB_{SPR} (mt)	4,871	245	-	9,496
Reference points based on estimated MSY values				
Spawning Stock Biomass at MSY (SB_{MSY}) (mt)	91,559	71,670	-	111,448
SPR_{MSY}	58.56%	46.86%	-	70.26%
Exploitation Rate corresponding to SPR_{MSY}	3.33%	NA		NA
MSY (mt)	6,303	4,529	-	8,077

Decision Table 1 based on model that includes sea surface height index and three states of nature which assume varying degrees of stock size by varying the NWFSC Combined survey catchability (Q) and various catch levels. Catch is in metric tons of killed fish.

						Low Stock Size		Base Case		High Stock Size	
						Q = 0.712		Q = 0.56		Q = 0.445	
						Less Likely (p=0.25)		More likely (p=0.50)		Less Likely (p=0.25)	
Management Decision	**Year**	**H&L Catch**	**Pot Catch**	**Trawl Catch**	**TOTAL**	**SSB**	**Depletion**	**SSB**	**Depletion**	**SSB**	**Depletion**
	2009	1,243	1,341	4,685	7,269	73,394	32.2%	94,693	38.6%	120,581	45.5%
	2010	1,128	1,249	4,342	6,719	71,142	31.2%	92,541	37.7%	118,545	44.7%
	2011	1,025	1,185	4,177	6,387	69,270	30.4%	90,744	37.0%	116,816	44.0%
Low Catch	2012	958	1,147	4,131	6,236	67,988	29.8%	89,587	36.5%	115,772	43.7%
	2013	924	1,127	4,142	6,194	67,164	29.4%	88,951	36.3%	115,313	43.5%
40:10	2014	913	1,117	4,169	6,199	66,606	29.2%	88,636	36.1%	115,234	43.5%
Low Stock Size	2015	912	1,112	4,189	6,213	66,179	29.0%	88,494	36.1%	115,372	43.5%
	2016	916	1,108	4,195	6,219	65,809	28.8%	88,440	36.1%	115,628	43.6%
	2017	921	1,104	4,187	6,211	65,464	28.7%	88,433	36.1%	115,952	43.7%
	2018	924	1,099	4,170	6,192	65,136	28.5%	88,455	36.1%	116,317	43.9%
	2009	1,672	1,986	6,139	9,797	73,394	32.2%	94,693	38.6%	120,581	45.5%
	2010	1,502	1,845	5,641	8,989	69,884	30.6%	91,292	37.2%	117,270	44.2%
	2011	1,351	1,747	5,387	8,485	66,868	29.3%	88,361	36.0%	114,378	43.1%
Base Case Catch	2012	1,248	1,686	5,293	8,226	64,547	28.3%	86,170	35.1%	112,271	42.3%
	2013	1,189	1,646	5,275	8,111	62,751	27.5%	84,567	34.5%	110,819	41.8%
40:10	2014	1,162	1,620	5,277	8,058	61,253	26.8%	83,321	34.0%	109,788	41.4%
Base Case	2015	1,151	1,600	5,270	8,020	59,901	26.2%	82,269	33.5%	109,001	41.1%
	2016	1,147	1,582	5,245	7,974	58,615	25.7%	81,322	33.2%	108,359	40.9%
	2017	1,145	1,565	5,204	7,914	57,363	25.1%	80,439	32.8%	107,808	40.7%
	2018	1,143	1,549	5,152	7,843	56,137	24.6%	79,604	32.5%	107,328	40.5%
	2009	2,147	2,512	7,718	12,377	73,394	32.2%	94,693	38.6%	120,581	45.5%
	2010	1,942	2,351	7,143	11,437	68,635	30.1%	90,019	36.7%	116,005	43.7%
	2011	1,755	2,239	6,866	10,860	64,433	28.2%	85,869	35.0%	111,902	42.2%
High Catch	2012	1,622	2,167	6,780	10,569	60,986	26.7%	82,515	33.6%	108,639	41.0%
	2013	1,543	2,120	6,780	10,443	58,096	25.5%	79,779	32.5%	106,063	40.0%
40:10	2014	1,493	2,073	6,750	10,316	55,507	24.3%	77,404	31.6%	103,918	39.2%
High Stock Size	2015	1,468	2,036	6,711	10,214	53,081	23.3%	75,248	30.7%	102,049	38.5%
	2016	1,454	2,003	6,650	10,107	50,731	22.2%	73,214	29.9%	100,351	37.8%
	2017	1,444	1,973	6,570	9,988	48,425	21.2%	71,262	29.1%	98,772	37.2%
	2018	1,434	1,945	6,478	9,857	46,152	20.2%	69,377	28.3%	97,292	36.7%
	2009	1,061	1,124	3,901	6,086	73,394	32.2%	94,705	38.7%	120,581	45.5%
	2010	985	1,069	3,688	5,742	71,709	31.4%	93,152	38.1%	119,120	44.9%
	2011	913	1,031	3,607	5,551	70,308	30.8%	91,856	37.5%	117,870	44.4%
Catch to	2012	866	1,013	3,617	5,496	69,422	30.4%	91,125	37.2%	117,229	44.2%
Stablize at B40%	2013	845	1,008	3,674	5,527	68,944	30.2%	90,868	37.1%	117,122	44.2%
40:10	2014	842	1,012	3,743	5,597	68,697	30.1%	90,899	37.1%	117,356	44.3%
Base Case	2015	851	1,018	3,805	5,675	68,555	30.0%	91,075	37.2%	117,774	44.4%
	2016	864	1,027	3,853	5,744	68,446	30.0%	91,313	37.3%	118,280	44.6%
	2017	878	1,035	3,888	5,800	68,335	29.9%	91,569	37.4%	118,819	44.8%
	2018	890	1,042	3,911	5,843	68,212	29.9%	91,824	37.5%	119,367	45.0%

Decision Table 2 based on model that does not includes sea surface height index and three states of nature which assume varying degrees of stock size by varying the NWFSC Combined survey catchability (Q) and various catch levels. Catch is in metric tons of killed fish.

						Low Stock Size		Base Case		High Stock Size	
						Q = 0.712		Q = 0.56		Q = 0.445	
						Less Likely (p=0.25)		More likely (p=0.50)		Less Likely (p=0.25)	
Management Decision	**Year**	**H&L Catch**	**Pot Catch**	**Trawl Catch**	**TOTAL**	**SSB**	**Depletion**	**SSB**	**Depletion**	**SSB**	**Depletion**
	2009	1,185	1,461	4,381	7026	73,561	30.8%	95,386	36.9%	122,045	43.2%
	2010	1,072	1,370	4,048	6489	71,298	29.8%	93,241	36.0%	120,013	42.5%
	2011	972	1,306	3,879	6156	69,381	29.0%	91,387	35.3%	118,201	41.8%
Low Catch	2012	903	1,265	3,820	5988	67,997	28.4%	90,102	34.8%	116,981	41.4%
	2013	866	1,238	3,814	5918	67,031	28.0%	89,290	34.5%	116,283	41.1%
40:10	2014	849	1,220	3,820	5889	66,315	27.7%	88,777	34.3%	115,932	41.0%
Low Stock Size	2015	843	1,206	3,821	5870	65,727	27.5%	88,431	34.2%	115,784	41.0%
	2016	842	1,193	3,808	5843	65,201	27.3%	88,176	34.1%	115,754	40.9%
	2017	842	1,182	3,784	5808	64,709	27.1%	87,974	34.0%	115,796	41.0%
	2018	841	1,171	3,752	5764	64,240	26.9%	87,810	33.9%	115,886	41.0%
	2009	1,699	1,843	6,151	9693	73,561	30.8%	95,386	36.9%	122,045	43.2%
	2010	1,522	1,704	5,626	8852	69,982	29.3%	91,912	35.6%	118,688	42.0%
	2011	1,363	1,598	5,345	8306	66,872	28.0%	88,846	34.4%	115,685	40.9%
Base Case Catch	2012	1,251	1,526	5,227	8003	64,428	27.0%	86,481	33.5%	113,392	40.1%
	2013	1,184	1,477	5,185	7846	62,490	26.2%	84,681	32.8%	111,703	39.5%
40:10	2014	1,148	1,442	5,164	7754	60,846	25.5%	83,230	32.2%	110,406	39.1%
Base Case	2015	1,130	1,414	5,134	7678	59,350	24.8%	81,973	31.7%	109,340	38.7%
	2016	1,120	1,390	5,086	7596	57,927	24.3%	80,826	31.3%	108,413	38.3%
	2017	1,112	1,368	5,023	7504	56,546	23.7%	79,748	30.9%	107,578	38.1%
	2018	1,104	1,348	4,951	7402	55,201	23.1%	78,728	30.5%	106,818	37.8%
	2009	2,163	2,611	7,692	12466	73,561	30.8%	95,386	36.9%	122,045	43.2%
	2010	1,953	2,450	7,094	11497	68,617	28.7%	90,554	35.0%	117,306	41.5%
	2011	1,758	2,330	6,783	10872	64,203	26.9%	86,202	33.3%	112,972	40.0%
High Catch	2012	1,599	2,221	6,589	10410	60,525	25.3%	82,599	31.9%	109,410	38.7%
	2013	1,499	2,140	6,496	10135	57,450	24.1%	79,642	30.8%	106,549	37.7%
40:10	2014	1,440	2,076	6,431	9947	54,724	22.9%	77,083	29.8%	104,144	36.8%
High Stock Size	2015	1,405	2,022	6,359	9786	52,177	21.8%	74,749	28.9%	102,013	36.1%
	2016	1,383	1,974	6,268	9624	49,723	20.8%	72,549	28.0%	100,056	35.4%
	2017	1,365	1,930	6,160	9455	47,328	19.8%	70,440	27.2%	98,223	34.7%
	2018	1,348	1,890	6,043	9280	44,981	18.8%	68,409	26.4%	96,495	34.1%

SCIENTIFIC AND STATISTICAL COMMITTEE REPORT ON STOCK ASSESSMENTS FOR 2009-2010 GROUNDFISH FISHERIES

FULL STOCK ASSESSMENTS

Sablefish

Dr. Michael Schirripa (of the Stock Assessment Team [STAT]) presented an overview of the 2007 sablefish stock assessment to the Scientific and Statistical Committee (SSC). Dr. Martin Dorn presented an overview of the Stock Assessment Review (STAR) Panel report.

Efforts were made by the STAT to reduce the complexity of the current assessment compared to previous assessments. Major changes include not utilizing pot survey and fishery logbook data, reducing from 5 to 3 the number of commercial fisheries in the model, and the addition of the Northwest Fisheries Science Center (NWFSC) shelf survey. The sablefish assessment continues to use sea surface height (SSH) as a predictor of recruitment. These environmental data are incorporated in a technically superior way compared to the previous assessment. One result of these changes and the addition of the most recent data is that the model now provides a plausible estimate for steepness.

The estimate of spawning biomass remains highly sensitive to estimates of NWFSC slope survey catchability. A preliminary model fixed this value at 1, while the model fit best with a much lower value. The STAR Panel created a prior for survey catchability based on informed consensus opinion. The median of this prior ($Q = 0.56$) was used for the base model, whereas the full prior distribution was used to calculate high and low states for nature for the decision table.

There were two unresolved areas of disagreement between the STAT and the STAR Panel as noted in the STAR Panel report. The SSC worked with the STAR chair and the STAT to resolve these issues. There was considerable discussion among the SSC, STAR Chair and STAT about the use of SSH in the assessment. The SSC concurs with the STAT and endorses the use of SSH in the current assessment but notes that much more work needs to be done toward evaluating the selection and validation of environmental signals in stock assessments as was recommended following the Groundfish Harvest Policy Evaluation Workshop in December, 2006. The inclusion of SSH had only a small influence on estimated depletion levels (in 2009: 38.6% with vs. 36.9% without the SSH data).

The base model estimates a 2007 spawning biomass of 93,895 mt and depletion level of 38.3%, both of which are somewhat higher than the estimates from the 2005 assessment. The higher estimates of current and historical biomass are largely due to the change in estimated survey catchability. The model also shows a rapid increase in spawning biomass since 2002 due to very strong 1999 and 2000 year classes.

The SSC endorses the use of the base model and decision Table 1 for Council decision making. The fourth section of decision table 1 represents the catch series that will stabilize the population at B_{40}% under equilibrium assumptions, whereas the rest of the table represents the standard decision table which uses the accepted F proxy (F_{45}%) to define catches. The document available for SSC review was still in draft form and needs to be fully updated to reflect the final base model and include all the required diagnostics. The STAT will provide a new draft to the STAR Panel members who will provide a review for completeness according to the assessment TOR before the document is finalized.

Longnose Skate

The SSC was given a presentation by Dr. Vladlena Gertseva on the assessment for longnose skate, and Dr. Martin Dorn provided a review of the STAR Panel findings. This initial assessment of longnose skate was performed using a single sex configuration of Stock Synthesis 2. The assessment is configured as one stock in U.S. waters from Canada to Mexico, and models a single fishery because 97% of all landings are trawl-caught. It includes catch data from 1916-2006, along with limited age data from the catches. Abundance estimates from four NMFS surveys since 1980 were sources of fishery-independent data, including survey length compositions since 1997. Longnose skate exhibit the life history traits of late maturity, low fecundity and slow growth. In addition, resilience of the stock was assumed to be low. The selectivity curve for the fishery allows full selectivity at 90 cm, which corresponds to fish that are only 10% mature. This could be a concern because the fishery is catching immature fish from a stock that is assumed to exhibit low productivity.

Dr. Gertseva noted that the estimates of spawning biomass in the May 23, 2007 version of the stock assessment report were double the correct values. However, none of the other assessment results or findings is affected by this correction.

Assessment results indicate that the spawning biomass slowly declined through the late 1960s, and has continued a general downward trend since then, but with fluctuations. The current biomass is within the range of 41-80% of unfished stock size, with a best estimate of 66%. The major sources of uncertainty in the results are: 1) the magnitude of the historical catches, and 2) the NWFSC shelf-slope survey catchability coefficient *Q*. These sources of uncertainty were used to develop alternative states of nature for the decision table. The stock is projected to remain above 40% of unfished stock size under the most likely catch scenarios for the next ten years, and only under the most aggressive catch scenario

($F_{45\%}$) combined with the most pessimistic state of nature (high *Q* and high historical catch) is the depletion level forecast to decline below 40% of unfished abundance. Considering that elasmobranches have distinct life history traits that differ from other groundfish, the default harvest rate for groundfish (F45%) is unproven and potentially too aggressive. The SSC endorses the STAR Panel conclusions that this assessment represents the best available science and can form the basis for Council decision-making.

UPDATED STOCK ASSESSMENTS

The Groundfish Subcommittee of the SSC met June 9-10 to review updated assessments of Pacific Ocean perch, cowcod, yelloweye rockfish, English sole, and widow rockfish. According to the terms of reference for stock assessment reviews, updates are appropriate in situations where a "model" has already been critically examined and the objective is to simply incorporate the most recent data. To qualify, a stock assessment must carry forward its fundamental structure from a model that was previously reviewed and endorsed by a STAR Panel. Any new information being incorporated into the assessment should be presented in enough detail that the review panel can determine whether the update satisfactorily meets the Council's requirement to use the best available scientific information. The groundfish subcommittee's review focused on two crucial questions: (1) did the assessment comply with the terms of reference for stock assessment updates and (2) are new input data and model results sufficiently consistent with previous data and results that the updated assessment can form the basis of Council decision-making. If either of these criteria were not met, then a full stock assessment was recommended.

While an update assessment is clear in concept, in practice there are often special issues that make it difficult to determine whether an assessment qualifies as an update. For the update assessments reviewed by the subcommittee, several such issues needed to be considered. These included 1) when correction of an error in the previous assessment had a significant impact on model results, and 2) when "new" data were added to early years in the assessement. Despite these considerations, it was generally clear which assessments were acceptable as an update.

The Groundfish Subcommittee prepared draft reports on each of the assessment updates. These draft reports were then reviewed and adopted by the full SSC.

English Sole

The SSC groundfish subcommittee reviewed a document entitled "Updated U.S. English sole stock assessment: Status of the resource in 2007", authored by Dr. Ian Stewart. Dr. Stewart gave a brief presentation and fielded questions from the committee.

The updated model was run with SS2 Version 2.00e. Two fleets (North and South) were modeled as operating on one coastwide stock. In the future it may be useful to look at the two areas separately.

The update incorporated a revised catch data series for 1981-2006 which resulted in a small increase in total landings. A substantial amount of new fishery age and length data were also incorporated into the update (predominantly new age data for the period after 2001). The update also used a new recruitment bias-correction option in SS2. Compared to the 2005 assessment, the net result of the changes made in the update had the effect of 1) increasing the magnitude of recent year classes and 2) increasing the estimate of B_0. The level of depletion in 2006 from the base case model is 116%, but is expected to decrease as the impact of recent strong recruitments diminishes.

The SSC determined that the English sole assessment update complied with the terms of reference for updates and is consistent with the previous assessment. The SSC endorses its use for Council decision-making.

Pacific Ocean Perch

Dr. Owen Hamel presented the Pacific Ocean perch update assessment, which incorporated recent survey and fishery data. The new data suggest continued rebuilding of the Pacific Ocean perch stock is occurring. The NWFSC slope survey shows a generally increasing trend, and there are indications of a strong 1999 year class in both the survey and fishery age composition data over several years. Assessment results are highly consistent with the previous assessment except that a stronger 1999 year class is estimated. The current assessment indicates that the 1999 year class is the strongest since the 1960s. The SSC determined that the Pacific Ocean perch assessment update complied with the terms of reference for updates and endorses its use for Council decision-making.

Widow Rockfish

The SSC groundfish subcommittee received a presentation on the update assessment of widow rockfish. The update, which indicates much stronger age-3 recruitment in 2003 than had been estimated by the last full assessment (conducted in 2005), projects that the stock of widow rockfish will exceed the rebuilding target of 40% of unexploited spawning biomass during 2009, largely because of the exceptional strength of this year-class. The projections further indicate that the stock could sustain fishery removals of about 2,000 mt annually. During the review of the update it was determined that the update assessment had not fully accounted for the bycatch of widow rockfish by the fishery for Pacific hake. The SSC recommends that the current update should be revised with updated catch statistics that correctly account for removals in recent years, but notes that the revised catch data should not substantively alter the results of the update. The SSC groundfish subcommittee will conduct an email review of a revised update prior to the September SSC meeting, at which time the revised update will be reviewed by the full SSC. The SSC determined that the widow rockfish assessment update complied with the terms of reference for updates. The SSC notes that future widow rockfish assessments will increasingly be compromised by the lack of a reliable tuning index for recent years.

Cowcod

The STAT, represented by Drs. Dick, Ralston, and Pearson, presented an updated stock assessment to the SSC. The last full assessment for cowcod was conducted in 2005. Attempts to update the cowcod assessment have resulted in substantial changes in depletion and historical exploitation rates. In addition the visual survey is less consistent with the 2002 population estimate from the 2005 assessment. Therefore, the cowcod assessment update as presented to the SSC did not fully meet the terms of reference. As such, the SSC recommends that a full assessment for cowcod be developed and considered for review at either the darkblotched or Mop-Up STAR Panel.

Yelloweye Rockfish

The stock assessment update for yelloweye rockfish was presented to the SSC by John Wallace. Landings, compositional data, and the catch per unit of effort (CPUE) time series were all updated through 2006 in accordance with the Terms of Reference. Some key issues identified in the update by the STAT were: (1) correction of a technical error in the definition of age and length classes, (2) deleting Washington trawl-caught fish from hook-and-line age compositions,

and (3) revising the natural mortality rate upwards from 0.036 to 0.043 yr^{-1}. The update also considered the effect of including fishing trips that target halibut in the calculation of the Washington sport CPUE statistic, as well as the impact of dropping 2000 and 2001 from that particular time series. Neither of those two sensitivity analyses produced an appreciable effect on model outcome. Overall, the update with M = 0.043 is consistent with the previous assessment and the SSC endorses the update model with the revised natural mortality rate for use in status determination and management of the stock.

STATUS OF OTHER STOCK ASSESSMENTS

Shortbelly Rockfish

The SSC also reviewed the stock assessment for shortbelly rockfish conducted by the SWFSC, which was presented to the SSC by Dr. Field. This stock assessment was not reviewed by a Council STAR Panel with SSC participation. Rather it was reviewed using a structure similar to a STAR Panel (external reviewers, including a Center for Independent Experts [CIE] reviewer) and using the Council Terms of Reference for groundfish stock assessments. The SSC was asked to review this assessment primarily because NMFS solicited a review by the Council in order for it to be qualify as an assessment.

The assessment report does not provide estimates of accepted biological catch (ABCs) and optimum yield (OYs), the reviewers except for the CIE reviewer were not selected using the same process as for STAR Panels, and the record of how the review panel interacted with the assessment authors is not as complete as would be expected of STAR Panels reports. Therefore, this assessment does not fully satisfy the Council TOR for groundfish stock assessments. However, it represents improved knowledge about shortbelly rockfish and might be suitable for management purposes in place of inferences from the hydroacoustic surveys conducted during 1977 and 1980.

Dr. Field provided the SSC with the results of projections based a range of future sequences of catches, and these suggested that catches at the level of the current OY for shortbelly rockfish would lead to major reductions in abundance. However, catches of shortbelly rockfish are currently close to zero. If the GMT wishes to use the results from this assessment for management purposes, the SSC offers the following suggestions:

(a) the estimates of biomass for recent years are based on the greatest amount of data and are hence the most reliable;

(b) the trend in abundance from 1991 to the present is relatively reliable; and

(c) if ABCs and OYs are to be based on a survey estimate of abundance rather than the results of the assessment, the estimate of abundance for 1991 obtained by Ralston *et al*. (2003) should be preferred to the results of the 1977 and 1980 hydroacoustic surveys.

The SSC notes that the assessment of shortbelly rockfish does improve knowledge about one of the non-commercial species included in the Groundfish FMP and hence provides information relevant to further understanding the ecosystem impacts on the fish populations managed by the Council, as well as the implications of the choice between static and dynamic B_0. The SSC encourages additional assessments of species that are not of immediate management concern.

Review of assessments that come from outside of the normal Council process should ideally be scheduled as part of the "off year" science activities.

Finally, the SSC had access to the report by the CIE reviewer of the shortbelly rockfish assessment. The SSC notes that these reports contain general comments on assessment methodology and process, and recommends that summaries of the relevant parts of the CIE reports for the current round of stock assessments be made available to the SSC. In addition, the SSC recommends that Dr. Patrick Cordue (CIE reviewer on all of the 2007 Groundfish STAR Panels) participate at any "post-mortem" meeting as this will increase the ability to fine-tune the assessment and review process based on the experiences during 2007.

Blue Rockfish

Dr. Owen Hamel presented the draft Blue Rockfish STAR Panel report and Dr. Alec MacCall spoke to the STAT's response to the Panel report. The blue rockfish assessment was not completed during the Panel meeting (May 21-25th). Initially, the STAT presented two commonly-used stock assessment models (SS2 and A Stock Production Model Incorporating Covariates [ASPIC]). Due to several implementation problems with the SS2 model, the STAT preferred the ASPIC model. However, the STAR Panel did not consider the ASPIC-based assessment results adequate to support Council management decisions.

This STAR Panel reviewed three stock assessments (blue rockfish; black rockfish – south; and black rockfish – north). There was not sufficient time during the Panel meeting to work through the blue rockfish modeling issues and reach consensus. Dr. MacCall indicated that the STAT may be able to improve the ASPIC-based assessment over the next few months. The SSC supports the ASPIC work and encourages the STAT to also explore other models that may be able to utilize all of the available data, e.g. SS2 or a simple delay-difference model. If this is possible, the SSC recommends that a revised blue rockfish assessment be taken up at the Mop-Up STAR Panel in early October.

Black Rockfish -Southern Stock

Dr. Owen Hamel briefed the SSC on the recently completed STAR Panel review of the black rockfish assessment (May 21-25th). The Panel and the STAT were able to complete their work on the northern stock of black rockfish. For the southern stock, however, several important issues were not resolved. In the latter case, the Panel and the STAT concurred that the problems could be worked out over the next few months, and that a revised assessment could be tabled at the Mop-Up STAR Panel in early October. The SSC concurs and recommends that black rockfish (southern stock) be taken up by the Mop-Up Panel.

PFMC
06/13/07

Agenda Item E.7
Situation Summary
June 2007

CONSIDERATION OF INSEASON ADJUSTMENTS

The Council set optimum yield (OY) levels and various management measures for the 2007 groundfish management season with the understanding these management measures will likely need to be adjusted periodically through the biennial management period with the goal of attaining, but not exceeding, the OYs. The Groundfish Management Team (GMT) and the Groundfish Advisory Subpanel (GAP) will begin meeting on Sunday, June 10, 2007 (see Ancillary B and Ancillary C agendas) to discuss and recommend inseason adjustments to ongoing 2007 groundfish fisheries.

Under this agenda item, the Council is to consider advisory body advice and public comment on the status of ongoing and upcoming fisheries and recommended inseason adjustments prior to adopting final changes. The Council may provide guidance to the GMT and GAP prior to making final inseason adjustments under Agenda Item E.10 on Friday, June 15, 2007, or make final inseason adjustments under this agenda item. If the latter course is chosen, the Council may cancel Agenda Item E.10 or direct that opportunity be provided to confirm or clarify the Council decision under Agenda Item E.7.

Council Action:

1. **Consider information on the status of ongoing fisheries.**
2. **Consider and adopt inseason adjustments as necessary.**

Reference Materials:

1. Agenda Item E.7.e, Public Comment.

Agenda Order:

a. Agenda Item Overview — John DeVore
b. Report of the Groundfish Management Team (GMT) — Kelly Ames
c. Agency and Tribal Comments
d. Reports and Comments of Advisory Bodies
e. Public Comment
d. **Council Action:** Adopt Preliminary or Final Recommendations for Adjustments to 2007 Groundfish Fisheries

PFMC
05/15/07

GROUNDFISH MANAGEMENT TEAM (GMT) REPORT
ON CONSIDERATION OF INSEASON ADJUSTMENTS

COMMERCIAL

Open Access (OA) Fixed Gear

Conception Area sablefish
The Groundfish Advisory Subpanel (GAP) requested that the GMT analyze an increase in OA fixed gear sablefish south of 36˚ N. lat. Specifically, the GAP requested an increase in the daily limit to 350 pounds from 300 lbs, and an increase in the weekly limit from 700 lbs to 1,050 lbs. This request would provide fishing opportunities that are equivalent to opportunities in more recent years. The GMT discussed the request, considered the potential impacts on sablefish catch levels, and paid particular attention to the likelihood of effort shifts occurring from vessels currently fishing north of the Conception area. Currently, fishing opportunities north of the Conception area are 300 lbs per day, 700 lbs per week, and 2,100 lbs per two months. Based on analysis of past fishing patterns, increases in the daily limit have resulted in large increases in effort, therefore the GMT did not further consider changing the daily limit. Increasing the Conception area weekly limit to 1,050 lbs per week would result in far greater opportunities than in northern areas and is likely to result in effort shifts toward the Conception area. Therefore, the GMT recommends a moderate increase in the weekly limit to 800 lbs, in order to avoid effort shifts.

Sablefish Daily Trip Limit (DTL) North of 36˚ degrees N Lat.
The GMT received a request to look at an increase in OA DTL limits north of 36˚ N. lat. Based on analysis of available data it does not appear that an increase can be supported at this time. Projections of catch with existing regulations indicate the OA sablefish allocation will be met. However, the GMT will revisit this issue at the September meeting and recommend inseason action if catch projections are below the allocation.

Limited Entry (LE) Fixed Gear

Shortspine Thornyheads south of 34˚ 27' N Lat.
The GMT was asked to analyze an increase in the LE fixed gear limits for shortspine thornyhead south of 34˚27' N. lat. The trip limit in this area is currently 2,000 lbs per two months. As of May 31, the total shortspine Conception area landings are estimated at 60.6 metric tons. The optimal yield (OY) for the area south of 34˚27 N lat. (a portion of the Conception area) is 421 metric tons meaning there are several hundred metric tons available for harvest. Recent catch levels in this area have been 120-130 metric tons per year for fixed gear.

The GMT discussed this proposal and paid particular attention to available catch amounts and the potential for effort shifts. Shortspine thornyheads landed in the California bight fetch a high price, with some landings receiving in excess of $5.50 per pound and prices of this magnitude tend to draw effort. While the amount of shortspine available for harvest in this area is several hundred metric tons, an increase in effort may result in higher sablefish catch and higher catches of other species, and higher than anticipated catch could result in premature closure of other

fishing opportunities. Based on the potential for increased effort, the GMT recommends adopting a measured approach with limits at 3,000 lbs per two months in period 4 with the limit reverting to 2,000 lbs per two months for period 5. The impact of this increase would be evaluated at the September meeting and changes to period 6 limits could be made if appropriate.

Shelf Rockfish off Central California
The GMT has been asked to look at combining widow, bocaccio, and chilipepper rockfish with the minor shelf rockfish limit off central California for the LE fixed gear fishery. The GMT heard reports that the differentiation of these limits is resulting in high discard levels as one or more of the individual limits is reached. Combining the limits would allow for more flexibility in retention opportunities that would in turn reduce discard. The GMT considered the implication of this request and believes that combining widow and bocaccio into the shelf rockfish complex between 40˚10' N lat. and 34˚27' N lat., while leaving chilipepper separate, can be accommodated without affecting overfished species catch levels. The GMT recommends a combined widow-bocaccio-shelf rockfish limit be set at 500 lbs per month for the remainder of the year beginning August 1 for LE fixed gears.

Limited Entry Trawl

Non-Whiting Trawl Fishery
At the March 2007 meeting, the Council adopted a complex set of rockfish conservation area (RCA) boundaries north of 40˚10' N lat. to reduce canary rockfish catch levels while attempting to provide reasonable economic opportunity. That inseason action closed areas off northern Washington and southern Oregon and more heavily restricted an area north of the Columbia River. Parallel to the change in the shoreward RCA boundary, the seaward boundary was changed to 150 fm north of Cascade Head to encourage trawlers to fish seaward of the RCA where canary bycatch rates are lower. It was expected that this would result in additional darkblotched and POP impacts, but the expected impact would remain within the OY.

Available fish ticket data indicates that the 150 fm line resulted in increased participation by vessels which do not typically fish seaward of the RCA. Several vessels, which were typically thought of as shoreward vessels, fished seaward of the RCA in April. While this should minimize impacts to canary rockfish, the balance between darkblotched impacts and canary impacts must still be achieved as increased participation seaward of the RCA may lead to higher than expected impacts on darkblotched.

An examination of available data shows that generally A) canary rockfish bycatch rates are relatively higher off Washington and relatively lower off northern Oregon, and that B) darkblotched bycatch rates are slightly lower off Washington and slightly higher off northern Oregon. Based on this information, the GMT proposes to move the seaward boundary of the RCA between Cascade Head and the Columbia River from 150 fm to 200 fm starting August 1. This action is expected to reduce darkblotched impacts and move some effort shoreward. An increase in shoreward effort will tend to increase canary impacts; however, those areas off northern Oregon have relatively low canary bycatch rates and overall impacts are still expected to be within the OY.

In addition to the changes in RCA boundaries, cumulative limit adjustments are proposed based on inseason catch levels and vessel attainment of those available limits. Cumulative limit

adjustment proposals are to increase longspine limits for large footrope gear in the north to 25,000 lbs per two months beginning in period 4 for the remainder of the year and to increase Dover sole limits in the south to 80,000 lbs per two months beginning in period 4 for the remainder of the year.

Lingcod Shoreward of the RCA

The GAP requested that the GMT examine increasing retention of lingcod in the LE trawl fishery in areas shoreward of the RCA. Industry members reported that high discard rates of lingcod are occurring shoreward of the RCA and increasing the trip limits would decrease unnecessary discard. The GMT discussed this proposal in the context of whether allowing for higher retention opportunities would encourage targeting and whether that targeting would result in increased bycatch of overfished species, in particular, canary rockfish. Over the past several years, the price per pound of lingcod in the trawl fishery has averaged just over $0.60 cents. At current retention limits of 1,500 lbs, this represents just over $900 per two months. While this is probably not enough revenue to justify a trip, the GMT believes that limits in excess of this amount may encourage some topping off which could result in increased impacts to overfished species. In addition, the lingcod cumulative limit was increased in 2007 and data are not yet available to analyze the effect of that increase. The GMT therefore does not recommend increasing the lingcod limit at this time.

Chilipepper Rockfish South of 40˚ 10' N Lat.

In April, the GMT received a request to increase chilipepper rockfish limits for small footrope travels south of 40˚10 N. lat. (Agenda Item E.2.b, April 2007). The GMT made a request to the Northwest Fisheries Science Center (NWFSC) for observer data summaries that would help to estimate the impact of this request. The NWFSC indicated that observations of chilipepper catch were not sufficient to inform this inseason request. Therefore, the GMT is unable to provide a specific analysis pertaining to the potential impacts of an increase in chilipepper opportunity.

Based on the aggregated observer data that is available, the discard rates of chilipepper in the south have been as high as 70-80%. The GMT discussed this amount of discard, potential increases in the chilipepper limit that would reduce discard, and the potential for targeting on chilipepper that may occur if the limit is increased. The GMT is concerned that targeting of chilipepper may result in more bocaccio and widow impacts as those two species tend to be associated with chilipepper. Currently established limits are 500 lbs per month and it does not appear that this limit is resulting in targeting of chilipepper by the non-whiting trawl fishery. Consequently, a modest increase of several hundred pounds should not result in targeting. The GMT recommends that chilipepper limits for small footrope trawls south of 40˚10' N lat. be increased to 800 lbs per month beginning August 1.

Combined Arrowtooth and Other Flatfish Limit North of 40˚ 10'

The GAP requested that the GMT re-visit the combined arrowtooth and Other Flatfish limit that was established at the March meeting. The intention of combining arrowtooth and Other Flatfish was to allow for targeting opportunity while achieving reductions in effort necessary to stay within the canary rockfish OY. Some trawlers target arrowtooth while other trawlers target Other Flatfish. To disaggregate these limits could mean reducing both limits by fifty percent, which would reduce target opportunities for all trawlers. Maintaining the current approach (one combined limit) allows for specialization to continue at catch levels that are economically viable.

The GMT discussed establishing a separate arrowtooth limit because industry stated that high discard of arrowtooth has occurred as vessels attempt to fill their Other Flatfish and arrowtooth limit with more valuable species than arrowtooth. The GMT notes that establishing a separate limit on arrowtooth may indeed decrease the discard of arrowtooth occurring on vessels that do not typically target that species; however, it would decrease opportunities for vessels that target arrowtooth. In addition, establishing a separate arrowtooth limit may result in increased effort which would increase impacts on canary rockfish. Therefore, while the GMT acknowledges that unintended regulatory discard of arrowtooth may be occurring, the GMT recommends leaving the combined Other Flatfish and arrowtooth limit as currently scheduled in regulation.

Pacific Whiting

The GMT was made aware of higher than projected catch of darkblotched and widow rockfish in the whiting fishery. The California shore-based fishery began on April 1 and the at-sea whiting fisheries (catcher/processors and motherships) began on May 15. Fishers have reported that large aggregations of whiting have been less common early in the season and the fleet is encountering a high incidental catch rate of widow and darkblotched rockfish. The at-sea fleet has made efforts to avoid bycatch, but continues to encounter widow and darkblotched.

The whiting industry had numerous meetings about bycatch of widow and darkblotched rockfish, but has been unable to agree on a solution due to different views regarding the distribution of bycatch limit species between sectors or whether vessels should voluntarily stop or delay fishing. The at-sea fleets have identified the intent to stop fishing if incidental catch of either widow or darkblotched rockfish exceed specified amounts, which would leave bycatch limit species available for the shore-based sector.

The GMT notes that fishing early in the season often takes the bulk of the bycatch caps in the whiting fishery due to a lack of availability of large aggregations of whiting. Bycatch generally decreases later in the season once whiting become more available.

Pacific whiting catch; at-sea data through June 3, 2007, shoreside data through May 26, 2007.

Sector	Catch by Species				
	Whiting (mt)	Chinook (#)	Canary (mt)	Darkblotched (mt)	Widow (mt)
Shoreside (CA)	2,909	576	0.00	0.96	0.92
Motherships	27,403	90	0.39	6.33	49.20
Catcher/processors	29,262	157	0.07	4.84	38.59
All	59,574	823	0.46	12.13	88.71
Bycatch Limit			4.7	25	220

Proposed Cumulative Limits and RCA Boundaries in the LE Non-Whiting Trawl Fishery

		RCA Boundaries		Cumulative Limits							
AREA	PERIOD	INLINE	OUTLINE	Sable	Longsp	Shortsp	Dover	Other Flat	Petrale	Arrowt'th	Slope Rock
NORTH OF 40 10 Large footrope	1	75	250*	13,000	22,000	7,500	80,000	110,000	50,000	100,000	4,000
	2	See Attached Table		13,000	22,000	7,500	80,000	110,000	30,000	100,000	4,000
	3			15,000	22,000	10,000	60,000	110,000	20,000	combined with other flatfish	1,500
	4			15,000	25,000	10,000	60,000	110,000	20,000		1,500
	5			15,000	25,000	10,000	60,000	110,000	20,000		1,500
	6			13,000	25,000	10,000	80,000	110,000	30,000		1,500
NORTH SFFT	1	75	250*	5,000	3,000	3,000	40,000	90,000	16,000	90,000	4,000
	2	75	250	8,000	3,000	3,000	40,000	90,000	25,000	90,000	4,000
	3	75	150	5,000	3,000	3,000	38,000	70,000	20,000	combined with other flatfish	1,500
	4	75	200	5,000	3,000	3,000	38,000	70,000	20,000		1,500
	5	75	200	5,000	3,000	3,000	38,000	70,000	15,000		1,500
	6	75	200*	5,000	3,000	3,000	25,000	30,000	8,000		1,500
38 - 40 10	1	100	200*	14,000	22,000	7,500	70,000	110,000	50,000	10,000	15,000
	2	100	150	14,000	22,000	7,500	70,000	110,000	30,000	10,000	15,000
	3	100	150	14,000	22,000	7,500	70,000	110,000	25,000	combined with other flatfish	15,000
	4	100	150	14,000	22,000	7,500	80,000	110,000	25,000		10,000
	5	100	150	14,000	22,000	7,500	80,000	110,000	25,000		10,000
	6	100	200*	14,000	22,000	7,500	80,000	110,000	50,000		15,000
SOUTH 38	1	75	200*	14,000	22,000	7,500	70,000	110,000	50,000	10,000	40,000
	2	100	150	14,000	22,000	7,500	70,000	110,000	30,000	10,000	40,000
	3	100	150	14,000	22,000	7,500	70,000	110,000	25,000	combined with other flatfish	40,000
	4	100	150	14,000	22,000	7,500	80,000	110,000	25,000		40,000
	5	100	150	14,000	22,000	7,500	80,000	110,000	25,000		40,000
	6	75	200*	14,000	22,000	7,500	80,000	110,000	50,000		40,000

Proposed RCA Boundaries in Areas north of 40 degrees 10 minutes N latitude

Rockfish Conservation Area (RCA) North of 40 10

	JAN-FEB	MARCH-APRIL	MAY-JUN	JUL-AUG	SEP-OCT	NOV-DEC
North of 48o10.00' N. lat.	75-250*	75-250	shore - 150		shore-200	shore-200*
48o10.00' N. lat. - 46o38.17' N. lat.			75-150		75-200	75-200*
46o38.17' N. lat. - 46o16.00 N. lat.			60-150		60-200	75-200*
46o16.00 N. lat. - 45o03.83 N. lat.			75-150	75-200		75-200*
45o03.83' N. lat. - 43o20.83' N. lat.			75-200			75-200*
43o20.83' N. lat. - 42o40.50' N. lat.			shore-200			shore-200*
42o40.50' N. lat. -40o10.00' N. lat.			75-200			75-200*

Estimated Impacts From Proposed Trawl Inseason Action

		North	South	Total	OY / ALLOCATION
Rebuilding Species	Canary	7.1	1.1	8.1	
	POP	101.9	0.0	101.9	150*
	Darkbltch	212.0	34.7	246.7	290*
	Widow	1.5	0.0	1.6	
	Bocaccio	0.0	25.4	25.4	
	Y'eye	0.4	0.0	0.4	
	Cowcod	0.2	1.4	1.6	
Target Species	Sable	2,099	489	2,589	2,651
	Longsp	698	346	1,044	2220*
	Shortsp	932	225	1,156	1634*
	Dover	7,993	1,780	9,773	16500*
	Arrowtth	3,261	89	3,350	5800*
	Petrale	1,919	391	2,310	2499*
	Otr Flat	1,449	487	1,936	4884*
	Slope Rock	124	155	279	1160*n 626*s

note: a * indicates the value is an OY

PFMC 06/13/07 C:\PFMC_Meetings\2007\June\GMT\GMT STATEMENT ON INSEASON.doc

2007 Projected mortality impacts (mt) of overfished groundfish species under current regulations. Updated with March 2007 inseason adjustments. a/

3/12/07

Fishery	Bocaccio b/	Canary	Cowcod	Dkbl	POP	Widow	Yelloweye
Limited Entry Trawl- Non-whiting	25.4	8.1	1.6	246.7	101.9	1.6	0.4
Limited Entry Trawl- Whiting							
At-sea whiting motherships		4.7		25.0	1.0	220.0	0.0
At-sea whiting cat-proc					2.9		0.0
Shoreside whiting					1.8		0.0
Tribal whiting		0.7		0.0	0.6	6.1	0.0
Tribal							
Midwater Trawl		1.8		0.0	0.0	40.0	0.0
Bottom Trawl		0.8		0.0	3.7	0.0	0.0
Troll		0.5		0.0	0.0		0.0
Fixed gear		0.3		0.0	0.0	0.0	2.3
Limited Entry Fixed Gear		1.1		1.3	0.4		2.9
Sablefish	13.4		0.0			0.0	
Non-Sablefish			0.1			0.5	
Open Access: Directed Groundfish		1.0					
Sablefish DTL	0.0		0.1	0.2	0.1	0.0	0.5
Nearshore (North of 40°10' N. lat.)	0.0	1.7		0.0	0.0	0.1	2.0
Nearshore (South of 40°10' N. lat.)	0.0			0.0	0.0		
Other	10.6			0.0	0.0	0.0	0.1
Open Access: Incidental Groundfish							
CA Halibut	0.1	0.0		0.0	0.0		
CA Gillnet c/	0.5			0.0	0.0	0.0	
CA Sheephead c/				0.0	0.0	0.0	0.0
CPS- wetfish c/	0.3						
CPS- squid d/							
Dungeness crab c/	0.0		0.0	0.0	0.0		
HMS b/		0.0	0.0	0.0			
Pacific Halibut c/	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pink shrimp	0.1	0.1	0.0	0.0	0.0	0.1	0.1
Ridgeback prawn	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Salmon troll	0.2	0.8	0.0	0.0	0.0	0.3	0.2
Sea Cucumber	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Spot Prawn (trap)							
Recreational Groundfish e/							
WA		5.7					6.2
OR						1.4	
CA	98.0	8.3	0.4			8.0	1.7
Research: Includes NMFS trawl shelf-slope surveys, the IPHC halibut survey, and expected impacts from SRPs and LOAs. f/							
	2.0	7.5	0.1	3.8	3.6	0.9	2.0
TOTAL	150.7	43.1	2.3	277.1	116.0	279.0	18.5
2007 OY	218	44.0	4.0	290	150	368	23
Difference	67.3	0.9	1.7	13.0	34.0	89.1	4.5
Percent of OY	69.1%	98.0%	57.5%	95.5%	77.3%	75.8%	80.3%
Key		= either not applicable; trace amount (<0.01 mt); or not reported in available					

a/ All numbers reflect projected annual total catches except that the non-tribal "Limited Entry Trawl- Whiting" numbers are the total bycatch caps for canary, darkblotched, and widow rockfish.

b/ South of 40°10' N. lat.

c/ Mortality estimates are not hard numbers; based on the GMT's best professional judgment.

d/ Bycatch amounts by species unavailable, but bocaccio occurred in 0.1% of all port samples and other rockfish in another 0.1% of all port samples (and squid fisheries usually land their whole catch).

e/ Values in scorecard represent projected impacts. However, harvest guidelines for 2007 are as follows: canary in WA and OR combined = 8.2 mt and in CA = 9.0 mt; yelloweye in WA and OR combined = 6.8 mt and in CA = 2.1 mt.

f/ Research projections only updated for canary rockfish in November 2006. The other species' updates will be updated in April 2007.

GROUNDFISH ADVISORY SUBPANEL (GAP) REPORT ON CONSIDERATION OF INSEASON ADJUSTMENTS

The Groundfish Advisory Subpanel (GAP) reviewed the current quota species monitoring (QSM) report and the latest scorecard presented by the Groundfish Management Team (GMT) and has the following comments and recommendations with regard to inseason management.

The GAP recognizes that based on the QSM report several species are tracking behind at nearly half way through the year. Based on conflicting schedules and a very full agenda, the GAP has not been able to work closely with the GMT on these requests. While the GMT provides their best scientific estimates, the GAP provides practical information and recommendations that directly affect the industry. While it is always helpful when the GAP concurs with the GMT and visa-versa – many times we are in respectful disagreement. Some of the following recommendations have not been formally blessed by the GMT, but we believe they deserve your full consideration.

Limited Entry Fixed Gear South of 34°27' N Lat. (Point Conception)

Shortspine Thornyheads

For shortspine thornyheads, the June 1st QSM estimates that less than 15% of the 421 metric ton harvest guideline has been caught. Therefore, the GAP recommends increasing the current trip limit for period 4 only from 2,000 lbs to 3,000 lbs for the 2 month cumulative limit. Opportunity for short spine thornyhead is available due to the significant portion of the OY currently unharvested. However, due to possible effort shifts from the north, the proposal is for period 4 only and will be evaluated at the September Council meeting with regards to behavioral changes.

Limited-Entry Fixed Gear Between 36° and 40°10' N Lat.

Chilipepper

Chilipepper stocks are healthy and the QSM reports that less then 1% of the 2,000 mt harvest guideline has been caught. Discards of bocaccio and widow rockfish have prevented higher catches of abundant chilipepper. The GAP recommends a modification to the current trip limit which is 2,000 lbs of chilipepper and 300 lbs of shelf/widow rockfish and 300 lbs of bocaccio to 2,000 lbs of chilipepper and a combined widow/bocaccio/shelf rockfish limit of 500 lbs per cumulative period beginning August 1st through the remainder of the year.

Open Access Daily Trip Limit (DTL) South of 36° N Lat. (Conception Area)

The June 1st QSM indicates that while we are nearly half-way through the season, only 13% of the 211 metric ton harvest guideline has been harvested. The GAP recommends increasing the current trip limit (300lbs per day or 1 landing of 700 lbs per week) to 350 lbs per day or 1 landing of 1,050 lbs per week. While the GMT believes there may be effort shifts, the GAP does not anticipate this effort shift because additional commercial fishing opportunities for salmon and other species are available which were not last year.

Non-Whiting Trawl

Chilipepper Rockfish South of 40°10 N Lat.

The GMT is recommending an increase in the chilipepper fishery from 500 lbs to 800 lbs per month. This recommendation does not adequately address the chilipepper discard problem the fleet is having fishing shoreward of the Rockfish Conservation Area (RCA). As noted above, the catch of chilipepper rockfish is at less then 1% of the 2,000 mt harvest guideline. Therefore, the GAP recommends a more meaningful increase to at least 2,500 lbs per month. This equates to real dollars and does not encourage direct targeting on this stock. The chilipepper trip limits are constrained by potential bycatch of bocaccio and canary rockfish. The June 1st QSM indicates that we are at less then 34% of the projected canary catch and less then 22% of the projected bocaccio catch through June.

Lingcod coastwide shoreward of the RCA

Vessels fishing shoreward of the RCA are discarding lingcod and are looking to the Council for relief. An increase in the trip limit for lingcod could help reduce these discards without encouraging a targeted fishery. The GAP questions the bycatch model impacts associated with lingcod within 100-75 fathoms and shallower. This stock is rebuilding at a rate that is causing unnecessary discards. The GAP is recommending an increase to 2,500 lbs per cumulative limit period.

PFMC
06/13/07
5:40 pm

Topic: 43*2o.83N 42*40.50N closure. For Canary catch reduction.

Dear Council chair;

We request that the Humbug Mountain line to be moved north to the 43*04.00 latitude. For those boats that do not or cannot fish outside of 200 fathoms, the present boundary line eliminates the only area to catch shallow water Dover from Florence Oregon to the California border. It also eliminates a Petrale area that was fished with a low discard rate. The observer data in 2005 for this area was not representive of what the fleet was doing in this area. We caught four pounds of Canary rockfish for 10,000 pounds of marketable fish. The other boats in this area did just as good or better.

The area below the 43,04.00 line is wide open and has no Canary hot spots with the 75-fathom boundary line. There is no way, from our experience, that the 1000 pounds of Canaries recorded by the observer program in fifteen tows came from this area. The fishing area above the 43,04 are slots around rocks and therefore have a higher Canary by-catch rate.

The selective flatfish trawl does a good job reducing Canary by-catch. If this net is fished in an area where a high rise net catches 5000 pounds of Canary and it only catches five hundred pounds, it has done its job. The problem is that the fisherman did not do his. Our job is to drag this where the Canary catch rate is low.

Those of us who are doing our job are penalized for the one who is not. Therefore, we request you look at the area where the 1000 pounds of Canaries were caught and close that area only down. We will then all be fishing in low Canary catch areas. We know the Humbug Mountain line is random, because we are the only boat fishing that area.

This larger than necessary area closure will push boats into areas they are not familiar with and thus will increase the number of boats in these other areas and will increase bottom times and discard rates. When you fish area you are not familiar with the Canary catch rate can increase. There are no maps showing fishermen the Canary hot spots and therefore will have to be learned thru experience.

We request therefore that the closure area be as small as possible to accomplish the same goal. This closure would then have no effect on those of us who have to fish inside of 200 fathoms. A smaller closure area would only cause the fishermen who are not doing their job to join the ones who are. We can then supply quality shallow water Dover and Petrale sole economically with minimal Canary by-catch.

Vessel Amak

Alex Ells

Terry Sweeney

AMENDMENT 21: INTERSECTOR ALLOCATION

The Council has decided to pursue a Groundfish Fishery Management Plan (FMP) amendment (Amendment 21) in consideration of formal allocations of groundfish species and species' complexes for sectors of the groundfish fishery. Intersector allocations are needed to support implementation of FMP Amendment 18 bycatch mitigation policies, development of biennial groundfish specifications and management measures, and rationalization of the limited entry trawl fishery (Amendment 20). An environmental impact statement (EIS) will be developed, which will analyze intersector allocation alternatives to support decision-making in this process.

The Council's Groundfish Allocation Committee (GAC) has met five times since January 2005 to discuss intersector allocations and develop a range of preliminary alternatives for the Council's consideration. The Council adopted the recommended range of preliminary intersector alternatives for further analysis and public review at their November 2006 meeting.

The GAC convened their fifth meeting on May 15-17, 2007 to discuss refinements to the preliminary range of intersector allocation alternatives and the data informing those alternatives. One new element in the sector catch histories requested by the Council last November was inclusion of the 2005 landings data by species and sector. These data are provided in Agenda Item E.8.a, Attachment 1 and form the basis for the sector catch percentages under each alternative (Agenda Item E.8.a, Attachment 2). As indicated in the draft summary minutes of the May 2007 GAC meeting (Agenda Item E.8.b, GAC Report), the GAC recommended data refinements including: applying only recreational landings when calculating sector catch percentages under alternatives 2, 3, 6, and 7 (the recreational catch data provided is a combination of historical landings + discard mortalities); and providing total catch data stratified to the sector level and for all the species and species' complexes under consideration under alternatives 1 and 5 (the available commercial discard mortality data did not include estimates for all the species and sectors). The GAC recommended eliminating alternatives 4 and 8; however, the best available 2007 total catch projections of overfished species should be included in the preliminary DEIS (to be presented in November 2007 when the Council is scheduled to select a preferred alternative). The GAC also recommended that, in the intersector allocation process, trawl allocations should be decided first and that allocations to the various sectors of the limited entry trawl fishery should be analyzed and decided within this process rather than in the Trawl Rationalization decision-making process.

The Council task at this meeting is to adopt a final range of intersector allocation alternatives for analysis in the EIS. The Council should consider the GAC materials and recommendations; advisory body advice; and public comments before taking action.

Council Action:

Adopt intersector allocation alternatives for analysis.

Reference Materials:

1. Agenda Item E.8.a, Attachment 1: Tables Summarizing Historical Catch Data by Fishing Sector Relevant to the Intersector Allocation Process.
2. Agenda Item E.8.a, Attachment 2: Preliminary Intersector Allocation Alternatives Recommended by the Council in November 2006.
3. Agenda Item E.8.b, GAC Report: Draft Summary Minutes of the May 15-17, 2007 Groundfish Allocation Committee Meeting.

Agenda Order:

a. Agenda Item Overview — John DeVore
b. Recommendations of the Groundfish Allocation Committee (GAC) — Don Hansen
c. Agency and Tribal Comments
d. Reports and Comments of Advisory Bodies
e. Public Comment
f. **Council Action:** Adopt Alternatives for Analysis

PFMC
05/23/07

Agenda Item E.8.a
Attachment 1
June 2007

Tables Summarizing Historical Catch Data by Fishing Sector Relevant to the Intersector Allocation Process

Index of Attached Tables:

Table 1. Landings or Deliveries of PFMC-managed Groundfish by West Coast Fishery Sectors (mt): 1995 to 2005.

Table 2a. Share (%) of Non-Treaty Landings or Deliveries of PFMC-managed Groundfish by West Coast Fishery Sectors: 1995 to 2005.

Table 2b. Limited Entry Trawl Sector Share (%) of Non-Treaty Landings or Deliveries of PFMC-managed Groundfish: 1995 to 2005.

Table 2c. Limited Entry Fixed Gear Sector Share (%) of Non-Treaty Landings or Deliveries of PFMC-managed Groundfish: 1995 to 2005.

Table 2d. Open Access Sector Share (%) of Non-Treaty Landings or Deliveries of PFMC-managed Groundfish: 1995 to 2005.

Table 2e. Recreational Sector Share (%) of Non-Treaty Landings or Deliveries of PFMC-managed Groundfish: 1995 to 2005.

Table 2f. Treaty Sector Landings or Deliveries as a Share (%) of Associated OYs: 1995 To 2005.

Table 3. Maximum, Minimum and Average Shares (%) of Non-Treaty Landings or Deliveries of PFMC-managed Groundfish by West Coast Fishery Sectors: 1995 to 2005.

Table 4. Total Mortality (Ocean and Estuary) of PFMC-managed Groundfish by Recreational Sector by Subregion (mt): 1995 to 2005.

Notes.

Table 1. Landings or Deliveries of PFMC-managed Groundfish by Westcoast Fishery Sectors (mt): 1995 to 2005

1995

Stock or Complex	At-Sea Catcher-Processors	At Sea Motherships	Shoreside Whiting LE Trawl	Shoreside Non-whiting LE Trawl	LE Trawl Total	Shoreside LE Line Gear	Shoreside LE Pot Gear	Shoreside Directed OA	Shoreside Incidental OA	Recreational	Non-LE Trawl Totals	Non-Treaty Dir. Total	Shoreside	At-Sea	Treaty Totals
	Non-Treaty Sectors: LE Trawl Sectors					Non-Treaty Sectors: Non-LE Trawl Sectors							Treaty Sectors		
Lingcod - coastwide	0.0	-	0.1	1,069.7	1,069.9	42.1	0.3	278.1	69.1	409.2	798.8	1,799.6	-	-	-
N. of 42° (OR & WA)	0.0	-	0.1	775.0	775.2	8.9	0.3	79.4	59.0	140.2	287.8	1,003.9	-	-	-
S. of 42° (CA)	-	-	-	294.7	294.7	33.2	0.0	198.7	10.1	269.0	511.0	795.6	-	-	-
Pacific Cod	-	0.0	0.1	490.7	490.8	1.0	0.0	1.0	8.7	0.3	11.0	493.1	1.3	-	1.3
Pacific Whiting (Coastwide)	61,138.3	33,010.4	74,846.3	70.7	169,065.7	0.9	-	0.2	0.0	0.4	1.5	169,067.2	-	-	-
Sablefish (Coastwide)	4.4	2.8	42.8	3,705.4	3,755.3	1,911.5	776.4	587.7	59.2	2.8	3,337.6	7,033.8	769.3	-	769.3
N. of 36° (Monterey north)	4.4	2.8	42.8	3,499.0	3,549.0	1,867.5	776.4	513.0	58.5	2.8	3,218.2	6,708.7	769.3	-	769.3
S. of 36° (Conception area)	-	-	-	206.3	206.3	44.0	-	74.7	0.7	-	119.4	325.1	-	-	-
PACIFIC OCEAN PERCH	13.4	28.1	29.9	824.7	896.2	3.9	0.2	1.8	4.9	0.0	10.8	902.1	-	-	-
Shortbelly Rockfish	4.8	4.2	0.0	29.9	38.9	0.0	-	0.2	-	-	0.2	39.1	-	-	-
WIDOW ROCKFISH	87.0	95.3	236.1	6,165.3	6,583.6	8.2	0.0	83.5	20.6	6.1	118.4	6,681.4	-	-	-
CANARY ROCKFISH	0.2	0.2	0.5	675.4	676.3	59.5	-	124.3	12.6	109.3	305.7	969.4	0.0	-	0.0
Chilipepper Rockfish	-	-	-	1,474.8	1,474.8	15.7	-	382.1	9.0	10.9	417.7	1,883.6	-	-	-
BOCACCIO	-	-	-	326.2	326.2	4.3	-	345.7	3.3	33.2	386.4	709.3	-	-	-
Splitnose Rockfish	-	-	-	274.5	274.5	1.5	-	22.3	0.3	-	24.1	298.4	-	-	-
Yellowtail Rockfish	81.4	505.3	294.2	4,006.9	4,887.8	14.6	-	59.3	221.6	29.8	325.3	4,991.5	0.2	-	0.2
Shortspine Thornyhead - coastwide	5.6	0.2	0.5	1,855.0	1,861.3	32.3	0.1	15.7	2.9	-	51.0	1,909.4	7.1	-	7.1
N. of 34°27'	5.6	0.2	0.5	1,212.6	1,218.8	19.0	0.1	5.3	2.7	-	27.1	1,243.2	7.1	-	7.1
S. of 34°27'	-	-	-	642.4	642.4	13.3	-	10.4	0.2	-	23.9	666.2	-	-	-
Longspine Thornyhead - coastwide	0.0	0.0	2.8	5,311.4	5,314.2	25.9	0.0	27.0	2.4	-	55.3	5,367.1	0.6	-	0.6
N. of 34°27'	0.0	0.0	2.8	5,311.4	5,314.2	25.9	0.0	27.0	2.4	-	55.3	5,367.1	0.6	-	0.6
S. of 34°27'	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-
Other thornyheads	-	-	-	4.7	4.7	20.2	-	76.9	0.2	-	97.3	101.9	-	-	-
COWCOD	-	-	-	-	-	3.1	-	13.3	0.5	1.7	18.7	18.2	-	-	-
DARKBLOTCHED	48.9	3.3	0.5	709.9	762.7	2.0	-	2.2	2.6	-	6.8	766.9	-	-	-
YELLOWEYE	-	0.0	0.0	135.1	135.1	26.5	-	40.9	0.3	32.8	100.5	235.3	-	-	-
Black Rockfish - coastwide	-	-	0.1	9.2	9.3	34.0	-	224.3	1.2	729.8	989.2	997.3	-	-	-
Black Rockfish (WA)	-	-	0.1	3.2	3.3	-	-	-	-	212.9	212.9	216.2	-	-	-
Black Rockfish (OR-CA)	-	-	0.0	6.0	6.0	34.0	-	224.3	1.2	516.9	776.4	781.1	-	-	-
Minor Rockfish North	59.2	7.9	2.8	1,673.0	1,743.0	546.5	2.2	229.8	139.1	40.7	958.2	2,562.2	52.0	0.0	52.0
Nearshore Species	-	0.1	-	0.8	0.9	12.6	-	42.7	0.2	34.5	90.0	90.7	-	-	-
Shelf Species	30.4	4.0	2.5	963.4	1,000.3	396.9	2.1	181.1	130.8	6.1	717.0	1,586.5	52.0	0.0	52.0
BOCACCIO: N. of Monterrey	0.4	0.1	0.0	183.3	183.8	4.3	-	14.9	4.7	1.7	25.5	204.7	-	-	-
Chilipepper Rockfish: Eureka	28.4	-	0.1	99.5	127.9	10.9	-	3.8	0.2	0.1	15.0	142.7	-	-	-
Redstripe Rockfish	1.5	3.4	0.1	252.2	257.2	0.0	-	0.0	0.0	0.6	0.6	257.8	-	-	-
Silvergrey Rockfish	0.0	0.0	0.0	92.1	92.1	0.0	-	2.2	0.0	0.1	2.3	94.4	-	-	-
Other Northern Shelf Rockfish	0.1	0.5	2.3	336.4	339.2	381.7	2.1	160.1	125.9	3.7	673.5	886.9	52.0	-	52.0
Slope Species	28.8	3.8	0.4	708.8	741.8	136.9	0.1	6.1	8.2	0.0	151.3	884.9	0.0	0.0	0.0
Bank Rockfish	-	-	0.0	23.1	23.1	-	-	1.0	0.0	-	1.0	24.1	-	-	-
Sharpchin Rockfish, north	0.0	0.0	0.3	224.2	224.5	0.9	-	0.7	0.0	-	1.6	226.1	-	-	-
Splitnose Rockfish: N. of Monterrey	24.6	0.1	0.1	111.2	136.0	0.8	-	0.6	0.2	-	1.6	137.4	-	-	-
Yellowmouth Rockfish	0.3	0.0	0.0	106.6	106.9	1.8	-	2.7	0.0	-	4.5	111.4	-	-	-
Other Northern Slope Rockfish	3.9	3.6	0.0	243.7	251.3	133.4	0.1	1.1	7.9	0.0	142.5	385.9	-	-	-
Minor Rockfish South	0.0	0.0	0.0	701.0	701.0	164.2	0.2	1,053.1	27.6	729.3	1,974.3	2,647.8	0.0	0.0	0.0
Nearshore Species	-	-	-	9.0	9.0	18.1	0.0	286.0	4.1	339.4	647.6	652.4	-	-	-
Shelf Species	0.0	0.0	0.0	186.3	186.3	83.4	0.0	537.5	21.6	386.9	1,029.5	1,194.1	0.0	0.0	0.0
Redstripe Rockfish	-	-	-	0.2	0.2	-	-	-	-	-	-	0.2	-	-	-
Yellowtail Rockfish	-	-	-	42.8	42.8	36.4	-	108.9	1.0	33.3	179.6	221.5	-	-	-
Other Southern Shelf Rockfish	-	-	-	143.2	143.2	47.0	0.0	428.6	20.6	353.6	849.9	972.4	-	-	-
Slope Species	0.0	0.0	0.0	505.8	505.8	62.7	0.1	229.6	1.8	3.0	297.3	801.2	0.0	0.0	0.0
Bank Rockfish	-	-	-	309.3	309.3	4.0	-	69.3	0.5	0.2	74.0	382.8	-	-	-
Blackgill Rockfish	-	-	-	127.5	127.5	54.2	0.1	148.2	0.6	2.8	205.8	332.7	-	-	-
Sharpchin Rockfish	-	-	-	5.1	5.1	0.1	-	0.6	-	-	0.7	5.8	-	-	-
Yellowmouth Rockfish	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-
Other Southern Slope Rockfish	-	-	-	63.9	63.9	4.4	0.0	11.5	0.7	0.1	16.8	79.9	-	-	-
California scorpionfish	-	-	-	-	-	3.2	0.0	13.7	14.9	101.8	133.6	118.7	-	-	-
Cabezon (off CA only)	-	-	-	-	-	1.6	-	87.2	1.8	68.8	159.5	157.7	-	-	-
Dover Sole	0.0	0.0	0.4	10,376.9	10,377.3	3.2	0.2	2.2	84.9	-	90.5	10,382.9	0.8	-	0.8
English Sole	0.0	0.0	0.0	1,106.8	1,106.8	0.0	-	1.9	13.2	-	15.1	1,108.7	-	-	-
Petrale Sole (coastwide)	0.0	0.0	0.0	1,588.5	1,620.7	0.9	-	6.9	15.3	0.7	23.8	1,629.3	-	-	-
N of 40°10'	0.0	0.0	0.0	1,247.7	1,278.7	0.0	-	-	8.4	0.1	8.5	1,278.8	-	-	-
S of 40°10'	-	-	-	340.8	342.0	0.9	-	6.9	6.9	0.7	15.4	350.5	-	-	-
Arrowtooth Flounder	0.2	1.5	0.2	2,304.8	2,306.7	1.5	0.1	0.7	20.0	-	22.3	2,309.0	0.1	-	0.1
Starry Flounder	-	-	-	49.8	49.8	0.0	-	0.2	8.4	3.8	12.4	53.8	-	-	-
Other Flatfish	0.4	0.1	0.0	2,363.9	2,364.4	0.5	-	6.1	49.8	16.8	73.2	2,387.8	-	-	-
Kelp Greenling	-	-	-	1.5	1.5	0.6	-	3.3	0.0	37.0	40.9	42.4	-	-	-
Spiny Dogfish	145.4	40.7	0.1	355.3	541.6	7.3	0.0	0.8	0.2	19.8	28.1	569.5	-	-	-
Other Fish	-	0.0	0.1	848.5	848.6	63.1	0.0	76.6	16.1	222.9	378.7	1,211.2	-	-	-
SECTOR TOTALS	61,589	33,700	75,458	48,510	219,289	3,000	780	3,769	810	2,608	10,967	229,445.5	832	0	832

Table 1. Landings or Deliveries of PFMC-managed Groundfish by Westcoast Fishery Sectors (mt): 1995 to 2005

1996

Stock or Complex	Non-Treaty Sectors: LE Trawl Sectors: At-Sea Catcher-Processors	At Sea Motherships	Shoreside Whiting LE Trawl	Shoreside Non-whiting LE Trawl	LE Trawl Total	Non-Treaty Sectors: Non-LE Trawl Sectors: Shoreside LE Line Gear	Shoreside LE Pot Gear	Shoreside Directed OA	Shoreside Incidental OA	Recreational	Non-LE Trawl Totals	Non-Treaty Dir. Total	Treaty Sectors: Shoreside	At-Sea	Treaty Totals
Lingcod - coastwide	0.1	0.0	0.7	1,204.1	1,204.9	54.0	0.1	238.8	64.4	510.2	867.5	2,008.0	1.2	-	1.2
N. of 42° (OR & WA)	0.1	0.0	0.7	911.0	911.8	10.2	0.1	110.9	48.2	147.3	316.8	1,180.3	1.2	-	1.2
S. of 42° (CA)	-	-	0.0	293.1	293.1	43.8	-	127.9	16.2	362.9	550.7	827.7	-	-	-
Pacific Cod	-	0.0	0.4	433.0	433.5	1.4	0.0	0.5	8.6	0.6	11.1	436.0	0.7	0.1	0.8
Pacific Whiting (Coastwide)	65,877.9	44,658.1	82,472.9	65.1	193,074.0	0.3	-	45.1	1.2	1.3	47.9	193,120.7	-	15,013.3	15,013.3
Sablefish (Coastwide)	6.7	0.1	37.0	4,132.7	4,176.5	2,072.2	537.1	640.8	81.9	2.8	3,334.8	7,429.4	853.5	0.0	853.5
N. of 36° (Monterey north)	6.7	0.1	37.0	3,918.6	3,962.4	1,986.4	537.1	599.2	81.6	2.8	3,207.1	7,087.9	853.5	0.0	853.5
S. of 36° (Conception area)	-	-	-	214.1	214.1	85.8	-	41.6	0.3	-	127.7	341.5	-	-	-
PACIFIC OCEAN PERCH	3.9	2.1	32.8	819.7	858.5	9.7	0.2	0.9	6.0	-	16.8	869.3	-	0.0	0.0
Shortbelly Rockfish	6.2	-	0.0	35.9	42.1	0.0	-	0.0	0.4	0.1	0.6	42.2	-	-	-
WIDOW ROCKFISH	119.9	117.3	571.5	5,403.2	6,211.9	7.8	0.0	47.1	13.8	24.6	93.3	6,291.4	-	11.5	11.5
CANARY ROCKFISH	0.1	1.4	1.2	966.6	969.3	67.8	0.0	156.3	25.7	86.8	336.6	1,280.3	0.1	0.0	0.1
Chilipepper Rockfish	-	-	-	1,395.6	1,395.6	12.4	-	277.7	9.5	32.8	332.4	1,718.6	-	-	-
BOCACCIO	-	-	-	275.7	275.7	6.7	-	149.0	1.8	93.0	250.5	524.4	-	-	-
Splitnose Rockfish	-	-	-	401.7	401.7	0.9	-	4.5	0.1	0.1	5.6	407.2	-	-	-
Yellowtail Rockfish	237.4	350.4	482.6	4,157.9	5,228.3	32.6	0.1	71.0	310.9	31.7	446.3	5,363.6	0.6	92.6	93.2
Shortspine Thornyhead - coastwide	2.0	-	0.1	1,512.0	1,514.1	78.1	0.2	14.4	1.3	0.0	93.9	1,606.7	7.3	-	7.3
N. of 34°27'	2.0	-	0.1	1,081.6	1,083.6	18.8	0.2	2.4	1.1	0.0	22.5	1,105.0	7.3	-	7.3
S. of 34°27'	-	-	-	430.4	430.4	59.3	-	12.0	0.1	-	71.4	501.8	-	-	-
Longspine Thornyhead - coastwide	-	-	0.0	4,751.1	4,751.1	96.1	0.0	9.5	0.9	-	106.5	4,856.7	0.2	-	0.2
N. of 34°27'	-	-	0.0	4,751.1	4,751.1	79.1	0.0	9.2	0.9	-	89.2	4,839.4	0.2	-	0.2
S. of 34°27'	-	-	-	-	-	17.0	-	0.3	-	-	17.3	17.3	-	-	-
Other thornyheads	-	-	-	44.0	44.0	49.5	0.0	17.0	0.1	-	66.5	110.4	-	-	-
COWCOD	-	-	-	0.0	0.0	1.9	-	13.9	0.0	5.6	21.5	21.5	-	-	-
DARKBLOTCHED	6.2	0.7	5.9	721.6	734.3	1.6	-	0.6	2.5	0.0	4.7	736.5	-	-	-
YELLOWEYE	0.5	-	0.1	100.6	101.2	35.6	-	35.6	0.7	30.2	102.1	202.5	-	-	-
Black Rockfish - coastwide	-	-	0.0	17.5	17.5	22.8	-	218.7	1.1	777.7	1,020.4	1,036.8	-	-	-
Black Rockfish (WA)	-	-	-	-	-	-	-	-	-	234.9	234.9	234.9	-	-	-
Black Rockfish (OR-CA)	-	-	0.0	17.5	17.5	22.8	-	218.7	1.1	542.8	785.5	801.9	-	-	-
Minor Rockfish North	14.0	16.7	21.5	1,710.9	1,763.2	427.9	2.6	202.0	221.6	52.7	906.8	2,448.3	36.1	0.0	36.1
Nearshore Species	-	-	0.0	0.0	0.0	12.7	-	42.3	0.1	47.6	102.7	102.6	-	-	-
Shelf Species	0.4	1.6	18.3	1,072.6	1,092.9	339.8	2.6	149.4	211.6	4.4	707.8	1,589.2	36.1	0.0	36.1
BOCACCIO: N. of Monterrey	0.1	0.1	0.7	128.1	128.9	7.6	-	20.0	2.5	0.4	30.5	156.9	-	0.0	0.0
Chilipepper Rockfish: Eureka	0.0	-	0.0	102.9	102.9	4.2	-	9.9	0.5	-	14.6	116.9	-	-	-
Redstripe Rockfish	0.2	0.2	11.6	206.9	219.0	0.0	-	0.6	0.0	0.1	0.8	219.7	-	-	-
Silvergrey Rockfish	0.0	-	0.7	235.7	236.4	0.2	-	0.2	2.1	0.0	2.5	236.8	-	-	-
Other Northern Shelf Rockfish	0.1	1.3	5.3	399.1	405.7	327.9	2.6	118.7	206.4	3.9	659.4	858.8	36.1	-	36.1
Slope Species	13.6	15.1	3.2	638.3	670.3	75.4	0.0	10.3	9.9	0.6	96.2	756.6	0.0	0.0	0.0
Bank Rockfish	-	-	0.0	24.2	24.2	0.2	-	0.5	0.0	-	0.8	25.0	-	-	-
Sharpchin Rockfish, north	-	0.0	1.7	204.6	206.2	-	-	0.0	0.5	-	0.5	206.2	-	-	-
Splitnose Rockfish: N. of Monterrey	5.4	14.8	0.2	70.4	90.7	-	-	-	0.1	-	0.1	90.7	-	-	-
Yellowmouth Rockfish	0.0	0.1	0.5	111.0	111.6	0.8	-	0.1	0.1	-	1.0	112.5	-	0.0	0.0
Other Northern Slope Rockfish	8.2	0.3	0.9	228.1	237.5	74.4	-	9.6	9.2	0.6	93.8	322.1	0.0	0.0	0.0
Minor Rockfish South	0.0	0.0	0.0	951.4	951.4	237.0	0.6	834.2	27.1	1,023.9	2,122.7	3,047.1	0.0	0.0	0.0
Nearshore Species	-	-	-	18.6	18.6	36.1	-	285.5	4.6	489.9	816.0	830.0	-	-	-
Shelf Species	0.0	0.0	0.0	208.6	208.6	85.6	0.3	406.3	19.7	512.0	1,023.8	1,212.7	0.0	0.0	0.0
Redstripe Rockfish	-	-	-	-	-	-	-	-	-	0.1	0.1	0.1	-	-	-
Yellowtail Rockfish	-	-	-	71.9	71.9	8.5	-	36.4	1.9	96.1	142.9	212.9	-	-	-
Other Southern Shelf Rockfish	-	-	-	136.7	136.7	77.1	0.3	369.8	17.8	415.8	880.8	999.8	-	-	-
Slope Species	0.0	0.0	0.0	724.3	724.3	115.3	0.3	142.5	2.8	22.0	282.9	1,004.4	0.0	0.0	0.0
Bank Rockfish	-	-	-	498.6	498.6	0.9	-	32.8	0.6	21.8	56.1	554.1	-	-	-
Blackgill Rockfish	-	-	-	151.5	151.5	112.4	0.3	98.2	0.1	-	211.0	362.3	-	-	-
Sharpchin Rockfish	-	-	-	20.2	20.2	0.0	-	0.1	0.0	-	0.1	20.4	-	-	-
Yellowmouth Rockfish	-	-	-	0.0	0.0	-	-	0.0	-	-	0.0	0.0	-	-	-
Other Southern Slope Rockfish	-	-	-	54.0	54.0	2.0	-	11.4	2.1	0.2	15.7	67.6	-	-	-
California scorpionfish	-	-	-	-	-	3.7	-	12.1	9.5	166.6	191.9	182.4	-	-	-
Cabezon (off CA only)	-	-	-	0.0	0.0	0.6	-	109.2	3.5	84.9	198.2	194.7	-	-	-
Dover Sole	0.1	-	1.4	12,160.6	12,162.1	4.1	0.4	4.1	96.8	-	105.5	12,170.8	1.1	-	1.1
English Sole	0.0	0.0	0.5	1,129.1	1,129.6	0.0	-	0.9	31.0	0.0	31.9	1,130.6	0.0	-	0.0
Petrale Sole (coastwide)	-	-	0.6	1,803.6	1,795.8	0.3	0.0	2.1	24.7	0.6	27.7	1,798.8	0.0	-	0.0
N of 40°10'	-	-	0.6	1,357.0	1,356.9	0.1	0.0	0.1	20.1	0.0	20.4	1,357.1	0.0	-	0.0
S of 40°10'	-	-	-	446.6	438.9	0.2	-	2.0	4.6	0.6	7.4	441.7	-	-	-
Arrowtooth Flounder	0.2	0.4	1.1	2,172.9	2,174.6	0.2	0.0	0.2	5.7	-	6.1	2,175.1	0.0	0.1	0.1
Starry Flounder	-	-	-	27.9	27.9	0.0	-	0.2	14.7	3.1	18.0	31.2	0.0	-	0.0
Other Flatfish	0.2	0.0	1.5	1,868.4	1,870.1	0.5	0.0	5.7	84.4	53.7	144.4	1,930.1	0.0	0.0	0.0
Kelp Greenling	-	-	-	0.0	0.0	0.4	-	3.8	0.1	54.1	58.5	58.4	-	-	-
Spiny Dogfish	46.7	104.1	3.8	195.2	349.8	22.2	-	29.2	0.3	21.7	73.5	423.0	2.5	195.5	198.0
Other Fish	-	0.0	0.0	746.7	746.7	577.1	0.0	297.7	22.5	82.9	980.3	1,704.5	-	0.0	0.0
SECTOR TOTALS	66,322	45,251	83,636	49,205	244,406	3,825	541	3,443	1,073	3,142	12,024	255,356.8	903	15,313	16,217

Table 1. Landings or Deliveries of PFMC-managed Groundfish by Westcoast Fishery Sectors (mt): 1995 to 2005

1997

	Non-Treaty Sectors												Treaty Sectors		
	LE Trawl Sectors					Non-LE Trawl Sectors									
Stock or Complex	At-Sea Catcher-Processors	At Sea Motherships	Shoreside Whiting LE Trawl	Shoreside Non-whiting LE Trawl	LE Trawl Total	Shoreside LE Line Gear	Shoreside LE Pot Gear	Shoreside Directed OA	Shoreside Incidental OA	Recreational	Non-LE Trawl Totals	Non-Treaty Dir. Total	Shoreside	At-Sea	Treaty Totals
Lingcod - coastwide	0.1	0.1	0.5	1,170.2	1,170.9	65.2	0.4	278.8	59.9	430.8	835.1	1,946.1	0.7	-	0.7
N. of 42° (OR & WA)	0.1	0.1	0.5	856.0	856.6	28.0	0.3	131.8	47.4	165.4	373.0	1,182.1	0.7	-	0.7
S. of 42° (CA)	-	-	0.0	314.3	314.3	37.3	0.1	147.0	12.4	265.4	462.1	763.9	-	-	-
Pacific Cod	-	0.0	0.0	589.4	589.4	0.6	-	1.3	3.7	0.3	5.9	591.6	1.0	0.0	1.0
Pacific Whiting (Coastwide)	70,809.6	48,911.7	87,287.5	115.1	207,123.8	0.8	0.0	0.0	6.3	0.7	7.9	207,125.4	-	24,827.6	24,827.6
Sablefish (Coastwide)	0.6	0.2	42.0	3,703.4	3,746.3	2,423.0	433.4	503.6	46.3	3.5	3,409.7	7,109.7	805.2	0.3	805.5
N. of 36° (Monterey north)	0.6	0.2	42.0	3,549.9	3,592.7	2,320.2	433.1	498.4	45.8	3.5	3,301.1	6,848.0	805.2	0.3	805.5
S. of 36° (Conception area)	-	-	-	153.5	153.5	102.7	0.2	5.2	0.5	-	108.6	261.7	-	-	-
PACIFIC OCEAN PERCH	2.0	1.6	6.4	663.0	672.9	1.6	0.4	1.7	4.0	-	7.7	676.6	-	6.5	6.5
Shortbelly Rockfish	0.5	0.3	0.0	78.2	79.0	-	-	-	0.1	0.0	0.1	79.1	-	-	-
WIDOW ROCKFISH	72.6	122.0	163.3	6,213.3	6,571.2	8.8	-	61.1	10.5	42.9	123.3	6,684.0	-	9.6	9.6
CANARY ROCKFISH	1.0	0.4	1.0	793.5	795.9	79.3	0.0	214.6	22.7	145.9	462.5	1,235.7	0.0	1.7	1.7
Chilipepper Rockfish	-	-	-	1,535.2	1,535.2	13.6	-	394.2	4.7	73.6	486.1	2,016.5	-	-	-
BOCACCIO	-	-	-	220.5	220.5	11.8	-	69.1	1.0	156.6	238.5	457.9	-	-	-
Splitnose Rockfish	-	-	-	429.4	429.4	0.8	-	6.7	0.4	-	7.9	436.9	-	-	-
Yellowtail Rockfish	120.1	146.5	226.5	1,338.7	1,831.8	36.4	-	99.8	157.6	41.1	334.9	2,009.1	1.1	121.3	122.4
Shortspine Thornyhead - coastwide	0.4	0.0	0.2	1,398.4	1,399.0	52.2	0.2	2.8	2.8	-	58.0	1,454.2	7.7	-	7.7
N. of 34°27'	0.4	0.0	0.2	996.3	996.9	21.5	0.2	1.2	2.7	-	25.6	1,019.8	7.7	-	7.7
S. of 34°27'	-	-	-	402.1	402.1	30.7	-	1.6	0.1	-	32.4	434.4	-	-	-
Longspine Thornyhead - coastwide	-	-	0.4	3,851.3	3,851.7	69.6	0.0	12.6	3.3	-	85.5	3,933.9	0.1	-	0.1
N. of 34°27'	-	-	0.4	3,851.3	3,851.7	56.3	0.0	12.6	3.3	-	72.2	3,920.6	0.1	-	0.1
S. of 34°27'	-	-	-	-	-	13.3	-	-	0.0	-	13.3	13.3	-	-	-
Other thornyheads	-	-	-	33.6	33.6	75.2	-	3.9	1.0	-	80.1	112.7	-	-	-
COWCOD	-	-	-	-	-	1.3	-	4.0	0.2	2.5	7.9	7.8	-	-	-
DARKBLOTCHED	1.8	0.9	0.5	810.4	813.5	0.5	-	0.2	5.6	-	6.3	814.2	-	-	-
YELLOWEYE	0.0	-	0.1	83.4	83.5	47.5	-	52.4	0.6	35.8	136.2	219.1	-	-	-
Black Rockfish - coastwide	-	-	0.2	23.8	24.0	42.8	-	237.0	6.6	629.1	915.4	932.8	-	-	-
Black Rockfish (WA)	-	-	-	1.0	1.0	-	-	-	-	180.4	180.4	181.3	-	-	-
Black Rockfish (OR-CA)	-	-	0.2	22.8	23.0	42.8	-	237.0	6.6	448.7	735.0	751.5	-	-	-
Minor Rockfish North	26.9	3.9	23.1	1,529.5	1,583.4	283.7	3.0	209.4	47.4	91.1	634.6	2,170.7	29.5	0.7	30.2
Nearshore Species	-	-	-	0.3	0.3	12.3	-	60.6	0.0	84.5	157.5	157.7	-	-	-
Shelf Species	0.2	1.2	22.3	863.3	887.0	256.3	2.0	146.8	40.3	6.6	452.0	1,298.8	29.5	0.7	30.2
BOCACCIO: N. of Monterrey	0.1	0.2	0.5	158.0	158.7	2.7	-	6.0	0.5	0.4	9.7	167.9	-	0.3	0.3
Chilipepper Rockfish: Eureka	-	0.0	0.0	58.9	59.0	3.0	-	15.4	0.7	0.1	19.1	77.3	-	-	-
Redstripe Rockfish	0.0	1.0	0.2	138.2	139.4	0.0	-	0.0	0.4	0.4	0.8	139.8	-	0.3	0.3
Silvergrey Rockfish	0.1	0.0	1.1	83.3	84.4	1.3	-	2.8	0.1	0.0	4.2	88.6	-	-	-
Other Northern Shelf Rockfish	0.0	0.0	20.5	424.9	445.5	249.2	2.0	122.6	38.7	5.7	418.3	825.1	29.5	-	29.5
Slope Species	26.7	2.7	0.8	665.9	696.1	15.1	1.0	2.0	7.1	0.0	25.1	714.2	0.0	0.0	0.0
Bank Rockfish	-	-	0.0	13.5	13.5	-	-	0.2	0.1	-	0.3	13.7	-	-	-
Sharpchin Rockfish, north	0.0	0.0	0.1	218.1	218.2	0.0	-	0.0	0.4	-	0.4	218.2	-	-	-
Splitnose Rockfish: N. of Monterrey	15.1	2.0	0.1	131.7	148.9	0.0	-	0.0	0.8	-	0.8	148.9	-	-	-
Yellowmouth Rockfish	0.0	-	0.0	84.1	84.2	-	-	-	0.5	-	0.5	84.2	-	0.0	0.0
Other Northern Slope Rockfish	11.5	0.8	0.6	218.5	231.4	15.1	1.0	1.8	5.3	0.0	23.1	249.2	-	-	-
Minor Rockfish South	0.0	0.0	0.0	916.6	916.6	248.8	1.9	708.5	30.7	1,196.2	2,186.2	3,072.0	0.0	0.0	0.0
Nearshore Species	-	-	-	13.2	13.2	54.0	0.0	257.5	4.8	544.2	860.5	868.9	-	-	-
Shelf Species	0.0	0.0	0.0	261.9	261.9	125.0	0.0	344.8	24.2	639.8	1,133.7	1,371.4	0.0	0.0	0.0
Redstripe Rockfish	-	-	-	3.0	3.0	-	-	-	-	0.3	0.3	3.3	-	-	-
Yellowtail Rockfish	-	-	-	175.7	175.7	39.6	-	111.1	0.5	401.8	552.9	728.1	-	-	-
Other Southern Shelf Rockfish	-	-	-	83.3	83.3	85.4	0.0	233.7	23.7	237.7	580.5	640.1	-	-	-
Slope Species	0.0	0.0	0.0	641.4	641.4	69.9	1.9	106.3	1.7	12.2	192.0	831.7	0.0	0.0	0.0
Bank Rockfish	-	-	-	370.6	370.6	0.4	-	30.6	0.8	11.7	43.6	413.4	-	-	-
Blackgill Rockfish	-	-	-	130.0	130.0	69.0	1.9	68.1	0.7	-	139.7	269.0	-	-	-
Sharpchin Rockfish	-	-	-	99.8	99.8	-	-	0.1	0.0	-	0.1	99.9	-	-	-
Yellowmouth Rockfish	-	-	-	0.6	0.6	-	-	-	-	-	-	0.6	-	-	-
Other Southern Slope Rockfish	-	-	-	40.4	40.4	0.5	-	7.5	0.2	0.5	8.6	48.8	-	-	-
California scorpionfish	-	-	-	5.8	5.8	0.7	-	15.9	10.8	103.9	131.1	126.2	-	-	-
Cabezon (off CA only)	-	-	-	-	-	9.2	-	120.9	2.0	60.0	192.1	190.1	-	-	-
Dover Sole	-	-	1.6	10,114.5	10,116.1	2.0	0.6	0.5	72.4	-	75.6	10,119.2	0.6	0.0	0.6
English Sole	-	0.0	0.6	1,428.7	1,429.3	0.0	-	0.2	65.6	-	65.9	1,429.6	0.1	-	0.1
Petrale Sole (coastwide)	-	-	0.6	1,862.9	1,879.6	1.6	0.0	0.6	62.3	0.3	64.8	1,882.1	0.0	-	0.0
N of 40°10'	-	-	0.6	1,389.6	1,404.9	0.2	0.0	0.0	56.3	0.1	56.6	1,405.2	0.0	-	0.0
S of 40°10'	-	-	-	473.3	474.7	1.4	-	0.6	6.0	0.2	8.2	476.9	-	-	-
Arrowtooth Flounder	0.1	0.1	0.9	2,325.1	2,326.1	0.3	0.2	0.0	4.3	-	4.8	2,326.6	-	0.2	0.2
Starry Flounder	-	-	-	58.9	58.9	0.0	-	0.3	28.9	3.3	32.5	62.6	0.0	-	0.0
Other Flatfish	0.0	0.0	3.3	1,815.7	1,819.0	0.9	-	7.1	152.9	38.6	199.5	1,865.6	0.0	-	0.0
Kelp Greenling	-	-	-	-	-	2.4	-	19.2	0.1	36.2	57.9	57.8	-	-	-
Spiny Dogfish	139.2	65.3	3.3	335.6	543.4	2.5	-	82.4	0.7	5.1	90.8	633.5	-	111.5	111.5
Other Fish	0.1	0.1	0.1	566.0	566.3	296.5	-	147.0	18.6	65.2	527.3	1,075.0	-	-	-
SECTOR TOTALS	71,175	49,253	87,762	44,010	252,216	3,780	440	3,256	834	3,163	11,472	262,854.4	846	25,079	25,925

Table 1. Landings or Deliveries of PFMC-managed Groundfish by Westcoast Fishery Sectors (mt): 1995 to 2005

1998

	Non-Treaty Sectors												Treaty Sectors		
	LE Trawl Sectors					Non-LE Trawl Sectors									
Stock or Complex	At-Sea Catcher-Processors	At Sea Motherships	Shoreside Whiting LE Trawl	Shoreside Non-whiting LE Trawl	LE Trawl Total	Shoreside LE Line Gear	Shoreside LE Pot Gear	Shoreside Directed OA	Shoreside Incidental OA	Recreational	Non-LE Trawl Totals	Non-Treaty Dir. Total	Shoreside	At-Sea	Treaty Totals
Lingcod - coastwide	-	0.1	0.4	217.3	217.8	24.8	0.5	88.8	20.3	354.2	488.7	686.1	2.4	-	2.4
N. of 42° (OR & WA)	-	0.1	0.1	143.2	143.4	13.8	0.2	32.2	13.0	100.7	159.9	290.2	2.4	-	2.4
S. of 42° (CA)	-	-	0.3	74.1	74.4	11.1	0.4	56.6	7.3	253.5	328.8	395.9	-	-	-
Pacific Cod	-	-	0.8	405.7	406.5	0.9	0.0	0.4	2.4	1.5	5.2	409.3	2.2	0.0	2.2
Pacific Whiting (Coastwide)	70,372.3	49,666.4	87,707.8	111.2	207,857.7	0.6	-	27.6	15.9	0.1	44.3	207,886.0	-	24,507.7	24,507.7
Sablefish (Coastwide)	27.2	0.5	27.9	2,144.4	2,200.1	1,195.4	385.6	180.0	31.8	2.9	1,795.8	3,964.1	444.9	-	444.9
N. of 36° (Monterey north)	27.2	0.5	27.9	2,029.9	2,085.6	1,100.2	385.6	176.7	31.2	2.9	1,696.6	3,751.0	444.9	-	444.9
S. of 36° (Conception area)	-	-	-	114.5	114.5	95.3	-	3.3	0.6	-	99.2	213.1	-	-	-
PACIFIC OCEAN PERCH	14.8	8.3	22.3	610.0	655.4	0.1	0.0	0.2	1.2	-	1.5	655.7	-	0.4	0.4
Shortbelly Rockfish	0.0	-	1.3	18.8	20.2	0.0	-	0.0	0.2	0.0	0.3	20.2	-	-	-
WIDOW ROCKFISH	120.9	173.7	349.6	3,346.7	3,990.8	12.2	-	155.4	10.3	52.4	230.2	4,210.8	0.0	14.8	14.8
CANARY ROCKFISH	0.3	2.5	0.9	902.6	906.2	105.5	0.0	165.8	19.1	81.3	371.7	1,258.8	0.4	2.7	3.1
Chilipepper Rockfish	-	-	-	1,036.2	1,036.2	15.6	-	266.5	11.7	7.3	301.1	1,325.5	-	-	-
BOCACCIO	-	-	-	55.9	55.9	7.5	-	70.0	2.1	51.4	130.9	184.7	-	-	-
Splitnose Rockfish	-	-	-	1,304.8	1,304.8	0.1	-	45.3	8.9	0.3	54.6	1,350.4	-	-	-
Yellowtail Rockfish	63.7	334.8	499.7	1,691.0	2,589.2	43.7	0.0	123.7	156.1	64.0	387.5	2,820.6	6.2	159.0	165.3
Shortspine Thornyhead - coastwide	2.5	0.0	0.8	1,184.1	1,187.4	57.5	0.2	0.9	1.5	-	60.1	1,245.9	3.7	0.0	3.7
N. of 34°27'	2.5	0.0	0.8	855.7	859.0	16.7	0.2	0.5	1.3	-	18.7	876.4	3.7	0.0	3.7
S. of 34°27'	-	-	-	328.4	328.4	40.7	0.0	0.4	0.3	-	41.4	369.5	-	-	-
Longspine Thornyhead - coastwide	0.0	-	0.1	2,223.6	2,223.7	15.4	-	0.1	2.7	-	18.2	2,239.2	0.0	-	0.0
N. of 34°27'	0.0	-	0.1	2,223.6	2,223.7	4.5	-	0.0	2.6	-	7.2	2,228.3	0.0	-	0.0
S. of 34°27'	-	-	-	-	-	10.9	-	0.1	0.1	-	11.0	11.0	-	-	-
Other thornyheads	-	-	-	16.6	16.6	29.7	-	1.7	0.6	-	32.0	48.0	-	-	-
COWCOD	-	-	-	-	-	0.6	-	1.1	0.2	2.8	4.8	4.5	-	-	-
DARKBLOTCHED	6.9	12.9	5.1	901.8	926.7	6.2	0.0	11.0	10.6	-	27.8	943.8	-	0.0	0.0
YELLOWEYE	0.0	-	0.2	29.4	29.6	15.8	-	22.4	0.1	39.0	77.4	106.9	-	-	-
Black Rockfish - coastwide	-	-	0.7	81.1	81.8	33.3	0.2	175.6	1.1	693.0	903.2	984.0	-	-	-
Black Rockfish (WA)	-	-	0.7	17.6	18.3	-	-	-	-	224.4	224.4	242.7	-	-	-
Black Rockfish (OR-CA)	-	-	0.0	63.5	63.5	33.3	0.2	175.6	1.1	468.7	678.8	741.3	-	-	-
Minor Rockfish North	22.8	8.3	41.2	1,471.1	1,543.4	345.7	2.9	158.0	53.9	92.7	653.2	2,142.7	29.6	2.2	31.8
Nearshore Species	-	-	-	4.6	4.6	19.1	-	50.9	0.2	83.4	153.7	158.1	-	-	-
Shelf Species	2.4	1.0	23.0	1,012.8	1,039.3	249.9	2.9	104.9	46.6	9.1	413.4	1,406.1	29.6	2.2	31.8
BOCACCIO: N. of Monterrey	0.0	1.0	0.3	89.1	90.3	0.9	-	7.8	0.7	0.5	9.7	99.4	0.0	0.6	0.6
Chilipepper Rockfish: Eureka	0.0	0.0	0.3	71.0	71.4	0.2	-	0.5	2.0	-	2.7	72.0	-	-	-
Redstripe Rockfish	0.0	0.0	0.3	110.6	111.0	0.0	-	0.0	0.2	0.2	0.5	111.2	0.0	1.7	1.7
Silvergrey Rockfish	0.2	0.0	2.0	183.3	185.5	0.0	-	0.9	-	0.2	1.1	186.6	-	-	-
Other Northern Shelf Rockfish	2.1	0.0	20.0	558.9	581.1	248.9	2.9	95.7	43.6	8.2	399.4	936.9	29.6	-	29.6
Slope Species	20.4	7.2	18.2	453.6	499.5	76.7	0.1	2.2	7.1	0.1	86.1	578.5	0.0	0.0	0.0
Bank Rockfish	-	-	0.0	2.7	2.7	0.5	-	0.3	0.0	-	0.9	3.5	-	-	-
Sharpchin Rockfish, north	-	0.1	0.4	102.9	103.4	0.0	-	0.0	0.7	-	0.8	103.4	0.0	-	0.0
Splitnose Rockfish: N. of Monterrey	4.4	0.9	16.4	144.2	165.8	0.1	-	0.2	2.8	-	3.0	166.1	-	-	-
Yellowmouth Rockfish	0.0	2.9	0.0	39.9	42.8	-	0.0	0.0	0.0	-	0.0	42.8	-	-	-
Other Northern Slope Rockfish	15.9	3.4	1.4	164.0	184.7	76.1	0.1	1.6	3.5	0.1	81.5	262.6	0.0	-	0.0
Minor Rockfish South	0.0	0.0	0.0	814.5	814.5	223.6	3.1	771.7	25.4	804.1	1,827.8	2,617.0	0.0	0.0	0.0
Nearshore Species	-	-	-	0.8	0.8	34.3	2.8	228.4	2.7	486.3	754.6	752.7	-	-	-
Shelf Species	0.0	0.0	0.0	244.1	244.1	87.3	0.1	376.3	21.7	314.8	800.2	1,022.5	0.0	0.0	0.0
Redstripe Rockfish	-	-	-	0.6	0.6	0.0	-	0.0	-	0.0	0.1	0.7	-	-	-
Yellowtail Rockfish	-	-	-	123.0	123.0	24.8	0.0	167.2	1.0	111.6	304.5	426.6	-	-	-
Other Southern Shelf Rockfish	-	-	-	120.4	120.4	62.5	0.1	209.1	20.7	203.2	495.5	595.2	-	-	-
Slope Species	0.0	0.0	0.0	569.6	569.6	102.0	0.2	167.0	1.0	3.0	273.1	841.8	0.0	0.0	0.0
Bank Rockfish	-	-	-	416.7	416.7	9.2	-	137.4	0.3	2.4	149.4	565.7	-	-	-
Blackgill Rockfish	-	-	-	114.4	114.4	90.5	0.1	22.5	0.2	-	113.3	227.5	-	-	-
Sharpchin Rockfish	-	-	-	10.2	10.2	0.0	-	0.1	0.0	-	0.1	10.3	-	-	-
Yellowmouth Rockfish	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-
Other Southern Slope Rockfish	-	-	-	28.3	28.3	2.2	0.1	7.0	0.5	0.6	10.4	38.2	-	-	-
California scorpionfish	-	-	-	-	-	0.9	-	32.2	7.6	82.9	123.5	115.9	-	-	-
Cabezon (off CA only)	-	-	-	-	-	2.2	3.1	168.7	2.8	73.3	250.0	247.2	-	-	-
Dover Sole	0.0	0.0	3.5	8,058.8	8,062.2	1.7	0.3	0.3	52.9	-	55.2	8,064.6	2.0	-	2.0
English Sole	-	0.0	1.2	1,122.7	1,123.9	0.0	-	0.4	26.0	-	26.4	1,124.4	0.8	-	0.8
Petrale Sole (coastwide)	-	-	1.4	1,458.9	1,429.3	0.6	-	0.4	25.3	0.0	26.3	1,430.4	1.5	-	1.5
N of 40°10'	-	-	1.4	1,203.6	1,168.7	0.2	-	-	17.9	0.0	18.1	1,169.0	1.5	-	1.5
S of 40°10'	-	-	-	255.3	260.6	0.4	-	0.4	7.4	-	8.2	261.4	-	-	-
Arrowtooth Flounder	0.1	0.7	0.3	3,191.9	3,193.0	0.6	0.1	0.0	5.4	-	6.1	3,193.8	0.1	0.5	0.7
Starry Flounder	-	-	-	53.0	53.0	0.0	-	0.1	25.4	8.0	33.5	61.1	-	-	-
Other Flatfish	0.3	0.0	4.1	1,534.5	1,539.0	1.1	-	4.0	65.2	14.3	84.5	1,558.3	1.1	0.0	1.1
Kelp Greenling	-	-	-	0.0	0.0	1.3	0.4	15.8	0.0	18.6	36.1	36.1	-	-	-
Spiny Dogfish	57.8	162.3	56.2	402.3	678.5	0.7	-	2.0	0.2	2.5	5.3	683.6	-	98.8	98.8
Other Fish	0.7	0.3	0.3	622.4	623.7	157.7	0.9	73.0	26.7	65.9	324.3	921.3	-	0.2	0.2
SECTOR TOTALS	70,690	50,371	88,726	35,011	244,767	2,301	398	2,563	613	2,512	8,387	252,541.1	495	24,786	25,281

Table 1. Landings or Deliveries of PFMC-managed Groundfish by Westcoast Fishery Sectors (mt): 1995 to 2005

1999

	Non-Treaty Sectors												Treaty Sectors		
	LE Trawl Sectors					Non-LE Trawl Sectors									
Stock or Complex	**At-Sea Catcher-Processors**	**At Sea Motherships**	**Shoreside Whiting LE Trawl**	**Shoreside Non-whiting LE Trawl**	**LE Trawl Total**	**Shoreside LE Line Gear**	**Shoreside LE Pot Gear**	**Shoreside Directed OA**	**Shoreside Incidental OA**	**Recreational**	**Non-LE Trawl Totals**	**Non-Treaty Dir. Total**	**Shoreside**	**At-Sea**	**Treaty Totals**
Lingcod - coastwide	0.0	0.0	0.6	216.6	217.3	32.1	0.3	73.8	45.7	462.0	614.0	785.5	3.2	-	3.2
N. of 42° (OR & WA)	0.0	0.0	0.6	134.1	134.7	22.1	0.2	32.2	37.2	119.0	210.7	308.3	3.2	-	3.2
S. of 42° (CA)	-	-	0.0	82.5	82.5	10.1	0.1	41.6	8.6	343.0	403.3	477.3	-	-	-
Pacific Cod	0.0	0.0	0.2	276.8	277.1	1.3	-	0.3	1.7	0.4	3.6	279.0	1.2	0.1	1.3
Pacific Whiting (Coastwide)	67,671.8	47,565.5	83,392.5	25.8	198,655.5	0.0	-	0.4	0.2	2.3	2.9	198,658.2	-	25,836.6	25,836.6
Sablefish (Coastwide)	0.7	1.3	3.5	3,158.3	3,163.8	1,739.1	707.5	310.8	58.6	0.3	2,816.4	5,921.6	710.5	0.0	710.5
N. of 36° (Monterey north)	0.7	1.3	3.5	3,075.2	3,080.7	1,652.8	707.5	298.7	58.5	0.3	2,717.8	5,740.0	710.5	0.0	710.5
S. of 36° (Conception area)	-	-	-	83.1	83.1	86.3	-	12.1	0.1	-	98.6	181.6	-	-	-
PACIFIC OCEAN PERCH	9.4	4.1	1.9	520.2	535.6	1.1	0.1	0.3	9.0	-	10.6	537.1	0.0	1.2	1.2
Shortbelly Rockfish	-	0.0	5.5	2.2	7.7	-	-	-	0.4	-	0.4	7.7	-	0.0	0.0
WIDOW ROCKFISH	104.1	58.1	194.4	3,691.1	4,047.7	15.4	-	39.7	12.7	32.7	100.5	4,135.5	0.2	36.5	36.7
CANARY ROCKFISH	1.0	0.6	1.9	513.8	517.3	62.4	-	69.5	38.7	98.5	269.1	747.7	0.6	4.3	4.9
Chilipepper Rockfish	-	-	-	783.1	783.1	12.9	-	97.7	7.0	24.5	142.2	918.2	-	-	-
BOCACCIO	-	-	-	31.3	31.3	4.4	-	22.5	1.3	124.1	152.2	182.3	-	-	-
Splitnose Rockfish	-	-	-	205.7	205.7	0.6	-	0.2	0.2	0.0	1.0	206.4	-	-	-
Yellowtail Rockfish	426.3	325.4	477.3	1,641.4	2,870.4	34.2	-	39.2	68.2	25.8	167.5	2,969.6	16.0	469.9	485.8
Shortspine Thornyhead - coastwide	0.0	-	0.4	713.0	713.5	99.2	0.1	7.4	1.4	0.6	108.6	820.6	6.1	0.0	6.1
N. of 34°27'	0.0	-	0.4	526.6	527.1	16.3	0.1	0.0	1.0	0.5	17.8	543.9	6.1	0.0	6.1
S. of 34°27'	-	-	-	186.4	186.4	82.9	0.0	7.4	0.4	0.1	90.7	276.7	-	-	-
Longspine Thornyhead - coastwide	-	-	0.2	1,770.1	1,770.4	26.0	-	1.9	2.6	-	30.4	1,798.2	-	-	-
N. of 34°27'	-	-	0.2	1,770.1	1,770.4	11.8	-	1.1	2.6	-	15.5	1,783.2	-	-	-
S. of 34°27'	-	-	-	-	-	14.2	-	0.8	0.0	-	15.0	15.0	-	-	-
Other thornyheads	-	-	-	36.1	36.1	4.1	-	0.9	0.2	-	5.3	41.2	-	-	-
COWCOD	-	-	-	-	-	0.3	-	1.8	0.0	5.6	7.7	7.6	-	-	-
DARKBLOTCHED	6.9	4.2	0.6	345.7	357.5	0.8	-	0.2	7.8	-	8.8	358.5	0.0	0.0	0.0
YELLOWEYE	0.0	-	0.1	25.5	25.7	50.7	-	16.3	0.8	48.3	116.1	141.0	0.0	-	0.0
Black Rockfish - coastwide	0.0	-	0.0	4.6	4.6	17.9	-	152.9	2.6	606.4	779.8	781.8	-	-	-
Black Rockfish (WA)	-	-	-	-	-	-	-	-	-	154.2	154.2	154.2	-	-	-
Black Rockfish (OR-CA)	0.0	-	0.0	4.6	4.6	17.9	-	152.9	2.6	452.1	625.5	627.6	-	-	-
Minor Rockfish North	12.2	11.4	14.8	734.0	772.3	266.2	2.8	81.9	52.3	75.4	478.6	1,198.7	27.4	5.9	33.2
Nearshore Species	-	-	-	0.1	0.1	15.6	-	45.0	0.0	64.9	125.6	125.7	-	-	-
Shelf Species	1.0	4.2	10.7	418.3	434.2	243.9	2.8	35.4	44.5	10.5	337.0	726.8	27.2	5.8	33.1
BOCACCIO: N. of Monterrey	0.2	0.2	0.1	43.3	43.9	2.9	-	5.4	0.6	0.8	9.7	53.0	0.0	1.0	1.0
Chilipepper Rockfish: Eureka	-	1.2	0.1	44.3	45.5	-	-	0.0	3.5	0.0	3.5	45.5	-	-	-
Redstripe Rockfish	0.6	2.5	0.1	32.9	36.0	-	-	-	0.2	0.1	0.3	36.1	0.0	4.8	4.8
Silvergrey Rockfish	0.1	0.3	0.1	73.0	73.5	0.5	-	0.2	0.0	0.1	0.8	74.4	0.0	0.0	0.0
Other Northern Shelf Rockfish	0.0	0.0	10.3	224.9	235.2	240.5	2.8	29.9	40.1	9.4	322.7	517.8	27.2	0.0	27.2
Slope Species	11.2	7.2	4.1	315.5	338.0	6.7	0.0	1.5	7.9	0.0	16.0	346.2	0.1	0.0	0.1
Bank Rockfish	-	-	0.0	13.3	13.3	-	-	-	0.1	-	0.1	13.3	-	-	-
Sharpchin Rockfish, north	0.0	0.0	0.1	53.1	53.2	0.0	-	0.0	0.4	-	0.4	53.2	0.0	0.0	0.0
Splitnose Rockfish: N. of Monterrey	6.4	-	2.8	55.9	65.1	0.0	-	0.0	1.0	-	1.1	65.2	-	-	-
Yellowmouth Rockfish	0.2	0.0	0.0	28.2	28.4	-	-	-	0.0	-	0.0	28.4	-	-	-
Other Northern Slope Rockfish	4.6	7.2	1.2	165.0	178.1	6.6	-	1.5	6.3	0.0	14.4	186.2	0.1	-	0.1
Minor Rockfish South	0.0	0.0	0.0	123.5	123.5	63.4	4.5	279.6	13.0	1,171.7	1,532.1	1,642.6	0.0	0.0	0.0
Nearshore Species	-	-	-	13.0	13.0	14.9	4.2	183.8	2.3	498.6	703.7	714.4	-	-	-
Shelf Species	0.0	0.0	0.0	35.8	35.8	32.2	0.1	77.3	10.1	667.5	787.1	812.8	0.0	0.0	0.0
Redstripe Rockfish	-	-	-	0.2	0.2	-	-	-	-	0.1	0.1	0.4	-	-	-
Yellowtail Rockfish	-	-	-	14.5	14.5	6.2	-	23.5	0.5	205.5	235.6	249.6	-	-	-
Other Southern Shelf Rockfish	-	-	-	21.1	21.1	25.9	0.1	53.8	9.6	461.9	551.3	562.8	-	-	-
Slope Species	0.0	0.0	0.0	74.8	74.8	16.3	0.3	18.5	0.7	5.6	41.3	115.4	0.0	0.0	0.0
Bank Rockfish	-	-	-	18.7	18.7	0.0	-	7.4	0.4	4.9	12.7	31.1	-	-	-
Blackgill Rockfish	-	-	-	27.6	27.6	15.8	0.3	8.4	0.1	0.3	24.9	52.4	-	-	-
Sharpchin Rockfish	-	-	-	0.5	0.5	-	-	-	-	-	-	0.5	-	-	-
Yellowmouth Rockfish	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-
Other Southern Slope Rockfish	-	-	-	27.9	27.9	0.5	0.0	2.6	0.2	0.4	3.7	31.4	-	-	-
California scorpionfish	-	-	-	-	-	0.1	-	30.3	7.8	139.6	177.7	169.9	-	-	-
Cabezon (off CA only)	-	-	-	0.1	0.1	0.8	2.9	119.3	2.0	43.4	168.4	166.5	-	-	-
Dover Sole	0.0	-	0.0	9,129.1	9,129.1	2.4	0.1	0.4	119.0	-	122.0	9,132.0	5.3	-	5.3
English Sole	0.0	0.0	0.1	888.0	888.1	0.0	-	0.1	33.9	-	34.0	888.1	0.3	0.0	0.3
Petrale Sole (coastwide)	-	-	0.2	1,473.2	1,449.1	0.3	-	0.1	36.1	0.1	36.6	1,449.6	0.2	-	0.2
N of 40°10'	-	-	0.2	1,224.5	1,184.4	0.2	-	-	32.5	0.0	32.7	1,184.7	0.2	-	0.2
S of 40°10'	-	-	-	248.7	264.7	0.1	-	0.1	3.6	0.1	3.9	265.0	-	-	-
Arrowtooth Flounder	2.6	0.6	3.4	5,336.8	5,343.3	1.6	0.0	0.0	14.6	-	16.2	5,345.0	6.0	3.2	9.2
Starry Flounder	-	-	-	22.2	22.2	0.0	-	0.2	25.1	4.9	30.3	27.4	-	-	-
Other Flatfish	0.0	0.0	1.5	1,882.8	1,884.3	0.4	0.0	4.7	68.2	22.5	95.8	1,911.9	0.4	0.0	0.4
Kelp Greenling	-	-	-	-	-	3.8	0.6	34.7	0.0	23.4	62.6	62.5	-	-	-
Spiny Dogfish	121.5	155.4	39.8	429.6	746.3	38.4	0.2	8.9	0.0	11.0	58.5	804.8	0.4	191.8	192.2
Other Fish	0.2	0.1	0.2	318.8	319.2	101.4	-	102.6	34.3	76.8	315.1	600.0	-	0.0	0.0
SECTOR TOTALS	68,357	48,127	84,139	34,299	234,898	2,581	719	1,499	666	3,000	8,465	242,697.1	778	26,549	27,327

Table 1. Landings or Deliveries of PFMC-managed Groundfish by Westcoast Fishery Sectors (mt): 1995 to 2005

2000

	Non-Treaty Sectors												Treaty Sectors		
	LE Trawl Sectors					Non-LE Trawl Sectors									
Stock or Complex	**At-Sea Catcher-Processors**	**At Sea Motherships**	**Shoreside Whiting LE Trawl**	**Shoreside Non-whiting LE Trawl**	**LE Trawl Total**	**Shoreside LE Line Gear**	**Shoreside LE Pot Gear**	**Shoreside Directed OA**	**Shoreside Incidental OA**	**Recreational**	**Non-LE Trawl Totals**	**Non-Treaty Dir. Total**	**Shoreside**	**At-Sea**	**Treaty Totals**
Lingcod - coastwide	-	0.3	0.8	66.1	67.2	15.5	0.3	37.3	27.6	278.5	359.3	398.8	3.1	-	3.1
N. of 42° (OR & WA)	-	0.3	0.8	38.1	39.2	10.5	0.2	17.2	25.6	84.5	138.0	151.6	3.1	-	3.1
S. of 42° (CA)	-	-	0.0	28.0	28.0	5.0	0.0	20.2	2.0	194.0	221.3	247.2	-	-	-
Pacific Cod	0.2	-	0.1	274.0	274.2	1.1	-	0.0	1.8	-	3.0	275.4	2.1	0.0	2.1
Pacific Whiting (Coastwide)	67,803.1	42,622.9	85,807.4	35.8	196,269.3	0.1	-	0.0	0.1	-	0.2	196,269.4	-	6,252.4	6,252.4
Sablefish (Coastwide)	45.7	0.9	1.7	2,690.8	2,739.0	1,708.4	699.2	444.4	70.6	0.2	2,922.7	5,591.2	705.7	0.0	705.7
N. of 36° (Monterey north)	45.7	0.9	1.7	2,654.6	2,702.8	1,639.1	699.2	428.3	70.1	0.2	2,836.9	5,469.6	705.7	0.0	705.7
S. of 36° (Conception area)	-	-	-	36.2	36.2	69.3	-	16.1	0.4	-	85.8	121.6	-	-	-
PACIFIC OCEAN PERCH	6.5	2.1	0.3	135.4	144.3	0.4	-	0.0	0.4	0.0	0.8	144.7	0.0	0.0	0.0
Shortbelly Rockfish	0.9	0.0	2.3	17.1	20.3	-	-	-	-	-	-	20.3	-	-	-
WIDOW ROCKFISH	69.8	141.2	83.3	3,718.5	4,012.8	5.4	-	15.0	3.2	15.4	39.0	4,048.6	0.9	9.6	10.5
CANARY ROCKFISH	0.9	0.3	1.1	36.1	38.3	7.6	-	5.5	13.8	94.3	121.2	145.8	0.4	0.9	1.3
Chilipepper Rockfish	-	-	-	359.5	359.5	8.4	-	47.5	2.4	39.2	97.5	454.6	-	-	-
BOCACCIO	-	-	-	17.2	17.2	2.3	-	4.9	0.8	111.9	120.0	136.4	-	-	-
Splitnose Rockfish	-	-	-	83.5	83.5	5.2	-	0.3	0.0	-	5.5	89.0	-	-	-
Yellowtail Rockfish	269.5	227.9	190.2	2,621.9	3,309.5	3.8	-	2.4	100.4	23.9	130.5	3,339.6	35.4	99.1	134.5
Shortspine Thornyhead - coastwide	19.5	0.2	1.9	762.5	784.1	51.5	0.1	7.6	0.4	-	59.6	843.3	4.1	-	4.1
N. of 34°27'	19.5	0.2	1.9	481.9	503.4	12.0	0.1	0.4	0.2	-	12.7	515.9	4.1	-	4.1
S. of 34°27'	-	-	-	280.7	280.7	39.6	-	7.2	0.2	-	47.0	327.4	-	-	-
Longspine Thornyhead - coastwide	0.0	-	0.6	1,426.4	1,426.9	51.4	-	7.3	0.8	-	59.5	1,485.5	-	-	-
N. of 34°27'	0.0	-	0.6	1,426.4	1,426.9	31.4	-	0.4	0.8	-	32.7	1,458.7	-	-	-
S. of 34°27'	-	-	-	-	-	20.0	-	6.8	-	-	26.8	26.8	-	-	-
Other thornyheads	-	-	-	58.5	58.5	9.8	-	3.7	0.0	-	13.6	72.1	-	-	-
COWCOD	-	-	-	-	-	0.0	-	0.3	0.1	6.2	6.6	6.5	-	-	-
DARKBLOTCHED	3.8	4.7	3.7	239.0	251.1	9.5	-	0.5	1.6	-	11.7	261.2	0.0	-	0.0
YELLOWEYE	4.1	-	0.0	1.2	5.3	4.3	-	2.1	0.2	27.8	34.4	39.5	0.0	-	0.0
Black Rockfish - coastwide	1.2	-	0.0	1.8	3.0	20.1	-	127.9	3.7	595.8	747.5	746.8	-	-	-
Black Rockfish (WA)	-	-	-	-	-	-	-	-	-	143.3	143.3	143.3	-	-	-
Black Rockfish (OR-CA)	1.2	-	0.0	1.8	3.0	20.1	-	127.9	3.7	452.4	604.2	603.5	-	-	-
Minor Rockfish North	79.3	34.1	45.1	347.3	505.7	80.2	5.7	36.9	15.3	63.4	201.6	692.0	31.7	0.4	32.1
Nearshore Species	-	-	-	0.3	0.3	11.5	0.7	27.5	0.8	57.0	97.4	97.0	0.0	-	0.0
Shelf Species	1.1	30.3	30.5	52.7	114.6	24.5	0.3	6.9	5.5	6.3	43.4	152.5	22.4	0.4	22.8
BOCACCIO: N. of Monterrey	0.4	1.7	0.5	4.1	6.7	0.0	-	0.0	0.0	1.0	1.1	7.8	0.1	0.3	0.4
Chilipepper Rockfish: Eureka	-	8.8	27.9	14.2	50.9	0.1	-	0.0	0.5	0.0	0.7	51.0	-	-	-
Redstripe Rockfish	0.6	0.8	0.0	4.8	6.1	-	-	-	-	0.0	0.0	6.2	0.1	0.1	0.2
Silvergrey Rockfish	0.0	0.1	-	1.3	1.4	-	-	-	0.0	0.1	0.1	1.5	0.0	-	0.0
Other Northern Shelf Rockfish	0.0	18.9	2.2	28.5	49.5	24.3	0.3	6.8	5.0	5.2	41.5	86.1	22.3	0.0	22.3
Slope Species	78.3	3.8	14.5	294.2	390.8	44.3	4.8	2.5	9.0	0.1	60.7	442.5	9.3	0.0	9.3
Bank Rockfish	0.0	-	0.1	3.0	3.1	0.1	-	0.0	0.1	-	0.2	3.2	-	-	-
Sharpchin Rockfish, north	0.0	0.0	0.0	12.3	12.4	0.1	-	0.0	0.0	-	0.2	12.5	0.0	-	0.0
Splitnose Rockfish: N. of Monterrey	13.1	2.3	9.9	33.8	59.1	0.9	-	0.1	0.5	-	1.5	60.1	-	-	-
Yellowmouth Rockfish	0.1	0.0	-	11.4	11.5	-	-	-	-	-	-	11.5	0.0	-	0.0
Other Northern Slope Rockfish	65.0	1.5	4.5	233.7	304.7	43.2	4.8	2.4	8.4	0.1	58.9	355.2	9.3	-	9.3
Minor Rockfish South	0.0	0.0	0.0	175.7	175.7	73.4	0.5	168.1	9.6	878.5	1,130.0	1,296.1	0.0	0.0	0.0
Nearshore Species	-	-	-	0.4	0.4	19.3	0.4	133.6	2.7	423.6	579.6	577.4	-	-	-
Shelf Species	0.0	0.0	0.0	29.6	29.6	12.1	0.0	26.6	6.4	452.1	497.2	520.4	0.0	0.0	0.0
Redstripe Rockfish	-	-	-	-	-	0.0	-	0.2	-	0.2	0.4	0.4	-	-	-
Yellowtail Rockfish	-	-	-	21.6	21.6	1.8	-	4.5	0.9	134.0	141.2	161.9	-	-	-
Other Southern Shelf Rockfish	-	-	-	8.0	8.0	10.3	-	21.9	5.5	317.9	355.6	358.1	-	-	-
Slope Species	0.0	0.0	0.0	145.7	145.7	42.0	0.0	7.8	0.5	2.7	53.2	198.3	0.0	0.0	0.0
Bank Rockfish	-	-	-	78.8	78.8	6.4	-	2.6	0.0	2.7	11.8	90.5	-	-	-
Blackgill Rockfish	-	-	-	52.9	52.9	29.1	0.0	3.6	0.3	-	33.1	85.7	-	-	-
Sharpchin Rockfish	-	-	-	0.4	0.4	0.0	-	-	-	-	0.0	0.4	-	-	-
Yellowmouth Rockfish	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-
Other Southern Slope Rockfish	-	-	-	13.6	13.6	6.5	-	1.6	0.2	-	8.3	21.7	-	-	-
California scorpionfish	-	-	-	-	-	0.0	-	11.5	6.0	89.5	107.0	101.0	-	-	-
Cabezon (off CA only)	-	-	-	0.0	0.0	2.7	0.5	109.1	4.2	41.2	157.7	153.5	-	-	-
Dover Sole	0.3	0.0	0.3	8,813.5	8,814.1	1.6	1.1	0.5	63.9	-	67.0	8,817.2	0.9	0.0	0.9
English Sole	0.1	0.2	0.5	743.6	744.3	0.0	-	0.0	26.2	-	26.2	744.3	0.5	0.1	0.5
Petrale Sole (coastwide)	-	-	0.2	1,849.4	1,822.7	0.4	-	0.1	50.4	0.2	51.0	1,823.4	0.0	-	0.0
N of 40°10'	-	-	0.2	1,613.6	1,556.3	0.3	-	-	47.1	0.0	47.4	1,556.6	0.0	-	0.0
S of 40°10'	-	-	-	235.8	266.4	0.1	-	0.1	3.3	0.1	3.6	266.7	-	-	-
Arrowtooth Flounder	3.8	3.1	1.9	3,277.6	3,286.5	1.0	0.9	0.1	18.4	-	20.4	3,288.5	0.2	1.9	2.0
Starry Flounder	-	-	-	25.1	25.1	0.0	-	0.3	12.2	6.2	18.6	31.6	-	-	-
Other Flatfish	5.1	1.6	0.6	1,521.8	1,529.2	0.2	-	7.5	45.4	64.7	117.9	1,601.7	0.1	0.0	0.1
Kelp Greenling	-	-	-	-	-	4.3	0.2	38.0	0.3	35.3	78.1	77.8	-	-	-
Spiny Dogfish	25.6	47.9	34.6	274.5	382.6	313.9	-	4.7	2.0	10.0	330.6	711.2	2.8	37.2	40.0
Other Fish	1.1	0.1	0.3	236.5	238.1	34.7	0.0	119.1	21.4	55.5	230.6	447.3	-	0.0	0.0
SECTOR TOTALS	68,340	43,087	86,177	29,810	227,388	2,417	708	1,203	504	2,438	7,270	234,154.1	788	6,402	7,190

Table 1. Landings or Deliveries of PFMC-managed Groundfish by Westcoast Fishery Sectors (mt): 1995 to 2005

2001

	Non-Treaty Sectors												Treaty Sectors		
	LE Trawl Sectors					Non-LE Trawl Sectors									
Stock or Complex	At-Sea Catcher-Processors	At Sea Motherships	Shoreside Whiting LE Trawl	Shoreside Non-whiting LE Trawl	LE Trawl Total	Shoreside LE Line Gear	Shoreside LE Pot Gear	Shoreside Directed OA	Shoreside Incidental OA	Recreational	Non-LE Trawl Totals	Non-Treaty Dir. Total	Shoreside	At-Sea	Treaty Totals
Lingcod - coastwide	0.2	0.5	0.8	58.0	59.4	16.2	1.3	57.9	17.0	258.5	350.9	393.3	4.3	-	4.3
N. of 42° (OR & WA)	0.2	0.5	0.8	31.4	32.8	12.5	1.3	28.2	14.5	96.2	152.6	171.0	4.3	-	4.3
S. of 42° (CA)	-	-	-	26.6	26.6	3.7	0.0	29.7	2.5	162.4	198.3	222.3	-	-	-
Pacific Cod	0.0	0.0	0.1	315.2	315.2	1.3	-	0.4	1.5	0.0	3.2	317.0	4.0	0.2	4.2
Pacific Whiting (Coastwide)	58,627.6	35,586.5	73,386.2	25.1	167,625.4	0.2	-	-	64.8	0.0	65.0	167,625.6	-	6,080.0	6,080.0
Sablefish (Coastwide)	21.0	0.2	47.1	2,513.9	2,582.3	1,342.7	552.6	467.1	45.4	2.9	2,410.8	4,947.6	658.7	0.0	658.7
N. of 36° (Monterey north)	21.0	0.2	47.1	2,485.5	2,554.0	1,244.0	552.6	454.0	44.1	2.8	2,297.4	4,807.3	658.7	0.0	658.7
S. of 36° (Conception area)	-	-	-	28.4	28.4	98.7	-	13.1	1.3	0.1	113.3	140.4	-	-	-
PACIFIC OCEAN PERCH	19.7	0.1	0.1	187.3	207.1	0.0	0.0	0.0	0.1	-	0.1	207.1	0.0	0.7	0.7
Shortbelly Rockfish	0.0	27.2	0.6	4.4	32.2	-	-	0.3	-	0.0	0.3	32.5	-	-	-
WIDOW ROCKFISH	139.7	27.7	44.3	1,729.6	1,941.3	1.3	0.0	12.9	1.4	13.8	29.4	1,969.3	7.4	3.3	10.7
CANARY ROCKFISH	0.7	1.1	1.4	23.6	26.8	7.0	0.0	4.9	3.7	46.2	61.8	84.9	2.5	2.4	4.9
Chilipepper Rockfish	-	-	-	297.3	297.3	2.9	-	27.0	0.8	51.9	82.6	379.1	-	-	-
BOCACCIO	-	-	-	13.3	13.3	2.4	-	6.0	0.5	109.0	118.0	130.8	-	-	-
Splitnose Rockfish	-	-	-	90.3	90.3	0.9	-	1.1	0.1	-	2.2	92.3	-	-	-
Yellowtail Rockfish	33.2	88.8	102.9	1,484.1	1,709.0	3.5	-	1.3	68.0	19.2	92.1	1,733.1	98.7	87.0	185.7
Shortspine Thornyhead - coastwide	15.2	0.0	0.1	471.4	486.6	50.8	0.2	1.6	0.5	-	53.1	539.2	5.0	-	5.0
N. of 34°27'	15.2	0.0	0.1	349.6	364.9	8.4	0.2	0.1	0.2	-	8.9	373.6	5.0	-	5.0
S. of 34°27'	-	-	-	121.7	121.7	42.3	-	1.5	0.3	-	44.2	165.6	-	-	-
Longspine Thornyhead - coastwide	-	-	0.0	1,131.7	1,131.7	36.9	0.0	6.5	0.7	-	44.1	1,175.2	-	-	-
N. of 34°27'	-	-	0.0	1,131.7	1,131.7	12.6	0.0	0.2	0.6	-	13.4	1,144.6	-	-	-
S. of 34°27'	-	-	-	-	-	24.2	-	6.4	0.1	-	30.7	30.6	-	-	-
Other thornyheads	-	-	-	21.5	21.5	22.8	-	3.4	0.2	-	26.4	47.7	-	-	-
COWCOD	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-
DARKBLOTCHED	11.5	0.6	4.7	152.5	169.3	2.2	0.0	0.3	0.4	-	3.0	171.8	0.1	-	0.1
YELLOWEYE	-	-	0.0	2.0	2.0	6.5	-	2.9	0.0	24.1	33.5	35.5	0.0	-	0.0
Black Rockfish - coastwide	-	0.0	-	0.9	0.9	45.3	0.0	198.0	2.6	742.0	987.8	986.2	-	-	-
Black Rockfish (WA)	-	-	-	-	-	-	-	-	-	175.7	175.7	175.7	-	-	-
Black Rockfish (OR-CA)	-	0.0	-	0.9	0.9	45.3	0.0	198.0	2.6	566.3	812.2	810.5	-	-	-
Minor Rockfish North	46.6	16.9	5.0	327.6	396.2	61.6	2.6	45.9	5.9	58.4	174.5	564.8	36.0	1.8	37.9
Nearshore Species	-	-	-	0.5	0.5	19.5	0.1	37.3	0.4	52.5	109.8	109.9	0.0	-	0.0
Shelf Species	0.8	14.8	2.5	188.7	206.8	20.3	0.0	4.8	3.3	5.9	34.3	237.8	10.2	1.2	11.4
BOCACCIO: N. of Monterrey	0.2	0.1	0.7	12.1	13.1	-	-	0.0	0.0	1.6	1.6	14.7	0.2	0.8	1.0
Chilipepper Rockfish: Eureka	0.2	3.3	0.8	136.6	141.0	0.2	-	-	0.2	0.0	0.3	141.2	-	-	-
Redstripe Rockfish	0.1	11.3	-	6.1	17.5	-	-	-	-	0.1	0.1	17.6	0.7	0.4	1.1
Silvergrey Rockfish	0.1	0.0	0.0	4.3	4.4	0.1	-	0.0	-	0.0	0.1	4.6	0.0	0.0	0.0
Other Northern Shelf Rockfish	0.2	0.0	0.9	29.6	30.8	20.0	0.0	4.8	3.1	4.1	32.1	59.8	9.3	-	9.3
Slope Species	45.8	2.1	2.6	138.4	188.9	21.8	2.6	3.8	2.3	0.0	30.5	217.1	25.8	0.7	26.5
Bank Rockfish	0.2	0.0	-	0.3	0.5	-	-	-	-	-	-	0.5	-	-	-
Sharpchin Rockfish, north	1.7	0.0	0.0	4.7	6.4	-	-	-	0.0	-	0.0	6.4	0.0	0.6	0.7
Splitnose Rockfish: N. of Monterrey	23.8	1.6	1.9	14.8	42.2	-	-	-	0.2	-	0.2	42.2	-	-	-
Yellowmouth Rockfish	-	-	-	4.5	4.5	-	-	-	0.0	-	0.0	4.5	-	0.0	0.0
Other Northern Slope Rockfish	20.1	0.5	0.6	114.0	135.2	21.8	2.6	3.8	2.1	0.0	30.3	163.4	25.8	-	25.8
Minor Rockfish South	0.0	0.0	0.0	214.9	214.9	65.9	0.0	171.8	8.7	752.2	998.6	1,204.8	0.0	0.0	0.0
Nearshore Species	-	-	-	0.3	0.3	16.3	-	131.1	2.5	484.8	634.7	632.5	-	-	-
Shelf Species	0.0	0.0	0.0	22.9	22.9	9.3	0.0	16.5	4.9	266.9	297.6	315.6	0.0	0.0	0.0
Redstripe Rockfish	-	-	-	-	-	0.0	-	0.0	-	-	0.0	0.0	-	-	-
Yellowtail Rockfish	-	-	-	1.3	1.3	1.1	-	1.2	0.2	56.0	58.5	59.6	-	-	-
Other Southern Shelf Rockfish	-	-	-	21.6	21.6	8.2	-	15.3	4.7	210.9	239.1	256.0	-	-	-
Slope Species	0.0	0.0	0.0	191.7	191.7	40.3	0.0	24.1	1.3	0.6	66.4	256.8	0.0	0.0	0.0
Bank Rockfish	-	-	-	81.9	81.9	4.6	-	10.4	0.3	0.4	15.7	97.4	-	-	-
Blackgill Rockfish	-	-	-	89.9	89.9	27.1	-	12.0	0.3	-	39.4	129.0	-	-	-
Sharpchin Rockfish	-	-	-	0.0	0.0	-	-	-	-	-	-	0.0	-	-	-
Yellowmouth Rockfish	-	-	-	0.0	0.0	-	-	-	-	-	-	0.0	-	-	-
Other Southern Slope Rockfish	-	-	-	19.8	19.8	8.6	-	1.8	0.7	0.1	11.3	30.3	-	-	-
California scorpionfish	-	-	-	0.0	0.0	0.0	-	14.3	4.9	113.5	132.8	127.9	-	-	-
Cabezon (off CA only)	-	-	-	0.0	0.0	1.1	-	66.2	5.4	57.0	129.7	124.3	-	-	-
Dover Sole	1.5	0.0	0.3	6,830.4	6,832.2	1.1	0.5	1.1	32.4	-	35.1	6,834.9	2.1	-	2.1
English Sole	0.1	0.0	1.3	958.6	959.9	0.0	-	0.3	24.1	-	24.4	960.3	3.2	0.0	3.2
Petrale Sole (coastwide)	-	-	1.8	1,775.8	1,777.8	0.5	0.0	1.0	35.7	0.1	37.3	1,779.4	0.9	-	0.9
N of 40°10'	-	-	1.8	1,508.4	1,497.8	0.5	0.0	0.0	32.3	0.0	32.8	1,498.3	0.9	-	0.9
S of 40°10'	-	-	-	267.4	280.0	-	-	1.0	3.4	0.1	4.5	281.1	-	-	-
Arrowtooth Flounder	2.7	0.9	1.3	2,450.2	2,455.1	0.6	0.4	0.6	1.6	0.2	3.4	2,456.9	0.4	0.7	1.1
Starry Flounder	-	-	-	7.3	7.3	0.0	-	0.1	15.5	381.4	397.0	388.8	0.0	-	0.0
Other Flatfish	18.0	0.5	0.8	1,596.4	1,615.7	0.2	-	8.2	76.5	48.2	133.2	1,672.4	1.7	0.0	1.7
Kelp Greenling	-	-	-	0.0	0.0	5.1	0.1	34.1	0.3	72.2	111.8	111.5	-	-	-
Spiny Dogfish	67.6	6.2	12.7	332.9	419.4	216.3	-	0.7	3.7	9.4	230.2	645.9	-	153.3	153.3
Other Fish	0.5	0.2	0.1	234.1	234.9	63.2	7.1	86.8	20.3	63.6	241.0	455.6	-	-	-
SECTOR TOTALS	59,006	35,757	73,612	23,250	191,625	1,959	565	1,223	443	2,824	7,013	198,195.6	825	6,330	7,154

Table 1. Landings or Deliveries of PFMC-managed Groundfish by Westcoast Fishery Sectors (mt): 1995 to 2005

2002

	Non-Treaty Sectors												Treaty Sectors		
	LE Trawl Sectors					Non-LE Trawl Sectors									
Stock or Complex	At-Sea Catcher-Processors	At Sea Motherships	Shoreside Whiting LE Trawl	Shoreside Non-whiting LE Trawl	LE Trawl Total	Shoreside LE Line Gear	Shoreside LE Pot Gear	Shoreside Directed OA	Shoreside Incidental OA	Recreational	Non-LE Trawl Totals	Non-Treaty Dir. Total	Shoreside	At-Sea	Treaty Totals
Lingcod - coastwide	0.2	0.1	0.4	102.3	102.9	10.8	1.4	68.4	13.6	605.3	699.4	788.7	11.3	-	11.3
N. of 42° (OR & WA)	0.2	0.1	0.4	65.8	66.4	6.3	1.3	30.4	11.0	173.0	221.9	277.3	11.3	-	11.3
S. of 42° (CA)	-	-	0.0	36.5	36.5	4.4	0.1	38.0	2.5	432.3	477.4	511.4	-	-	-
Pacific Cod	-	-	0.4	690.3	690.7	0.5	-	0.3	2.0	5.0	7.9	696.5	58.3	0.0	58.3
Pacific Whiting (Coastwide)	36,341.5	26,593.4	45,503.6	39.4	108,477.8	0.3	-	-	183.0	0.3	183.6	108,478.5	-	21,815.3	21,815.3
Sablefish (Coastwide)	20.6	0.4	131.9	1,444.7	1,597.6	1,040.0	359.8	380.8	29.7	6.6	1,816.8	3,384.7	436.6	0.5	437.1
N. of 36° (Monterey north)	20.6	0.4	131.9	1,395.6	1,548.6	929.6	359.8	356.4	23.8	6.6	1,676.1	3,200.9	436.6	0.5	437.1
S. of 36° (Conception area)	-	-	-	49.0	49.0	110.4	-	24.4	5.8	-	140.6	183.8	-	-	-
PACIFIC OCEAN PERCH	1.4	2.2	0.2	147.3	151.1	0.2	0.2	0.0	0.0	0.0	0.4	151.5	0.3	0.2	0.5
Shortbelly Rockfish	0.5	0.1	0.1	0.1	0.7	-	-	-	-	-	-	0.7	-	-	-
WIDOW ROCKFISH	114.8	20.4	5.1	254.9	395.3	0.0	0.0	0.5	0.4	2.9	3.7	398.6	12.7	19.5	32.2
CANARY ROCKFISH	1.6	0.8	0.5	42.3	45.2	1.6	-	0.2	1.4	23.9	27.1	71.0	3.2	2.8	6.1
Chilipepper Rockfish	-	-	-	153.8	153.8	0.5	-	3.2	0.2	89.6	93.4	247.0	-	-	-
BOCACCIO	-	-	-	17.7	17.7	0.5	-	2.7	0.4	9.3	12.9	30.2	-	-	-
Splitnose Rockfish	-	-	-	55.7	55.7	1.3	-	1.3	0.1	-	2.6	58.3	-	-	-
Yellowtail Rockfish	12.9	1.4	42.5	694.3	751.1	0.6	0.0	2.1	28.6	21.0	52.2	774.7	259.9	179.3	439.2
Shortspine Thornyhead - coastwide	11.9	0.0	0.2	665.6	677.7	102.8	0.2	2.6	1.3	1.1	108.0	784.4	4.8	0.0	4.8
N. of 34°27'	11.9	0.0	0.2	427.0	439.2	7.8	0.2	0.1	0.1	1.1	9.2	448.3	4.8	0.0	4.8
S. of 34°27'	-	-	-	238.6	238.6	95.0	-	2.5	1.2	-	98.7	336.1	-	-	-
Longspine Thornyhead - coastwide	-	-	-	1,896.7	1,896.7	12.0	0.0	2.3	0.2	-	14.4	1,910.9	-	-	-
N. of 34°27'	-	-	-	1,896.3	1,896.3	1.9	0.0	0.2	0.1	-	2.2	1,898.4	-	-	-
S. of 34°27'	-	-	-	0.5	0.5	10.0	-	2.1	0.1	-	12.2	12.5	-	-	-
Other thornyheads	-	-	-	52.2	52.2	5.3	-	0.8	0.1	-	6.1	58.2	-	-	-
COWCOD	-	-	-	0.0	0.0	0.0	-	-	-	0.2	0.3	0.3	-	-	-
DARKBLOTCHED	2.2	0.9	0.0	107.0	110.1	0.2	0.1	0.4	0.6	0.0	1.2	110.8	1.5	0.1	1.6
YELLOWEYE	0.0	-	0.0	0.9	1.0	0.0	0.0	0.0	0.3	7.4	7.8	8.5	2.2	-	2.2
Black Rockfish - coastwide	-	-	-	3.2	3.2	21.9	0.4	194.2	1.7	620.7	838.9	840.4	-	-	-
Black Rockfish (WA)	-	-	-	0.3	0.3	-	-	-	-	176.2	176.2	176.5	-	-	-
Black Rockfish (OR-CA)	-	-	-	2.9	2.9	21.9	0.4	194.2	1.7	444.5	662.7	663.9	-	-	-
Minor Rockfish North	22.4	3.2	1.0	124.2	150.8	57.8	2.2	43.5	1.6	42.8	147.9	297.1	25.7	2.2	27.8
Nearshore Species	-	-	0.0	0.7	0.7	11.5	0.1	37.8	0.0	36.0	85.4	86.0	0.1	-	0.1
Shelf Species	10.3	2.3	0.8	44.0	57.3	3.5	0.2	4.0	0.9	6.6	15.1	71.6	8.2	2.2	10.3
BOCACCIO: N. of Monterrey	0.0	0.2	0.1	5.7	6.0	-	-	-	0.0	1.9	1.9	7.9	0.9	0.4	1.3
Chilipepper Rockfish: Eureka	3.0	1.9	0.5	8.5	13.9	-	-	-	-	0.0	0.0	13.9	0.0	-	0.0
Redstripe Rockfish	3.3	0.0	0.0	2.6	5.9	-	-	-	0.0	0.0	0.0	5.9	0.4	1.7	2.1
Silvergrey Rockfish	0.0	-	0.1	2.3	2.4	0.1	-	-	0.3	0.1	0.5	2.6	0.2	0.0	0.3
Other Northern Shelf Rockfish	4.0	0.2	0.1	24.9	29.1	3.4	0.2	4.0	0.6	4.5	12.7	41.3	6.6	0.0	6.7
Slope Species	12.1	0.9	0.2	79.5	92.8	42.9	1.9	1.7	0.7	0.1	47.4	139.5	17.4	0.0	17.4
Bank Rockfish	-	0.1	0.0	0.0	0.1	-	-	-	-	-	-	0.1	-	-	-
Sharpchin Rockfish, north	0.1	0.0	0.0	5.4	5.6	-	-	-	0.0	-	0.0	5.6	0.2	0.0	0.2
Splitnose Rockfish: N. of Monterrey	11.1	0.3	0.0	7.2	18.6	0.0	-	-	0.0	-	0.0	18.6	0.3	-	0.3
Yellowmouth Rockfish	0.6	-	-	2.1	2.7	-	-	-	-	0.1	0.1	2.8	-	-	-
Other Northern Slope Rockfish	0.3	0.5	0.2	64.8	65.8	42.9	1.9	1.7	0.7	0.0	47.3	112.3	17.0	-	17.0
Minor Rockfish South	0.0	0.0	0.0	391.8	391.8	57.1	0.0	172.5	4.3	868.5	1,102.5	1,490.0	0.0	0.0	0.0
Nearshore Species	-	-	-	0.8	0.8	7.8	-	101.5	1.8	532.8	643.8	642.9	-	-	-
Shelf Species	0.0	0.0	0.0	14.6	14.6	4.6	0.0	12.1	1.9	332.1	350.6	363.4	0.0	0.0	0.0
Redstripe Rockfish	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-
Yellowtail Rockfish	-	-	-	1.9	1.9	0.0	-	0.4	0.1	24.6	25.2	27.0	-	-	-
Other Southern Shelf Rockfish	-	-	-	12.7	12.7	4.5	-	11.7	1.7	307.4	325.4	336.4	-	-	-
Slope Species	0.0	0.0	0.0	376.4	376.4	44.8	0.0	58.9	0.7	3.7	108.0	483.7	0.0	0.0	0.0
Bank Rockfish	-	-	-	275.6	275.6	2.0	-	19.1	0.0	0.1	21.2	296.8	-	-	-
Blackgill Rockfish	-	-	-	63.2	63.2	38.9	-	38.4	0.5	3.0	80.8	143.5	-	-	-
Sharpchin Rockfish	-	-	-	0.3	0.3	-	-	-	-	-	-	0.3	-	-	-
Yellowmouth Rockfish	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-
Other Southern Slope Rockfish	-	-	-	37.3	37.3	3.9	-	1.4	0.2	0.6	6.0	43.1	-	-	-
California scorpionfish	-	-	-	0.0	0.0	0.6	-	9.5	3.3	56.4	69.8	66.5	-	-	-
Cabezon (off CA only)	-	-	-	0.0	0.0	1.7	-	46.2	2.5	30.1	80.5	78.1	-	-	-
Dover Sole	0.6	0.0	1.6	6,317.7	6,319.9	1.0	0.7	0.3	17.1	-	19.1	6,321.8	16.1	-	16.1
English Sole	0.1	0.0	1.7	1,124.8	1,126.7	-	-	0.1	9.4	0.0	9.5	1,126.7	40.2	-	40.2
Petrale Sole (coastwide)	-	-	0.6	1,783.1	1,759.7	0.7	0.0	0.2	14.2	4.0	19.1	1,764.7	20.6	-	20.6
N of 40°10'	-	-	0.6	1,561.7	1,535.3	0.7	0.0	-	13.1	0.0	13.8	1,536.1	20.6	-	20.6
S of 40°10'	-	-	-	221.4	224.4	-	-	0.2	1.1	4.0	5.3	228.6	-	-	-
Arrowtooth Flounder	2.2	0.0	0.7	2,075.3	2,078.1	5.1	0.3	0.2	1.3	0.1	7.0	2,083.7	3.2	3.5	6.7
Starry Flounder	-	-	0.0	18.4	18.4	0.2	-	0.1	11.2	14.8	26.3	33.5	0.1	-	0.1
Other Flatfish	11.6	0.2	0.3	1,621.7	1,633.8	0.1	-	7.1	40.9	39.3	87.3	1,680.2	19.9	0.0	19.9
Kelp Greenling	-	-	-	0.0	0.0	6.2	0.2	54.9	0.3	150.4	212.0	211.8	-	-	-
Spiny Dogfish	35.9	1.2	11.4	447.0	495.5	403.7	0.0	4.4	18.3	13.9	440.3	917.4	1.2	262.2	263.4
Other Fish	-	-	-	182.9	182.9	60.5	6.8	100.5	18.1	129.8	315.8	480.5	-	-	-
SECTOR TOTALS	36,580	26,624	45,702	20,455	129,338	1,793	372	1,099	406	2,743	6,414	135,346.0	918	22,286	23,203

Table 1. Landings or Deliveries of PFMC-managed Groundfish by Westcoast Fishery Sectors (mt): 1995 to 2005

2003

Stock or Complex	Non-Treaty Sectors: LE Trawl Sectors: At-Sea Catcher Processors	At Sea Motherships	Shoreside Whiting LE Trawl	Shoreside Non-whiting LE Trawl	LE Trawl Total	Non-Treaty Sectors: Non-LE Trawl Sectors: Shoreside LE Line Gear	Shoreside LE Pot Gear	Shoreside Directed OA	Shoreside Incidental OA	Recreational	Non-LE Trawl Totals	Non-Treaty Dir. Total	Treaty Sectors: Shoreside	At-Sea	Treaty Totals
Lingcod - coastwide	0.4	0.1	0.4	60.4	61.2	7.2	1.2	64.9	10.8	1,206.7	1,290.8	1,341.3	22.3	-	22.3
N. of 42° (OR & WA)	0.4	0.1	0.4	48.2	49.1	5.2	0.9	31.1	6.5	207.5	251.1	293.7	22.3	-	22.3
S. of 42° (CA)	-	-	0.0	12.2	12.2	2.0	0.3	33.8	4.3	999.2	1,039.7	1,047.5	-	-	-
Pacific Cod	0.2	-	0.0	1,040.7	1,041.0	2.3	0.0	0.5	7.0	11.8	21.6	1,055.6	213.8	0.5	214.4
Pacific Whiting (Coastwide)	41,214.4	26,021.5	51,182.3	30.2	118,448.4	0.7	-	-	43.1	0.1	43.9	118,449.2	4,078.9	19,376.1	23,454.9
Sablefish (Coastwide)	16.6	0.3	40.3	2,324.0	2,381.2	1,303.7	602.8	585.5	36.1	8.0	2,536.1	4,881.2	602.4	0.1	602.6
N. of 36° (Monterey north)	16.6	0.3	40.3	2,246.2	2,303.4	1,197.1	602.8	557.9	29.0	8.0	2,394.8	4,669.2	602.4	0.1	602.6
S. of 36° (Conception area)	-	-	-	77.7	77.7	106.6	-	27.7	7.0	-	141.3	212.0	-	-	-
PACIFIC OCEAN PERCH	5.0	0.1	0.3	131.6	137.0	0.3	0.0	0.0	0.0	-	0.4	137.4	0.1	1.1	1.2
Shortbelly Rockfish	0.5	0.0	0.0	0.2	0.8	-	-	0.3	-	-	0.3	1.1	-	-	-
WIDOW ROCKFISH	11.6	0.7	12.5	4.0	28.8	0.0	-	1.1	0.2	1.3	2.6	31.2	9.3	2.1	11.5
CANARY ROCKFISH	0.2	0.1	0.1	7.6	8.0	0.1	0.0	-	0.2	29.7	30.0	37.7	1.5	0.7	2.1
Chilipepper Rockfish	-	-	-	7.4	7.4	0.1	-	0.1	0.1	0.0	0.3	7.6	-	-	-
BOCACCIO	-	-	-	0.1	0.1	0.2	-	0.2	0.0	10.8	11.2	11.3	-	-	-
Splitnose Rockfish	-	-	-	150.6	150.6	0.4	-	0.1	0.0	0.1	0.7	151.3	-	-	-
Yellowtail Rockfish	1.7	0.6	43.9	100.4	146.7	0.5	0.0	1.3	4.7	23.0	29.5	171.5	273.2	34.0	307.1
Shortspine Thornyhead - coastwide	15.5	0.2	0.1	665.0	680.7	155.2	0.3	2.1	0.6	0.1	158.4	838.5	5.8	-	5.8
N. of 34°27'	15.5	0.2	0.1	462.2	477.9	6.7	0.3	0.0	0.2	0.1	7.2	485.0	5.8	-	5.8
S. of 34°27'	-	-	-	202.8	202.8	148.6	-	2.1	0.5	-	151.2	353.5	-	-	-
Longspine Thornyhead - coastwide	-	-	0.0	1,552.1	1,552.1	19.3	0.0	0.3	0.0	-	19.7	1,571.7	0.1	-	0.1
N. of 34°27'	-	-	0.0	1,552.1	1,552.1	8.8	0.0	0.1	0.0	-	9.0	1,561.1	0.1	-	0.1
S. of 34°27'	-	-	-	-	-	10.5	-	0.2	0.0	-	10.7	10.7	-	-	-
Other thornyheads	-	-	-	37.2	37.2	3.4	-	0.3	0.2	-	3.9	40.9	-	-	-
COWCOD	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-
DARKBLOTCHED	4.2	0.1	0.3	79.2	83.8	0.2	0.0	0.3	0.0	-	0.5	84.3	0.0	0.0	0.0
YELLOWEYE	0.0	-	-	1.0	1.0	0.1	0.0	0.0	0.2	10.2	10.4	11.3	0.3	-	0.3
Black Rockfish - coastwide	-	-	-	0.9	0.9	16.7	0.1	156.2	0.9	1,176.9	1,350.8	1,350.8	-	-	-
Black Rockfish (WA)	-	-	-	-	-	-	-	-	-	175.9	175.9	175.9	-	-	-
Black Rockfish (OR-CA)	-	-	-	0.9	0.9	16.7	0.1	156.2	0.9	1,001.1	1,174.9	1,174.9	-	-	-
Minor Rockfish North	24.3	1.7	10.4	148.9	185.2	31.1	3.9	29.3	0.9	48.5	113.6	298.0	22.1	0.5	22.5
Nearshore Species	-	-	-	0.2	0.2	2.7	0.0	23.5	0.2	41.7	68.1	68.2	0.0	-	0.0
Shelf Species	8.2	1.1	9.9	18.9	38.0	4.5	0.0	3.5	0.4	6.7	15.3	52.8	2.2	0.5	2.6
BOCACCIO: N. of Monterrey	0.1	-	-	7.5	7.6	-	-	0.0	0.0	1.3	1.3	8.9	0.2	0.2	0.4
Chilipepper Rockfish: Eureka	0.1	1.1	9.5	0.6	11.3	-	-	-	-	0.0	0.0	11.3	-	-	-
Redstripe Rockfish	5.0	0.0	-	0.7	5.7	-	-	-	0.0	0.1	0.1	5.8	0.9	0.2	1.1
Silvergrey Rockfish	0.0	0.0	-	1.8	1.8	-	-	-	-	0.1	0.1	1.9	-	0.0	0.0
Other Northern Shelf Rockfish	3.0	0.0	0.4	8.3	11.6	4.5	0.0	3.5	0.4	5.3	13.7	25.0	1.1	-	1.1
Slope Species	16.1	0.6	0.5	129.7	147.0	23.8	3.8	2.4	0.2	0.0	30.2	176.9	19.9	0.0	19.9
Bank Rockfish	-	-	-	0.0	0.0	-	-	-	-	-	-	0.0	-	-	-
Sharpchin Rockfish, north	2.4	0.1	-	3.6	6.1	-	-	-	-	-	-	6.1	1.1	-	1.1
Splitnose Rockfish: N. of Monterrey	11.6	0.3	0.0	5.5	17.4	0.0	-	0.0	-	-	0.0	17.4	-	-	-
Yellowmouth Rockfish	0.0	0.0	-	3.2	3.2	-	-	-	-	-	-	3.2	-	-	-
Other Northern Slope Rockfish	2.2	0.2	0.5	117.4	120.3	23.8	3.8	2.4	0.2	0.0	30.1	150.2	18.8	-	18.8
Minor Rockfish South	0.0	0.0	0.0	189.6	189.6	81.5	0.0	153.8	5.3	1,006.6	1,247.2	1,431.5	0.0	0.0	0.0
Nearshore Species	-	-	-	0.4	0.4	1.5	-	64.0	1.6	639.2	706.3	705.1	-	-	-
Shelf Species	0.0	0.0	0.0	2.7	2.7	1.8	0.0	7.0	2.6	365.3	376.8	376.9	0.0	0.0	0.0
Redstripe Rockfish	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-
Yellowtail Rockfish	-	-	-	0.4	0.4	-	-	0.4	0.6	18.9	20.0	19.7	-	-	-
Other Southern Shelf Rockfish	-	-	-	2.4	2.4	1.8	-	6.6	2.0	346.4	356.8	357.2	-	-	-
Slope Species	0.0	0.0	0.0	186.5	186.5	78.2	0.0	82.8	1.1	2.1	164.1	349.5	0.0	0.0	0.0
Bank Rockfish	-	-	-	86.3	86.3	0.1	-	15.8	0.0	1.0	16.9	103.2	-	-	-
Blackgill Rockfish	-	-	-	54.7	54.7	71.6	-	62.6	0.7	-	134.9	188.9	-	-	-
Sharpchin Rockfish	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-
Yellowmouth Rockfish	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-
Other Southern Slope Rockfish	-	-	-	45.5	45.5	6.4	-	4.4	0.4	1.1	12.3	57.5	-	-	-
California scorpionfish	-	-	-	-	-	-	-	2.2	2.2	89.4	93.8	91.6	-	-	-
Cabezon (off CA only)	-	-	-	-	-	0.1	-	37.8	1.9	96.1	135.9	134.0	-	-	-
Dover Sole	0.9	0.0	0.0	7,458.0	7,458.9	0.8	1.3	0.5	13.0	0.0	15.4	7,461.4	32.9	-	32.9
English Sole	0.0	0.0	0.4	853.9	854.3	-	-	0.0	18.9	0.0	18.9	854.3	67.7	-	67.7
Petrale Sole (coastwide)	0.0	-	0.0	1,940.2	1,903.1	0.5	-	0.1	52.3	0.2	53.1	1,903.9	84.2	-	84.2
N of 40°10'	0.0	-	0.0	1,692.7	1,676.3	0.5	-	0.1	51.1	0.1	51.9	1,677.1	84.2	-	84.2
S of 40°10'	-	-	-	247.5	226.8	-	-	-	1.2	0.1	1.3	226.9	-	-	-
Arrowtooth Flounder	2.8	0.0	0.2	2,304.8	2,307.8	3.6	0.1	0.1	14.5	0.1	18.4	2,311.7	22.6	1.4	24.0
Starry Flounder	-	-	0.0	28.9	28.9	0.0	-	0.1	14.1	16.0	30.1	44.9	0.0	-	0.0
Other Flatfish	6.7	0.2	0.0	1,470.7	1,477.6	0.3	0.0	2.2	38.8	53.3	94.6	1,533.3	11.0	0.0	11.0
Kelp Greenling	-	-	-	0.0	0.0	3.2	0.0	21.9	0.1	88.8	114.0	114.0	-	-	-
Spiny Dogfish	10.1	1.0	4.2	197.0	212.4	192.9	-	52.8	0.1	18.0	263.8	476.1	3.8	257.5	261.3
Other Fish	0.0	0.1	-	223.7	223.9	47.7	1.0	104.7	14.9	75.7	244.1	453.0	-	0.4	0.4
SECTOR TOTALS	41,315	26,027	51,296	21,008	139,609	1,872	611	1,219	281	3,971	7,954	147,281.6	5,452	19,674	25,126

Table 1. Landings or Deliveries of PFMC-managed Groundfish by Westcoast Fishery Sectors (mt): 1995 to 2005

2004

Stock or Complex	Non-Treaty Sectors: LE Trawl Sectors: At-Sea Catcher-Processors	At Sea Motherships	Shoreside Whiting LE Trawl	Shoreside Non-whiting LE Trawl	LE Trawl Total	Non-LE Trawl Sectors: Shoreside LE Line Gear	Shoreside LE Pot Gear	Shoreside Directed OA	Shoreside Incidental OA	Recreational	Non-LE Trawl Totals	Non-Treaty Dir. Total	Treaty Sectors: Shoreside	At-Sea	Treaty Totals
Lingcod - coastwide	0.4	0.8	4.1	58.0	63.3	9.0	2.8	73.2	8.9	304.2	398.1	452.6	23.8	-	23.8
N. of 42° (OR & WA)	0.4	0.8	4.1	42.3	47.6	6.3	2.0	33.3	5.3	174.6	221.5	263.8	23.8	-	23.8
S. of 42° (CA)	-	-	0.1	15.7	15.7	2.7	0.7	39.9	3.6	129.7	176.6	188.7	-	-	-
Pacific Cod	0.0	-	1.1	1,102.1	1,103.2	4.7	0.0	0.4	0.2	12.6	18.0	1,121.0	307.7	0.0	307.7
Pacific Whiting (Coastwide)	73,174.7	24,102.0	92,879.2	14.6	190,170.6	0.3	-	-	0.1	1.0	1.4	190,171.9	6,848.3	21,590.3	28,438.6
Sablefish (Coastwide)	19.4	9.4	130.9	2,444.6	2,604.2	1,480.4	625.4	515.1	33.0	2.8	2,656.5	5,227.8	712.5	0.1	712.6
N. of 36° (Monterey north)	19.4	9.4	130.9	2,364.4	2,524.1	1,403.6	625.4	493.5	28.1	2.8	2,553.3	5,049.3	712.5	0.1	712.6
S. of 36° (Conception area)	-	-	-	80.2	80.2	76.8	-	21.6	4.8	0.0	103.2	178.6	-	-	-
PACIFIC OCEAN PERCH	1.0	0.1	1.0	130.2	132.2	0.0	0.0	0.0	-	-	0.1	132.3	3.9	0.0	3.9
Shortbelly Rockfish	0.0	0.0	0.0	0.1	0.1	-	-	0.0	-	-	0.0	0.1	-	-	-
WIDOW ROCKFISH	8.2	11.4	34.3	8.8	62.7	0.1	0.0	0.1	0.1	15.3	15.6	78.2	21.5	1.5	22.9
CANARY ROCKFISH	0.5	4.1	1.2	6.5	12.3	0.0	-	0.0	0.1	16.4	16.5	28.7	3.1	0.6	3.7
Chilipepper Rockfish	-	-	-	39.2	39.2	2.3	-	1.3	0.6	6.0	10.1	48.7	-	-	-
BOCACCIO	-	-	-	6.1	6.1	2.1	-	3.8	0.1	62.5	68.5	74.4	-	-	-
Splitnose Rockfish	-	-	-	163.7	163.7	0.0	-	0.1	0.0	-	0.1	163.8	-	-	-
Yellowtail Rockfish	6.3	12.2	127.5	92.9	238.8	1.2	-	2.2	8.0	35.8	47.2	278.0	351.8	28.0	379.8
Shortspine Thornyhead - coastwide	5.3	0.0	0.5	663.3	669.1	133.3	0.4	0.5	0.3	0.0	134.5	803.3	6.4	-	6.4
N. of 34°27'	5.3	0.0	0.5	438.0	443.8	5.4	0.4	0.3	0.0	-	6.1	449.9	6.4	-	6.4
S. of 34°27'	-	-	-	225.3	225.3	127.9	-	0.2	0.3	0.0	128.4	353.4	-	-	-
Longspine Thornyhead - coastwide	0.0	-	0.0	722.2	722.2	8.5	-	0.1	0.3	-	8.8	730.7	0.0	-	0.0
N. of 34°27'	0.0	-	0.0	722.2	722.2	0.9	-	0.0	0.3	-	1.2	723.1	0.0	-	0.0
S. of 34°27'	-	-	-	-	-	7.6	-	0.0	0.0	-	7.6	7.6	-	-	-
Other thornyheads	-	-	-	0.8	0.8	24.2	-	0.9	0.0	-	25.1	25.8	-	-	-
COWCOD	-	-	-	-	-	-	-	-	-	0.5	0.5	0.5	-	-	-
DARKBLOTCHED	4.4	3.0	1.9	186.6	195.9	0.2	0.0	0.5	0.0	-	0.7	196.7	0.1	-	0.1
YELLOWEYE	-	0.0	0.0	0.3	0.3	0.0	0.0	-	0.5	7.0	7.6	7.4	0.8	-	0.8
Black Rockfish - coastwide	-	-	-	2.4	2.4	12.3	0.0	165.7	1.5	671.0	850.6	851.5	-	-	-
Black Rockfish (WA)	-	-	-	-	-	-	-	-	-	214.8	214.8	214.8	-	-	-
Black Rockfish (OR-CA)	-	-	-	2.4	2.4	12.3	0.0	165.7	1.5	456.2	635.8	636.7	-	-	-
Minor Rockfish North	26.3	1.7	26.2	215.9	270.0	37.8	3.5	27.7	0.7	57.7	127.3	396.6	27.2	0.2	27.4
Nearshore Species	-	-	-	1.2	1.2	1.7	-	21.9	0.1	49.3	72.9	74.1	0.0	-	0.0
Shelf Species	3.2	1.4	22.3	11.7	38.7	3.4	0.2	2.5	0.5	8.3	14.9	53.0	3.9	0.2	4.0
BOCACCIO: N. of Monterrey	0.1	0.1	0.0	3.9	4.1	-	-	-	-	0.4	0.4	4.5	0.2	0.1	0.2
Chilipepper Rockfish: Eureka	1.1	0.9	20.6	1.7	24.3	-	-	-	0.0	0.0	0.0	24.3	-	-	-
Redstripe Rockfish	2.0	0.4	-	0.2	2.6	-	-	-	0.0	0.0	0.0	2.6	0.0	0.1	0.1
Silvergrey Rockfish	0.0	0.1	-	0.6	0.8	0.1	-	0.0	-	0.0	0.1	0.9	0.0	0.0	0.0
Other Northern Shelf Rockfish	0.0	0.0	1.7	5.2	7.0	3.3	0.2	2.4	0.5	7.9	14.3	20.8	3.7	0.0	3.7
Slope Species	23.1	0.2	3.9	202.9	230.1	32.7	3.3	3.3	0.2	0.0	39.5	269.5	23.4	0.0	23.4
Bank Rockfish	0.1	-	0.0	4.7	4.8	-	-	-	-	-	-	4.8	-	-	-
Sharpchin Rockfish, north	0.3	-	0.0	22.0	22.3	-	-	-	-	-	-	22.3	0.0	-	0.0
Splitnose Rockfish: N. of Monterrey	8.4	0.2	0.6	24.6	33.8	-	-	0.0	0.0	-	0.0	33.8	0.0	-	0.0
Yellowmouth Rockfish	0.0	-	-	15.6	15.6	-	0.0	-	-	-	0.0	15.6	0.0	-	0.0
Other Northern Slope Rockfish	14.3	0.0	3.3	136.0	153.6	32.7	3.3	3.3	0.1	0.0	39.5	193.0	23.3	-	23.3
Minor Rockfish South	0.0	0.0	0.0	239.9	239.9	56.7	1.0	154.3	3.0	625.7	840.7	1,077.6	0.0	0.0	0.0
Nearshore Species	-	-	-	0.1	0.1	1.8	-	82.3	1.1	340.7	425.9	425.0	-	-	-
Shelf Species	0.0	0.0	0.0	1.8	1.8	6.4	0.0	20.9	1.4	284.6	313.3	313.7	0.0	0.0	0.0
Redstripe Rockfish	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-
Yellowtail Rockfish	-	-	-	0.2	0.2	0.0	-	1.1	0.2	12.1	13.4	13.4	-	-	-
Other Southern Shelf Rockfish	-	-	-	1.6	1.6	6.4	-	19.8	1.2	272.4	299.9	300.2	-	-	-
Slope Species	0.0	0.0	0.0	238.0	238.0	48.4	1.0	51.1	0.5	0.5	101.5	338.9	0.0	0.0	0.0
Bank Rockfish	-	-	-	109.5	109.5	0.1	-	20.3	-	0.5	20.8	130.3	-	-	-
Blackgill Rockfish	-	-	-	79.7	79.7	42.7	-	27.3	0.3	0.0	70.4	149.8	-	-	-
Sharpchin Rockfish	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-
Yellowmouth Rockfish	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-
Other Southern Slope Rockfish	-	-	-	48.7	48.7	5.6	1.0	3.5	0.2	-	10.3	58.8	-	-	-
California scorpionfish	-	-	-	-	-	0.0	-	1.6	1.9	43.9	47.4	45.5	-	-	-
Cabezon (off CA only)	-	-	-	-	-	0.4	-	47.3	1.8	39.8	89.2	87.4	-	-	-
Dover Sole	0.1	0.0	0.0	7,127.9	7,128.1	1.5	0.7	0.3	3.7	0.0	6.2	7,130.6	83.6	-	83.6
English Sole	0.0	0.0	0.7	886.6	887.3	-	-	0.2	5.9	-	6.1	887.5	81.1	-	81.1
Petrale Sole (coastwide)	-	-	0.3	1,904.0	1,860.6	1.1	0.0	0.1	5.2	0.5	6.8	1,862.2	84.1	-	84.1
N of 40°10'	-	-	0.3	1,638.6	1,596.4	1.1	0.0	0.1	3.8	0.2	5.1	1,597.7	84.1	-	84.1
S of 40°10'	-	-	-	265.4	264.2	-	-	-	1.4	0.3	1.7	264.5	-	-	-
Arrowtooth Flounder	1.1	0.0	0.6	2,386.3	2,388.0	1.0	0.3	0.1	0.8	0.0	2.3	2,389.5	81.9	1.8	83.7
Starry Flounder	-	-	0.0	118.3	118.3	-	-	0.1	21.3	5.5	26.9	123.8	2.3	-	2.3
Other Flatfish	1.7	0.2	0.4	1,269.3	1,271.5	0.4	-	3.8	41.0	45.5	90.7	1,321.3	17.3	0.0	17.3
Kelp Greenling	-	-	-	-	-	2.6	-	22.7	0.0	37.5	62.9	62.8	-	-	-
Spiny Dogfish	331.6	9.8	30.3	119.2	490.9	131.4	-	91.4	0.1	2.4	225.3	716.1	40.1	273.9	314.0
Other Fish	0.7	0.3	0.2	109.6	110.7	23.9	-	101.4	11.2	80.8	217.3	316.9	-	0.4	0.4
SECTOR TOTALS	73,582	24,155	93,240	20,019	210,953	1,935	634	1,215	150	2,074	6,009	216,811.2	8,698	21,897	30,594

Table 1. Landings or Deliveries of PFMC-managed Groundfish by Westcoast Fishery Sectors (mt): 1995 to 2005

2005

	Non-Treaty Sectors												Treaty Sectors		
	LE Trawl Sectors					Non-LE Trawl Sectors									
Stock or Complex	**At-Sea Catcher-Processors**	**At Sea Motherships**	**Shoreside Whiting LE Trawl**	**Shoreside Non-whiting LE Trawl**	**LE Trawl Total**	**Shoreside LE Line Gear**	**Shoreside LE Pot Gear**	**Shoreside Directed OA**	**Shoreside Incidental OA**	**Recreational**	**Non-LE Trawl Totals**	**Non-Treaty Dir. Total**	**Shoreside**	**At-Sea**	**Treaty Totals**
Lingcod - coastwide	0.4	2.0	5.9	77.6	85.9	11.8	2.9	70.7	3.7	504.1	593.1	675.4	29.9	1.0	30.9
N. of 42° (OR & WA)	0.4	2.0	5.9	57.3	65.6	9.0	2.2	33.5	3.1	204.3	252.2	314.7	29.9	1.0	30.9
S. of 42° (CA)	-	-	0.1	20.3	20.3	2.7	0.7	37.1	0.5	299.8	340.9	360.7	-	-	-
Pacific Cod	-	0.0	1.2	730.8	732.1	2.0	0.0	0.6	0.1	7.7	10.3	742.3	123.7	0.0	123.8
Pacific Whiting (Coastwide)	78,889.5	48,475.6	97,557.9	11.1	224,934.2	0.5	-	-	7.6	0.2	8.3	224,934.9	11,766.7	23,581.9	35,348.6
Sablefish (Coastwide)	13.0	2.1	22.4	2,363.3	2,400.9	1,617.7	616.5	922.8	2.2	1.4	3,160.6	5,559.3	699.8	0.0	699.8
N. of 36° (Monterey north)	13.0	2.1	22.4	2,308.4	2,346.0	1,545.0	616.5	905.9	2.0	1.3	3,070.7	5,414.7	699.8	0.0	699.8
S. of 36° (Conception area)	-	-	-	54.9	54.9	72.7	-	16.9	0.2	0.1	89.9	144.6	-	-	-
PACIFIC OCEAN PERCH	0.8	0.9	0.5	59.1	61.3	0.2	0.0	0.2	0.0	-	0.3	61.6	3.4	0.1	3.5
Shortbelly Rockfish	0.0	2.7	-	-	2.7	-	-	-	-	-	-	2.7	-	-	-
WIDOW ROCKFISH	43.1	35.5	76.8	3.0	158.5	0.1	0.0	0.3	0.9	3.2	4.4	162.0	28.6	1.4	30.0
CANARY ROCKFISH	0.3	0.7	2.2	5.6	8.8	0.0	-	0.1	0.0	9.1	9.2	18.1	4.3	0.4	4.7
Chilipepper Rockfish	-	-	0.1	30.2	30.3	2.9	-	0.5	0.1	3.6	7.1	37.3	-	-	-
BOCACCIO	-	-	0.0	3.7	3.7	1.6	-	1.4	0.3	38.1	41.4	44.9	-	-	-
Splitnose Rockfish	-	-	0.0	86.3	86.3	0.7	-	0.1	-	-	0.7	87.0	-	-	-
Yellowtail Rockfish	47.4	25.4	173.1	30.3	276.3	0.5	0.0	2.3	7.0	33.8	43.6	312.9	539.1	39.3	578.4
Shortspine Thornyhead - coastwide	6.3	0.7	0.3	503.9	511.2	141.7	0.3	0.5	0.2	-	142.8	653.8	10.8	-	10.8
N. of 34°27'	6.3	0.7	0.3	359.6	366.9	6.8	0.3	0.2	0.0	-	7.3	374.3	10.8	-	10.8
S. of 34°27'	-	-	-	144.3	144.3	134.9	-	0.3	0.2	-	135.4	279.5	-	-	-
Longspine Thornyhead - coastwide	-	-	0.0	631.3	631.3	15.0	-	0.0	-	-	15.0	646.3	0.2	-	0.2
N. of 34°27'	-	-	0.0	631.3	631.3	7.1	-	0.0	-	-	7.1	638.4	0.2	-	0.2
S. of 34°27'	-	-	-	-	-	7.9	-	-	-	-	7.9	7.9	-	-	-
Other thornyheads	-	-	-	7.9	7.9	4.7	-	0.6	-	-	5.2	13.2	-	-	-
COWCOD	-	-	-	-	-	-	-	0.0	-	0.1	0.1	0.1	-	-	-
DARKBLOTCHED	5.9	5.1	5.5	77.1	93.7	2.0	0.0	2.2	0.0	-	4.2	97.9	0.1	0.0	0.1
YELLOWEYE	-	-	0.0	0.3	0.3	-	-	0.0	-	10.9	11.0	11.2	0.8	-	0.8
Black Rockfish - coastwide	-	0.0	-	0.5	0.5	14.0	-	155.5	1.9	784.8	956.2	954.8	-	-	-
Black Rockfish (WA)	-	-	-	-	-	-	-	-	-	271.3	271.3	271.3	-	-	-
Black Rockfish (OR-CA)	-	0.0	-	0.5	0.5	14.0	-	155.5	1.9	513.4	684.8	683.5	-	-	-
Minor Rockfish North	40.4	17.1	31.0	108.3	196.9	56.4	3.8	45.9	0.4	85.9	192.4	388.9	38.3	0.4	38.6
Nearshore Species	-	-	0.0	0.2	0.2	2.5	-	31.4	0.1	73.2	107.1	107.3	0.2	-	0.2
Shelf Species	0.6	5.5	27.1	9.3	42.4	4.0	0.0	3.7	0.3	12.7	20.7	62.8	8.8	0.4	9.1
BOCACCIO: N. of Monterrey	0.1	0.2	0.0	0.5	0.8	0.0	-	0.0	-	0.2	0.2	1.0	0.5	0.3	0.8
Chilipepper Rockfish: Eureka	0.3	0.9	25.6	1.8	28.6	-	-	-	-	0.0	0.0	28.6	-	-	-
Redstripe Rockfish	0.1	4.4	-	0.1	4.6	-	-	-	-	0.1	0.1	4.6	1.7	0.1	1.8
Silvergrey Rockfish	0.0	0.0	-	0.4	0.4	-	-	-	-	0.1	0.1	0.5	0.0	0.0	0.0
Other Northern Shelf Rockfish	0.1	0.0	1.5	6.5	8.1	4.0	0.0	3.7	0.3	12.4	20.4	28.1	6.5	0.0	6.5
Slope Species	39.9	11.6	3.9	98.8	154.2	49.9	3.8	10.8	0.0	0.0	64.6	218.8	29.3	0.0	29.3
Bank Rockfish	0.0	0.0	-	0.8	0.9	-	-	-	-	-	-	0.9	-	-	-
Sharpchin Rockfish, north	0.0	0.0	-	4.9	5.0	-	-	-	-	-	-	5.0	0.2	-	0.2
Splitnose Rockfish: N. of Monterrey	9.3	5.8	0.6	10.3	25.9	0.0	-	0.1	-	-	0.1	26.0	0.0	-	0.0
Yellowmouth Rockfish	-	-	-	1.7	1.7	-	-	-	-	-	-	1.7	-	-	-
Other Northern Slope Rockfish	30.6	5.7	3.4	81.0	120.7	49.9	3.8	10.8	0.0	0.0	64.5	185.2	29.1	-	29.1
Minor Rockfish South	0.0	0.0	0.0	116.7	116.7	35.1	0.0	127.6	1.1	691.1	854.9	970.5	0.0	0.0	0.0
Nearshore Species	-	-	-	0.0	0.0	1.5	-	79.9	0.2	406.7	488.3	488.1	-	-	-
Shelf Species	0.0	0.0	0.0	5.8	5.8	7.5	0.0	18.0	0.7	283.9	310.2	315.2	0.0	0.0	0.0
Redstripe Rockfish	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-
Yellowtail Rockfish	-	-	-	3.9	3.9	0.0	-	0.9	0.2	8.1	9.1	12.8	-	-	-
Other Southern Shelf Rockfish	-	-	-	1.9	1.9	7.4	-	17.2	0.6	275.9	301.0	302.4	-	-	-
Slope Species	0.0	0.0	0.0	110.9	110.9	26.2	0.0	29.7	0.1	0.4	56.4	167.1	0.0	0.0	0.0
Bank Rockfish	-	-	-	24.8	24.8	0.5	-	12.0	0.0	0.4	12.9	37.6	-	-	-
Blackgill Rockfish	-	-	-	51.0	51.0	22.9	-	12.9	0.0	-	35.9	86.9	-	-	-
Sharpchin Rockfish	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-
Yellowmouth Rockfish	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	-
Other Southern Slope Rockfish	-	-	-	35.1	35.1	2.8	-	4.8	0.1	-	7.6	42.7	-	-	-
California scorpionfish	-	-	-	-	-	0.0	-	2.1	0.1	23.0	25.2	25.1	-	-	-
Cabezon (off CA only)	-	-	-	-	-	0.2	-	30.7	0.1	47.7	78.8	78.6	-	-	-
Dover Sole	0.3	0.0	0.0	6,952.2	6,952.6	1.0	1.3	0.3	3.7	0.0	6.4	6,955.3	145.0	-	145.0
English Sole	0.0	0.1	0.0	867.8	867.9	-	-	-	5.2	0.0	5.2	867.9	65.9	-	65.9
Petrale Sole (coastwide)	-	-	0.0	2,753.8	2,753.8	0.3	-	0.0	11.4	0.3	12.1	2,754.5	29.7	-	29.7
N of 40°10'	-	-	0.0	2,381.3	2,381.3	0.3	-	0.0	11.4	0.2	12.0	2,381.8	29.7	-	29.7
S of 40°10'	-	-	-	372.5	372.5	-	-	0.0	0.0	0.1	0.2	372.7	-	-	-
Arrowtooth Flounder	0.8	0.5	0.9	2,120.0	2,122.1	2.3	1.4	0.9	1.7	0.0	6.3	2,126.7	158.2	2.3	160.5
Starry Flounder	-	-	0.0	25.0	25.0	-	-	-	0.3	9.0	9.3	34.1	1.3	-	1.3
Other Flatfish	2.0	1.2	0.2	1,091.0	1,094.4	0.5	-	1.9	0.9	31.8	35.1	1,128.6	46.9	-	46.9
Kelp Greenling	0.0	-	-	-	0.0	1.5	-	21.0	-	30.1	52.6	52.6	-	-	-
Spiny Dogfish	42.2	27.9	95.5	126.0	291.6	229.8	-	10.3	0.7	2.8	243.7	534.6	5.9	284.9	290.8
Other Fish	0.6	1.1	0.0	99.0	100.7	29.0	0.1	97.5	0.3	100.8	227.7	328.1	-	0.5	0.5
SECTOR TOTALS	79,093	48,599	97,974	18,882	244,548	2,171	626	1,496	50	2,420	6,763	251,261.1	13,698	23,912	37,611

Table 2a. Share (%) of Non-Treaty Landings or Deliveries of PFMC-managed Groundfish by Westcoast Fishery Sectors: 1995 to 2005

1995

	Non-Treaty Sectors									
	Trawl Sectors				Non-Trawl Sectors					
Stock or Complex	**At-Sea Catcher-Processors**	**At Sea Motherships**	**Shoreside Whiting LE Trawl**	**Shoreside Non-whiting LE Trawl**	**Shoreside LE Line Gear**	**Shoreside LE Pot Gear**	**Shoreside Directed OA**	**Shoreside Incidental OA**	**Recreational**	**Non-Treaty Total (mt)**
Lingcod - coastwide	0.0%	-	0.0%	57.2%	2.3%	0.0%	14.9%	3.7%	21.9%	**1,868.7**
N. of 42° (OR & WA)	0.0%	-	0.0%	72.9%	0.8%	0.0%	7.5%	5.6%	13.2%	**1,063.0**
S. of 42° (CA)	-	-	-	36.6%	4.1%	0.0%	24.7%	1.3%	33.4%	**805.7**
Pacific Cod	-	0.0%	0.0%	97.8%	0.2%	0.0%	0.2%	1.7%	0.1%	**501.8**
Pacific Whiting (Coastwide)	36.2%	19.5%	44.3%	0.0%	0.0%	-	0.0%	0.0%	0.0%	**169,067.2**
Sablefish (Coastwide)	0.1%	0.0%	0.6%	52.2%	26.9%	10.9%	8.3%	0.8%	0.0%	**7,093.0**
N. of 36° (Monterey north)	0.1%	0.0%	0.6%	51.7%	27.6%	11.5%	7.6%	0.9%	0.0%	**6,767.2**
S. of 36° (Conception area)	-	-	-	63.3%	13.5%	-	22.9%	0.2%	-	**325.8**
PACIFIC OCEAN PERCH	1.5%	3.1%	3.3%	90.9%	0.4%	0.0%	0.2%	0.5%	0.0%	**907.0**
Shortbelly Rockfish	12.3%	10.7%	0.0%	76.4%	0.1%	-	0.5%	-	-	**39.1**
WIDOW ROCKFISH	1.3%	1.4%	3.5%	92.0%	0.1%	0.0%	1.2%	0.3%	0.1%	**6,702.0**
CANARY ROCKFISH	0.0%	0.0%	0.1%	68.8%	6.1%	-	12.7%	1.3%	11.1%	**982.0**
Chilipepper Rockfish	-	-	-	77.9%	0.8%	-	20.2%	0.5%	0.6%	**1,892.5**
BOCACCIO	-	-	-	45.8%	0.6%	-	48.5%	0.5%	4.7%	**712.6**
Splitnose Rockfish	-	-	-	91.9%	0.5%	-	7.5%	0.1%	-	**298.7**
Yellowtail Rockfish	1.6%	9.7%	5.6%	76.9%	0.3%	-	1.1%	4.3%	0.6%	**5,213.1**
Shortspine Thornyhead - coastwide	0.3%	0.0%	0.0%	97.0%	1.7%	0.0%	0.8%	0.2%	-	**1,912.3**
N. of 34°27'	0.4%	0.0%	0.0%	97.3%	1.5%	0.0%	0.4%	0.2%	-	**1,245.9**
S. of 34°27'	-	-	-	96.4%	2.0%	-	1.6%	0.0%	-	**666.3**
Longspine Thornyhead - coastwide	0.0%	0.0%	0.1%	98.9%	0.5%	0.0%	0.5%	0.0%	-	**5,369.6**
N. of 34°27'	0.0%	0.0%	0.1%	98.9%	0.5%	0.0%	0.5%	0.0%	-	**5,369.6**
S. of 34°27'										**-**
Other thornyheads	-	-	-	4.6%	19.8%	-	75.4%	0.2%	-	**102.0**
COWCOD	-	-	-	-	16.6%	-	71.3%	2.7%	9.4%	**18.7**
DARKBLOTCHED	6.4%	0.4%	0.1%	92.3%	0.3%	-	0.3%	0.3%	-	**769.5**
YELLOWEYE	-	0.0%	0.0%	57.3%	11.2%	-	17.4%	0.1%	13.9%	**235.6**
Black Rockfish - coastwide	-	-	0.0%	0.9%	3.4%	-	22.5%	0.1%	73.1%	**998.5**
Black Rockfish (WA)	-	-	0.0%	1.5%	-	-	-	-	98.5%	**216.2**
Black Rockfish (OR-CA)	-	-	0.0%	0.8%	4.3%	-	28.7%	0.1%	66.1%	**782.3**
Minor Rockfish North	2.2%	0.3%	0.1%	61.9%	20.2%	0.1%	8.5%	5.1%	1.5%	**2,701.2**
Nearshore Species	-	0.1%	-	0.9%	13.9%	-	46.9%	0.2%	38.0%	**90.9**
Shelf Species	1.8%	0.2%	0.1%	56.1%	23.1%	0.1%	10.5%	7.6%	0.4%	**1,717.3**
BOCACCIO: N. of Monterrey	0.2%	0.1%	0.0%	87.6%	2.0%	-	7.1%	2.2%	0.8%	**209.4**
Chilipepper Rockfish: Eureka	19.9%	-	0.1%	69.6%	7.6%	-	2.7%	0.1%	0.0%	**142.9**
Redstripe Rockfish	0.6%	1.3%	0.0%	97.8%	0.0%	-	0.0%	0.0%	0.2%	**257.8**
Silvergrey Rockfish	0.0%	0.0%	0.0%	97.5%	0.0%	-	2.3%	0.0%	0.1%	**94.4**
Other Northern Shelf Rockfish	0.0%	0.0%	0.2%	33.2%	37.7%	0.2%	15.8%	12.4%	0.4%	**1,012.8**
Slope Species	3.2%	0.4%	0.0%	79.4%	15.3%	0.0%	0.7%	0.9%	0.0%	**893.1**
Bank Rockfish	-	-	0.0%	95.8%	-	-	4.1%	0.1%	-	**24.1**
Sharpchin Rockfish, north	0.0%	0.0%	0.1%	99.2%	0.4%	-	0.3%	0.0%	-	**226.1**
Splitnose Rockfish: N. of Monterrey	17.9%	0.1%	0.1%	80.8%	0.6%	-	0.5%	0.1%	-	**137.6**
Yellowmouth Rockfish	0.2%	0.0%	0.0%	95.7%	1.6%	-	2.4%	0.0%	-	**111.4**
Other Northern Slope Rockfish	1.0%	0.9%	0.0%	61.9%	33.9%	0.0%	0.3%	2.0%	0.0%	**393.9**
Minor Rockfish South	-	-	-	26.2%	6.1%	0.0%	39.4%	1.0%	27.3%	**2,675.4**
Nearshore Species	-	-	-	1.4%	2.8%	0.0%	43.6%	0.6%	51.7%	**656.5**
Shelf Species	-	-	-	15.3%	6.9%	0.0%	44.2%	1.8%	31.8%	**1,215.8**
Redstripe Rockfish	-	-	-	100.0%	-	-	-	-	-	**0.2**
Yellowtail Rockfish	-	-	-	19.3%	16.4%	-	48.9%	0.5%	15.0%	**222.5**
Other Southern Shelf Rockfish	-	-	-	14.4%	4.7%	0.0%	43.2%	2.1%	35.6%	**993.1**
Slope Species	-	-	-	63.0%	7.8%	0.0%	28.6%	0.2%	0.4%	**803.0**
Bank Rockfish	-	-	-	80.7%	1.0%	-	18.1%	0.1%	0.0%	**383.3**
Blackgill Rockfish	-	-	-	38.2%	16.3%	0.0%	44.5%	0.2%	0.8%	**333.3**
Sharpchin Rockfish	-	-	-	87.4%	2.1%	-	10.5%	-	-	**5.8**
Yellowmouth Rockfish										**-**
Other Southern Slope Rockfish	-	-	-	79.2%	5.5%	0.0%	14.3%	0.9%	0.1%	**80.7**
California scorpionfish	-	-	-	-	2.4%	0.0%	10.3%	11.1%	76.2%	**133.6**
Cabezon (off CA only)	-	-	-	-	1.0%	-	54.7%	1.1%	43.2%	**159.5**
Dover Sole	0.0%	0.0%	0.0%	99.1%	0.0%	0.0%	0.0%	0.8%	-	**10,467.8**
English Sole	0.0%	0.0%	0.0%	98.7%	0.0%	-	0.2%	1.2%	-	**1,121.9**
Petrale Sole (coastwide)	0.0%	0.0%	0.0%	98.5%	0.1%	-	0.4%	0.9%	0.0%	**1,612.3**
N of 40°10'	0.0%	0.0%	0.0%	99.3%	0.0%	-	-	0.7%	0.0%	**1,256.2**
S of 40°10'	-	-	-	95.7%	0.3%	-	1.9%	1.9%	0.2%	**356.1**
Arrowtooth Flounder	0.0%	0.1%	0.0%	99.0%	0.1%	0.0%	0.0%	0.9%	-	**2,329.0**
Starry Flounder	-	-	-	80.1%	0.0%	-	0.3%	13.5%	6.1%	**62.2**
Other Flatfish	0.0%	0.0%	0.0%	97.0%	0.0%	-	0.2%	2.0%	0.7%	**2,437.6**
Kelp Greenling	-	-	-	3.6%	1.4%	-	7.8%	0.1%	87.1%	**42.5**
Spiny Dogfish	25.5%	7.1%	0.0%	62.4%	1.3%	0.0%	0.1%	0.0%	3.5%	**569.7**
Other Fish	-	0.0%	0.0%	69.1%	5.1%	0.0%	6.2%	1.3%	18.2%	**1,227.3**

Table 2a. Share (%) of Non-Treaty Landings or Deliveries of PFMC-managed Groundfish by Westcoast Fishery Sectors: 1995 to 2005

1996

Non-Treaty Sectors

	Trawl Sectors				Non-Trawl Sectors					
Stock or Complex	**At-Sea Catcher-Processors**	**At Sea Motherships**	**Shoreside Whiting LE Trawl**	**Shoreside Non-whiting LE Trawl**	**Shoreside LE Line Gear**	**Shoreside LE Pot Gear**	**Shoreside Directed OA**	**Shoreside Incidental OA**	**Recreational**	**Non-Treaty Total (mt)**
Lingcod - coastwide	0.0%	0.0%	0.0%	58.1%	2.6%	0.0%	11.5%	3.1%	24.6%	**2,072.4**
N. of 42° (OR & WA)	0.0%	0.0%	0.1%	74.2%	0.8%	0.0%	9.0%	3.9%	12.0%	**1,228.6**
S. of 42° (CA)	-	-	0.0%	34.7%	5.2%	-	15.2%	1.9%	43.0%	**843.8**
Pacific Cod	-	0.0%	0.1%	97.4%	0.3%	0.0%	0.1%	1.9%	0.1%	**444.6**
Pacific Whiting (Coastwide)	34.1%	23.1%	42.7%	0.0%	0.0%	-	0.0%	0.0%	0.0%	**193,121.9**
Sablefish (Coastwide)	0.1%	0.0%	0.5%	55.0%	27.6%	7.2%	8.5%	1.1%	0.0%	**7,511.3**
N. of 36° (Monterey north)	0.1%	0.0%	0.5%	54.7%	27.7%	7.5%	8.4%	1.1%	0.0%	**7,169.5**
S. of 36° (Conception area)	-	-	-	62.6%	25.1%	-	12.2%	0.1%	-	**341.8**
PACIFIC OCEAN PERCH	0.4%	0.2%	3.7%	93.7%	1.1%	0.0%	0.1%	0.7%	-	**875.2**
Shortbelly Rockfish	14.4%	-	0.0%	84.2%	0.0%	-	0.1%	1.0%	0.2%	**42.6**
WIDOW ROCKFISH	1.9%	1.9%	9.1%	85.7%	0.1%	0.0%	0.7%	0.2%	0.4%	**6,305.2**
CANARY ROCKFISH	0.0%	0.1%	0.1%	74.0%	5.2%	0.0%	12.0%	2.0%	6.6%	**1,306.0**
Chilipepper Rockfish	-	-	-	80.8%	0.7%	-	16.1%	0.6%	1.9%	**1,728.1**
BOCACCIO	-	-	-	52.4%	1.3%	-	28.3%	0.4%	17.7%	**526.2**
Splitnose Rockfish	-	-	-	98.6%	0.2%	-	1.1%	0.0%	0.0%	**407.3**
Yellowtail Rockfish	4.2%	6.2%	8.5%	73.3%	0.6%	0.0%	1.3%	5.5%	0.6%	**5,674.6**
Shortspine Thornyhead - coastwide	0.1%	-	0.0%	94.0%	4.9%	0.0%	0.9%	0.1%	0.0%	**1,608.0**
N. of 34°27'	0.2%	-	0.0%	97.8%	1.7%	0.0%	0.2%	0.1%	0.0%	**1,106.1**
S. of 34°27'	-	-	-	85.8%	11.8%	-	2.4%	0.0%	-	**501.9**
Longspine Thornyhead - coastwide	-	-	0.0%	97.8%	2.0%	0.0%	0.2%	0.0%	-	**4,857.6**
N. of 34°27'	-	-	0.0%	98.2%	1.6%	0.0%	0.2%	0.0%	-	**4,840.3**
S. of 34°27'	-	-	-	-	98.2%	-	1.8%	-	-	**17.3**
Other thornyheads	-	-	-	39.8%	44.8%	0.0%	15.4%	0.1%	-	**110.5**
COWCOD	-	-	-	0.0%	8.6%	-	64.9%	0.2%	26.3%	**21.5**
DARKBLOTCHED	0.8%	0.1%	0.8%	97.6%	0.2%	-	0.1%	0.3%	0.0%	**739.0**
YELLOWEYE	0.2%	-	0.1%	49.5%	17.5%	-	17.5%	0.4%	14.8%	**203.3**
Black Rockfish - coastwide	-	-	0.0%	1.7%	2.2%	-	21.1%	0.1%	74.9%	**1,037.9**
Black Rockfish (WA)	-	-	-	-	-	-	-	-	100.0%	**234.9**
Black Rockfish (OR-CA)	-	-	0.0%	2.2%	2.8%	-	27.2%	0.1%	67.6%	**803.0**
Minor Rockfish North	0.5%	0.6%	0.8%	64.1%	16.0%	0.1%	7.6%	8.3%	2.0%	**2,670.0**
Nearshore Species	-	-	0.0%	0.0%	12.3%	-	41.2%	0.1%	46.3%	**102.8**
Shelf Species	0.0%	0.1%	1.0%	59.6%	18.9%	0.1%	8.3%	11.7%	0.2%	**1,800.7**
BOCACCIO: N. of Monterrey	0.0%	0.1%	0.4%	80.3%	4.8%	-	12.6%	1.6%	0.2%	**159.4**
Chilipepper Rockfish: Eureka	0.0%	-	0.0%	87.6%	3.5%	-	8.4%	0.4%	-	**117.4**
Redstripe Rockfish	0.1%	0.1%	5.3%	94.1%	0.0%	-	0.3%	0.0%	0.1%	**219.8**
Silvergrey Rockfish	0.0%	-	0.3%	98.7%	0.1%	-	0.1%	0.9%	0.0%	**238.9**
Other Northern Shelf Rockfish	0.0%	0.1%	0.5%	37.5%	30.8%	0.2%	11.1%	19.4%	0.4%	**1,065.2**
Slope Species	1.8%	2.0%	0.4%	83.3%	9.8%	-	1.3%	1.3%	0.1%	**766.5**
Bank Rockfish	-	-	0.0%	96.9%	0.9%	-	2.1%	0.1%	-	**25.0**
Sharpchin Rockfish, north	-	0.0%	0.8%	99.0%	-	-	0.0%	0.2%	-	**206.7**
Splitnose Rockfish: N. of Monterrey	5.9%	16.3%	0.2%	77.5%	-	-	-	0.1%	-	**90.8**
Yellowmouth Rockfish	0.0%	0.1%	0.4%	98.6%	0.7%	-	0.1%	0.1%	-	**112.6**
Other Northern Slope Rockfish	2.5%	0.1%	0.3%	68.8%	22.4%	-	2.9%	2.8%	0.2%	**331.3**
Minor Rockfish South	-	-	-	30.9%	7.7%	0.0%	27.1%	0.9%	33.3%	**3,074.2**
Nearshore Species	-	-	-	2.2%	4.3%	-	34.2%	0.6%	58.7%	**834.6**
Shelf Species	-	-	-	16.9%	6.9%	0.0%	33.0%	1.6%	41.5%	**1,232.4**
Redstripe Rockfish	-	-	-	-	-	-	-	-	100.0%	**0.1**
Yellowtail Rockfish	-	-	-	33.5%	3.9%	-	17.0%	0.9%	44.7%	**214.8**
Other Southern Shelf Rockfish	-	-	-	13.4%	7.6%	0.0%	36.3%	1.7%	40.9%	**1,017.5**
Slope Species	-	-	-	71.9%	11.4%	0.0%	14.1%	0.3%	2.2%	**1,007.2**
Bank Rockfish	-	-	-	89.9%	0.2%	-	5.9%	0.1%	3.9%	**554.6**
Blackgill Rockfish	-	-	-	41.8%	31.0%	0.1%	27.1%	0.0%	-	**362.5**
Sharpchin Rockfish	-	-	-	99.3%	0.1%	-	0.6%	0.0%	-	**20.4**
Yellowmouth Rockfish	-	-	-	80.9%	-	-	19.1%	-	-	**0.0**
Other Southern Slope Rockfish	-	-	-	77.5%	2.9%	-	16.3%	3.0%	0.3%	**69.7**
California scorpionfish	-	-	-	-	1.9%	-	6.3%	5.0%	86.8%	**191.9**
Cabezon (off CA only)	-	-	-	0.0%	0.3%	-	55.1%	1.8%	42.8%	**198.2**
Dover Sole	0.0%	-	0.0%	99.1%	0.0%	0.0%	0.0%	0.8%	-	**12,267.6**
English Sole	0.0%	0.0%	0.0%	97.2%	0.0%	-	0.1%	2.7%	0.0%	**1,161.5**
Petrale Sole (coastwide)	-	-	0.0%	98.5%	0.0%	0.0%	0.1%	1.3%	0.0%	**1,831.9**
N of 40°10'	-	-	0.0%	98.5%	0.0%	0.0%	0.0%	1.5%	0.0%	**1,377.9**
S of 40°10'	-	-	-	98.4%	0.0%	-	0.4%	1.0%	0.1%	**454.0**
Arrowtooth Flounder	0.0%	0.0%	0.1%	99.6%	0.0%	0.0%	0.0%	0.3%	-	**2,180.7**
Starry Flounder	-	-	-	60.8%	0.1%	-	0.3%	32.0%	6.7%	**45.9**
Other Flatfish	0.0%	0.0%	0.1%	92.7%	0.0%	0.0%	0.3%	4.2%	2.7%	**2,014.4**
Kelp Greenling	-	-	-	0.1%	0.7%	-	6.5%	0.2%	92.5%	**58.5**
Spiny Dogfish	11.0%	24.6%	0.9%	46.1%	5.2%	-	6.9%	0.1%	5.1%	**423.3**
Other Fish	-	0.0%	0.0%	43.2%	33.4%	0.0%	17.2%	1.3%	4.8%	**1,727.0**

Table 2a. Share (%) of Non-Treaty Landings or Deliveries of PFMC-managed Groundfish by Westcoast Fishery Sectors: 1995 to 2005

1997

	Non-Treaty Sectors									
	Trawl Sectors				Non-Trawl Sectors					
Stock or Complex	**At-Sea Catcher-Processors**	**At Sea Motherships**	**Shoreside Whiting LE Trawl**	**Shoreside Non-whiting LE Trawl**	**Shoreside LE Line Gear**	**Shoreside LE Pot Gear**	**Shoreside Directed OA**	**Shoreside Incidental OA**	**Recreational**	**Non-Treaty Total (mt)**
Lingcod - coastwide	0.0%	0.0%	0.0%	58.3%	3.3%	0.0%	13.9%	3.0%	21.5%	**2,005.9**
N. of 42° (OR & WA)	0.0%	0.0%	0.0%	69.6%	2.3%	0.0%	10.7%	3.9%	13.5%	**1,229.6**
S. of 42° (CA)	-	-	0.0%	40.5%	4.8%	0.0%	18.9%	1.6%	34.2%	**776.4**
Pacific Cod	-	0.0%	0.0%	99.0%	0.1%	-	0.2%	0.6%	0.1%	**595.3**
Pacific Whiting (Coastwide)	34.2%	23.6%	42.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	**207,131.7**
Sablefish (Coastwide)	0.0%	0.0%	0.6%	51.8%	33.9%	6.1%	7.0%	0.6%	0.0%	**7,156.0**
N. of 36° (Monterey north)	0.0%	0.0%	0.6%	51.5%	33.7%	6.3%	7.2%	0.7%	0.1%	**6,893.8**
S. of 36° (Conception area)	-	-	-	58.6%	39.2%	0.1%	2.0%	0.2%	-	**262.1**
PACIFIC OCEAN PERCH	0.3%	0.2%	0.9%	97.4%	0.2%	0.1%	0.2%	0.6%	-	**680.6**
Shortbelly Rockfish	0.6%	0.4%	0.0%	98.8%	-	-	-	0.1%	0.1%	**79.1**
WIDOW ROCKFISH	1.1%	1.8%	2.4%	92.8%	0.1%	-	0.9%	0.2%	0.6%	**6,694.4**
CANARY ROCKFISH	0.1%	0.0%	0.1%	63.1%	6.3%	0.0%	17.1%	1.8%	11.6%	**1,258.4**
Chilipepper Rockfish	-	-	-	76.0%	0.7%	-	19.5%	0.2%	3.6%	**2,021.2**
BOCACCIO	-	-	-	48.0%	2.6%	-	15.1%	0.2%	34.1%	**459.0**
Splitnose Rockfish	-	-	-	98.2%	0.2%	-	1.5%	0.1%	-	**437.3**
Yellowtail Rockfish	5.5%	6.8%	10.5%	61.8%	1.7%	-	4.6%	7.3%	1.9%	**2,166.7**
Shortspine Thornyhead - coastwide	0.0%	0.0%	0.0%	96.0%	3.6%	0.0%	0.2%	0.2%	-	**1,457.0**
N. of 34°27'	0.0%	0.0%	0.0%	97.4%	2.1%	0.0%	0.1%	0.3%	-	**1,022.5**
S. of 34°27'	-	-	-	92.5%	7.1%	-	0.4%	0.0%	-	**434.5**
Longspine Thornyhead - coastwide	-	-	0.0%	97.8%	1.8%	0.0%	0.3%	0.1%	-	**3,937.2**
N. of 34°27'	-	-	0.0%	98.1%	1.4%	0.0%	0.3%	0.1%	-	**3,923.9**
S. of 34°27'	-	-	-	-	100.0%	-	-	0.0%	-	**13.3**
Other thornyheads	-	-	-	29.6%	66.1%	-	3.4%	0.9%	-	**113.7**
COWCOD	-	-	-	-	16.9%	-	49.8%	2.0%	31.3%	**7.9**
DARKBLOTCHED	0.2%	0.1%	0.1%	98.8%	0.1%	-	0.0%	0.7%	-	**819.9**
YELLOWEYE	0.0%	-	0.1%	37.9%	21.6%	-	23.8%	0.3%	16.3%	**219.7**
Black Rockfish - coastwide	-	-	0.0%	2.5%	4.6%	-	25.2%	0.7%	67.0%	**939.4**
Black Rockfish (WA)	-	-	-	0.5%	-	-	-	-	99.5%	**181.3**
Black Rockfish (OR-CA)	-	-	0.0%	3.0%	5.6%	-	31.3%	0.9%	59.2%	**758.1**
Minor Rockfish North	1.2%	0.2%	1.0%	69.0%	12.8%	0.1%	9.4%	2.1%	4.1%	**2,218.1**
Nearshore Species	-	-	-	0.2%	7.8%	-	38.4%	0.0%	53.5%	**157.7**
Shelf Species	0.0%	0.1%	1.7%	64.5%	19.1%	0.1%	11.0%	3.0%	0.5%	**1,339.0**
BOCACCIO: N. of Monterrey	0.0%	0.1%	0.3%	93.8%	1.6%	-	3.6%	0.3%	0.3%	**168.4**
Chilipepper Rockfish: Eureka	-	0.0%	0.0%	75.5%	3.8%	-	19.7%	0.9%	0.1%	**78.1**
Redstripe Rockfish	0.0%	0.7%	0.1%	98.6%	0.0%	-	0.0%	0.3%	0.2%	**140.2**
Silvergrey Rockfish	0.1%	0.0%	1.2%	94.0%	1.5%	-	3.1%	0.1%	0.1%	**88.6**
Other Northern Shelf Rockfish	0.0%	0.0%	2.4%	49.2%	28.9%	0.2%	14.2%	4.5%	0.7%	**863.7**
Slope Species	3.7%	0.4%	0.1%	92.3%	2.1%	0.1%	0.3%	1.0%	0.0%	**721.3**
Bank Rockfish	-	-	0.1%	97.7%	-	-	1.6%	0.7%	-	**13.8**
Sharpchin Rockfish, north	0.0%	0.0%	0.0%	99.8%	0.0%	-	0.0%	0.2%	-	**218.6**
Splitnose Rockfish: N. of Monterrey	10.1%	1.3%	0.0%	88.0%	0.0%	-	0.0%	0.5%	-	**149.7**
Yellowmouth Rockfish	0.1%	-	0.0%	99.3%	-	-	-	0.6%	-	**84.7**
Other Northern Slope Rockfish	4.5%	0.3%	0.2%	85.8%	5.9%	0.4%	0.7%	2.1%	0.0%	**254.5**
Minor Rockfish South	-	-	-	29.5%	8.0%	0.1%	22.8%	1.0%	38.6%	**3,102.8**
Nearshore Species	-	-	-	1.5%	6.2%	0.0%	29.5%	0.6%	62.3%	**873.7**
Shelf Species	-	-	-	18.8%	9.0%	0.0%	24.7%	1.7%	45.8%	**1,395.7**
Redstripe Rockfish	-	-	-	91.1%	-	-	-	-	8.9%	**3.3**
Yellowtail Rockfish	-	-	-	24.1%	5.4%	-	15.2%	0.1%	55.1%	**728.6**
Other Southern Shelf Rockfish	-	-	-	12.5%	12.9%	0.0%	35.2%	3.6%	35.8%	**663.8**
Slope Species	-	-	-	77.0%	8.4%	0.2%	12.8%	0.2%	1.5%	**833.4**
Bank Rockfish	-	-	-	89.5%	0.1%	-	7.4%	0.2%	2.8%	**414.1**
Blackgill Rockfish	-	-	-	48.2%	25.6%	0.7%	25.3%	0.3%	-	**269.7**
Sharpchin Rockfish	-	-	-	99.9%	-	-	0.1%	0.0%	-	**99.9**
Yellowmouth Rockfish	-	-	-	100.0%	-	-	-	-	-	**0.6**
Other Southern Slope Rockfish	-	-	-	82.4%	1.0%	-	15.2%	0.3%	1.0%	**49.0**
California scorpionfish	-	-	-	4.2%	0.5%	-	11.6%	7.9%	75.8%	**136.9**
Cabezon (off CA only)	-	-	-	-	4.8%	-	63.0%	1.0%	31.2%	**192.1**
Dover Sole	-	-	0.0%	99.2%	0.0%	0.0%	0.0%	0.7%	-	**10,191.7**
English Sole	-	0.0%	0.0%	95.6%	0.0%	-	0.0%	4.4%	-	**1,495.2**
Petrale Sole (coastwide)	-	-	0.0%	96.6%	0.1%	0.0%	0.0%	3.2%	0.0%	**1,928.3**
N of 40°10'	-	-	0.0%	96.0%	0.0%	0.0%	0.0%	3.9%	0.0%	**1,446.8**
S of 40°10'	-	-	-	98.3%	0.3%	-	0.1%	1.2%	0.0%	**481.5**
Arrowtooth Flounder	0.0%	0.0%	0.0%	99.7%	0.0%	0.0%	0.0%	0.2%	-	**2,330.9**
Starry Flounder	-	-	-	64.4%	0.0%	-	0.3%	31.6%	3.6%	**91.5**
Other Flatfish	0.0%	0.0%	0.2%	90.0%	0.0%	-	0.3%	7.6%	1.9%	**2,018.5**
Kelp Greenling	-	-	-	-	4.1%	-	33.1%	0.2%	62.6%	**57.9**
Spiny Dogfish	21.9%	10.3%	0.5%	52.9%	0.4%	-	13.0%	0.1%	0.8%	**634.2**
Other Fish	0.0%	0.0%	0.0%	51.8%	27.1%	-	13.4%	1.7%	6.0%	**1,093.6**

Table 2a. Share (%) of Non-Treaty Landings or Deliveries of PFMC-managed Groundfish by Westcoast Fishery Sectors: 1995 to 2005

1998

Non-Treaty Sectors

	Trawl Sectors				Non-Trawl Sectors					
Stock or Complex	**At-Sea Catcher-Processors**	**At Sea Motherships**	**Shoreside Whiting LE Trawl**	**Shoreside Non-whiting LE Trawl**	**Shoreside LE Line Gear**	**Shoreside LE Pot Gear**	**Shoreside Directed OA**	**Shoreside Incidental OA**	**Recreational**	**Non-Treaty Total (mt)**
Lingcod - coastwide	-	0.0%	0.1%	30.8%	3.5%	0.1%	12.6%	2.9%	50.1%	**706.5**
N. of 42° (OR & WA)	-	0.0%	0.0%	47.2%	4.5%	0.1%	10.6%	4.3%	33.2%	**303.3**
S. of 42° (CA)	-	-	0.1%	18.4%	2.7%	0.1%	14.0%	1.8%	62.9%	**403.2**
Pacific Cod	-	-	0.2%	98.6%	0.2%	0.0%	0.1%	0.6%	0.4%	**411.7**
Pacific Whiting (Coastwide)	33.8%	23.9%	42.2%	0.1%	0.0%	-	0.0%	0.0%	0.0%	**207,901.9**
Sablefish (Coastwide)	0.7%	0.0%	0.7%	53.7%	29.9%	9.6%	4.5%	0.8%	0.1%	**3,995.9**
N. of 36° (Monterey north)	0.7%	0.0%	0.7%	53.7%	29.1%	10.2%	4.7%	0.8%	0.1%	**3,782.2**
S. of 36° (Conception area)	-	-	-	53.6%	44.6%	-	1.6%	0.3%	-	**213.7**
PACIFIC OCEAN PERCH	2.2%	1.3%	3.4%	92.9%	0.0%	0.0%	0.0%	0.2%	-	**656.9**
Shortbelly Rockfish	0.1%	-	6.5%	92.1%	0.0%	-	0.0%	1.2%	0.1%	**20.5**
WIDOW ROCKFISH	2.9%	4.1%	8.3%	79.3%	0.3%	-	3.7%	0.2%	1.2%	**4,221.0**
CANARY ROCKFISH	0.0%	0.2%	0.1%	70.6%	8.3%	0.0%	13.0%	1.5%	6.4%	**1,277.9**
Chilipepper Rockfish	-	-	-	77.5%	1.2%	-	19.9%	0.9%	0.5%	**1,337.2**
BOCACCIO	-	-	-	29.9%	4.0%	-	37.4%	1.1%	27.5%	**186.8**
Splitnose Rockfish	-	-	-	96.0%	0.0%	-	3.3%	0.7%	0.0%	**1,359.3**
Yellowtail Rockfish	2.1%	11.2%	16.8%	56.8%	1.5%	0.0%	4.2%	5.2%	2.1%	**2,976.7**
Shortspine Thornyhead - coastwide	0.2%	0.0%	0.1%	94.9%	4.6%	0.0%	0.1%	0.1%	-	**1,247.5**
N. of 34°27'	0.3%	0.0%	0.1%	97.5%	1.9%	0.0%	0.1%	0.1%	-	**877.7**
S. of 34°27'	-	-	-	88.8%	11.0%	0.0%	0.1%	0.1%	-	**369.7**
Longspine Thornyhead - coastwide	0.0%	-	0.0%	99.2%	0.7%	-	0.0%	0.1%	-	**2,241.9**
N. of 34°27'	0.0%	-	0.0%	99.7%	0.2%	-	0.0%	0.1%	-	**2,230.9**
S. of 34°27'	-	-	-	-	99.1%	-	0.5%	0.5%	-	**11.0**
Other thornyheads	-	-	-	34.2%	61.1%	-	3.5%	1.2%	-	**48.6**
COWCOD	-	-	-	-	13.6%	-	22.8%	4.4%	59.2%	**4.8**
DARKBLOTCHED	0.7%	1.3%	0.5%	94.5%	0.6%	0.0%	1.1%	1.1%	-	**954.4**
YELLOWEYE	0.0%	-	0.2%	27.5%	14.8%	-	20.9%	0.1%	36.5%	**107.0**
Black Rockfish - coastwide	-	-	0.1%	8.2%	3.4%	0.0%	17.8%	0.1%	70.4%	**985.0**
Black Rockfish (WA)	-	-	0.3%	7.3%	-	-	-	-	92.5%	**242.7**
Black Rockfish (OR-CA)	-	-	0.0%	8.6%	4.5%	0.0%	23.7%	0.1%	63.1%	**742.4**
Minor Rockfish North	1.0%	0.4%	1.9%	67.0%	15.7%	0.1%	7.2%	2.5%	4.2%	**2,196.6**
Nearshore Species	-	-	-	2.9%	12.1%	-	32.2%	0.1%	52.7%	**158.3**
Shelf Species	0.2%	0.1%	1.6%	69.7%	17.2%	0.2%	7.2%	3.2%	0.6%	**1,452.7**
BOCACCIO: N. of Monterrey	0.0%	1.0%	0.3%	89.0%	0.9%	-	7.7%	0.7%	0.5%	**100.1**
Chilipepper Rockfish: Eureka	0.0%	0.0%	0.5%	95.9%	0.2%	-	0.6%	2.8%	-	**74.1**
Redstripe Rockfish	0.0%	0.0%	0.3%	99.2%	0.0%	-	0.0%	0.2%	0.2%	**111.5**
Silvergrey Rockfish	0.1%	0.0%	1.1%	98.2%	0.0%	-	0.5%	-	0.1%	**186.6**
Other Northern Shelf Rockfish	0.2%	0.0%	2.0%	57.0%	25.4%	0.3%	9.8%	4.5%	0.8%	**980.5**
Slope Species	3.5%	1.2%	3.1%	77.5%	13.1%	0.0%	0.4%	1.2%	0.0%	**585.6**
Bank Rockfish	-	-	0.0%	76.0%	13.2%	-	9.6%	1.2%	-	**3.6**
Sharpchin Rockfish, north	-	0.1%	0.4%	98.8%	0.0%	-	0.0%	0.7%	-	**104.1**
Splitnose Rockfish: N. of Monterrey	2.6%	0.5%	9.7%	85.4%	0.0%	-	0.1%	1.6%	-	**168.8**
Yellowmouth Rockfish	0.0%	6.7%	0.1%	93.1%	-	0.0%	0.0%	0.1%	-	**42.9**
Other Northern Slope Rockfish	6.0%	1.3%	0.5%	61.6%	28.6%	0.0%	0.6%	1.3%	0.0%	**266.2**
Minor Rockfish South	-	-	-	30.8%	8.5%	0.1%	29.2%	1.0%	30.4%	**2,642.3**
Nearshore Species	-	-	-	0.1%	4.5%	0.4%	30.2%	0.4%	64.4%	**755.4**
Shelf Species	-	-	-	23.4%	8.4%	0.0%	36.0%	2.1%	30.1%	**1,044.2**
Redstripe Rockfish	-	-	-	87.9%	0.5%	-	4.5%	-	7.1%	**0.7**
Yellowtail Rockfish	-	-	-	28.8%	5.8%	0.0%	39.1%	0.2%	26.1%	**427.6**
Other Southern Shelf Rockfish	-	-	-	19.5%	10.1%	0.0%	33.9%	3.4%	33.0%	**615.9**
Slope Species	-	-	-	67.6%	12.1%	0.0%	19.8%	0.1%	0.4%	**842.8**
Bank Rockfish	-	-	-	73.6%	1.6%	-	24.3%	0.1%	0.4%	**566.1**
Blackgill Rockfish	-	-	-	50.3%	39.8%	0.0%	9.9%	0.1%	-	**227.7**
Sharpchin Rockfish	-	-	-	99.0%	0.2%	-	0.9%	0.0%	-	**10.3**
Yellowmouth Rockfish										**-**
Other Southern Slope Rockfish	-	-	-	73.2%	5.7%	0.3%	18.1%	1.3%	1.5%	**38.7**
California scorpionfish	-	-	-	-	0.7%	-	26.1%	6.1%	67.1%	**123.5**
Cabezon (off CA only)	-	-	-	-	0.9%	1.3%	67.5%	1.1%	29.3%	**250.0**
Dover Sole	0.0%	0.0%	0.0%	99.3%	0.0%	0.0%	0.0%	0.7%	-	**8,117.5**
English Sole	-	0.0%	0.1%	97.6%	0.0%	-	0.0%	2.3%	-	**1,150.4**
Petrale Sole (coastwide)	-	-	0.1%	98.1%	0.0%	-	0.0%	1.7%	0.0%	**1,486.6**
N of 40°10'	-	-	0.1%	98.4%	0.0%	-	-	1.5%	0.0%	**1,223.1**
S of 40°10'	-	-	-	96.9%	0.2%	-	0.2%	2.8%	-	**263.5**
Arrowtooth Flounder	0.0%	0.0%	0.0%	99.8%	0.0%	0.0%	0.0%	0.2%	-	**3,199.1**
Starry Flounder	-	-	-	61.3%	0.0%	-	0.1%	29.3%	9.2%	**86.4**
Other Flatfish	0.0%	0.0%	0.3%	94.5%	0.1%	-	0.2%	4.0%	0.9%	**1,623.5**
Kelp Greenling	-	-	-	0.1%	3.6%	1.1%	43.7%	0.0%	51.5%	**36.1**
Spiny Dogfish	8.4%	23.7%	8.2%	58.8%	0.1%	-	0.3%	0.0%	0.4%	**683.8**
Other Fish	0.1%	0.0%	0.0%	65.7%	16.6%	0.1%	7.7%	2.8%	6.9%	**948.0**

Table 2a. Share (%) of Non-Treaty Landings or Deliveries of PFMC-managed Groundfish by Westcoast Fishery Sectors: 1995 to 2005

1999

Non-Treaty Sectors

	Trawl Sectors				Non-Trawl Sectors					
Stock or Complex	**At-Sea Catcher-Processors**	**At Sea Motherships**	**Shoreside Whiting LE Trawl**	**Shoreside Non-whiting LE Trawl**	**Shoreside LE Line Gear**	**Shoreside LE Pot Gear**	**Shoreside Directed OA**	**Shoreside Incidental OA**	**Recreational**	**Non-Treaty Total (mt)**
Lingcod - coastwide	0.0%	0.0%	0.1%	26.1%	3.9%	0.0%	8.9%	5.5%	55.6%	**831.3**
N. of 42° (OR & WA)	0.0%	0.0%	0.2%	38.8%	6.4%	0.1%	9.3%	10.8%	34.5%	**345.4**
S. of 42° (CA)	-	-	0.0%	17.0%	2.1%	0.0%	8.6%	1.8%	70.6%	**485.8**
Pacific Cod	0.0%	0.0%	0.1%	98.6%	0.4%	-	0.1%	0.6%	0.1%	**280.7**
Pacific Whiting (Coastwide)	34.1%	23.9%	42.0%	0.0%	0.0%	-	0.0%	0.0%	0.0%	**198,658.4**
Sablefish (Coastwide)	0.0%	0.0%	0.1%	52.8%	29.1%	11.8%	5.2%	1.0%	0.0%	**5,980.2**
N. of 36° (Monterey north)	0.0%	0.0%	0.1%	53.0%	28.5%	12.2%	5.2%	1.0%	0.0%	**5,798.5**
S. of 36° (Conception area)	-	-	-	45.7%	47.5%	-	6.7%	0.1%	-	**181.7**
PACIFIC OCEAN PERCH	1.7%	0.7%	0.3%	95.3%	0.2%	0.0%	0.1%	1.7%	-	**546.1**
Shortbelly Rockfish	-	0.0%	67.8%	27.4%	-	-	-	4.8%	-	**8.1**
WIDOW ROCKFISH	2.5%	1.4%	4.7%	89.0%	0.4%	-	1.0%	0.3%	0.8%	**4,148.2**
CANARY ROCKFISH	0.1%	0.1%	0.2%	65.3%	7.9%	-	8.8%	4.9%	12.5%	**786.4**
Chilipepper Rockfish	-	-	-	84.6%	1.4%	-	10.6%	0.8%	2.6%	**925.2**
BOCACCIO	-	-	-	17.1%	2.4%	-	12.2%	0.7%	67.6%	**183.5**
Splitnose Rockfish	-	-	-	99.5%	0.3%	-	0.1%	0.1%	0.0%	**206.7**
Yellowtail Rockfish	14.0%	10.7%	15.7%	54.0%	1.1%	-	1.3%	2.2%	0.9%	**3,037.8**
Shortspine Thornyhead - coastwide	0.0%	-	0.1%	86.7%	12.1%	0.0%	0.9%	0.2%	0.1%	**822.0**
N. of 34°27'	0.0%	-	0.1%	96.6%	3.0%	0.0%	0.0%	0.2%	0.1%	**544.9**
S. of 34°27'	-	-	-	67.3%	29.9%	0.0%	2.7%	0.2%	0.0%	**277.1**
Longspine Thornyhead - coastwide	-	-	0.0%	98.3%	1.4%	-	0.1%	0.1%	-	**1,800.8**
N. of 34°27'	-	-	0.0%	99.1%	0.7%	-	0.1%	0.1%	-	**1,785.8**
S. of 34°27'	-	-	-	-	95.0%	-	5.0%	0.0%	-	**15.0**
Other thornyheads	-	-	-	87.2%	10.0%	-	2.3%	0.6%	-	**41.4**
COWCOD	-	-	-	-	4.0%	-	23.0%	0.6%	72.5%	**7.7**
DARKBLOTCHED	1.9%	1.2%	0.2%	94.4%	0.2%	-	0.1%	2.1%	-	**366.3**
YELLOWEYE	0.0%	-	0.1%	18.0%	35.8%	-	11.5%	0.6%	34.1%	**141.8**
Black Rockfish - coastwide	0.0%	-	0.0%	0.6%	2.3%	-	19.5%	0.3%	77.3%	**784.4**
Black Rockfish (WA)	-	-	-	-	-	-	-	-	100.0%	**154.2**
Black Rockfish (OR-CA)	0.0%	-	0.0%	0.7%	2.8%	-	24.3%	0.4%	71.7%	**630.2**
Minor Rockfish North	1.0%	0.9%	1.2%	58.7%	21.3%	0.2%	6.5%	4.2%	6.0%	**1,251.0**
Nearshore Species	-	-	-	0.1%	12.4%	-	35.8%	0.0%	51.7%	**125.7**
Shelf Species	0.1%	0.5%	1.4%	54.2%	31.6%	0.4%	4.6%	5.8%	1.4%	**771.2**
BOCACCIO: N. of Monterrey	0.5%	0.4%	0.3%	80.8%	5.4%	-	10.0%	1.2%	1.6%	**53.6**
Chilipepper Rockfish: Eureka	-	2.4%	0.1%	90.3%	-	-	0.0%	7.1%	0.0%	**49.0**
Redstripe Rockfish	1.6%	6.8%	0.2%	90.6%	-	-	-	0.6%	0.2%	**36.3**
Silvergrey Rockfish	0.2%	0.4%	0.2%	98.1%	0.7%	-	0.2%	0.0%	0.2%	**74.4**
Other Northern Shelf Rockfish	0.0%	0.0%	1.8%	40.3%	43.1%	0.5%	5.4%	7.2%	1.7%	**558.0**
Slope Species	3.2%	2.0%	1.1%	89.1%	1.9%	-	0.4%	2.2%	0.0%	**354.1**
Bank Rockfish	-	-	0.0%	98.9%	-	-	-	1.1%	-	**13.4**
Sharpchin Rockfish, north	0.1%	0.0%	0.1%	99.1%	0.0%	-	0.0%	0.8%	-	**53.6**
Splitnose Rockfish: N. of Monterrey	9.6%	-	4.2%	84.5%	0.0%	-	0.0%	1.6%	-	**66.2**
Yellowmouth Rockfish	0.6%	0.0%	0.0%	99.4%	-	-	-	0.0%	-	**28.4**
Other Northern Slope Rockfish	2.4%	3.7%	0.6%	85.8%	3.5%	-	0.8%	3.3%	0.0%	**192.4**
Minor Rockfish South	-	-	-	7.5%	3.8%	0.3%	16.9%	0.8%	70.8%	**1,655.7**
Nearshore Species	-	-	-	1.8%	2.1%	0.6%	25.6%	0.3%	69.6%	**716.7**
Shelf Species	-	-	-	4.3%	3.9%	0.0%	9.4%	1.2%	81.1%	**822.9**
Redstripe Rockfish	-	-	-	60.2%	-	-	-	-	39.8%	**0.4**
Yellowtail Rockfish	-	-	-	5.8%	2.5%	-	9.4%	0.2%	82.2%	**250.1**
Other Southern Shelf Rockfish	-	-	-	3.7%	4.5%	0.0%	9.4%	1.7%	80.7%	**572.4**
Slope Species	-	-	-	64.4%	14.1%	0.2%	15.9%	0.6%	4.8%	**116.1**
Bank Rockfish	-	-	-	59.5%	0.0%	-	23.6%	1.3%	15.6%	**31.5**
Blackgill Rockfish	-	-	-	52.6%	30.1%	0.5%	16.0%	0.2%	0.6%	**52.5**
Sharpchin Rockfish	-	-	-	100.0%	-	-	-	-	-	**0.5**
Yellowmouth Rockfish										**-**
Other Southern Slope Rockfish	-	-	-	88.3%	1.6%	0.0%	8.3%	0.6%	1.2%	**31.6**
California scorpionfish	-	-	-	-	0.0%	-	17.0%	4.4%	78.6%	**177.7**
Cabezon (off CA only)	-	-	-	0.0%	0.5%	1.7%	70.8%	1.2%	25.7%	**168.5**
Dover Sole	0.0%	-	0.0%	98.7%	0.0%	0.0%	0.0%	1.3%	-	**9,251.1**
English Sole	0.0%	0.0%	0.0%	96.3%	0.0%	-	0.0%	3.7%	-	**922.1**
Petrale Sole (coastwide)	-	-	0.0%	97.6%	0.0%	-	0.0%	2.4%	0.0%	**1,510.0**
N of 40°10'	-	-	0.0%	97.4%	0.0%	-	-	2.6%	0.0%	**1,257.4**
S of 40°10'	-	-	-	98.5%	0.0%	-	0.0%	1.4%	0.0%	**252.6**
Arrowtooth Flounder	0.0%	0.0%	0.1%	99.6%	0.0%	0.0%	0.0%	0.3%	-	**5,359.6**
Starry Flounder	-	-	-	42.3%	0.0%	-	0.5%	47.8%	9.4%	**52.4**
Other Flatfish	0.0%	0.0%	0.1%	95.1%	0.0%	0.0%	0.2%	3.4%	1.1%	**1,980.1**
Kelp Greenling	-	-	-	-	6.1%	0.9%	55.4%	0.1%	37.5%	**62.6**
Spiny Dogfish	15.1%	19.3%	4.9%	53.4%	4.8%	0.0%	1.1%	0.0%	1.4%	**804.9**
Other Fish	0.0%	0.0%	0.0%	50.3%	16.0%	-	16.2%	5.4%	12.1%	**634.3**

Table 2a. Share (%) of Non-Treaty Landings or Deliveries of PFMC-managed Groundfish by Westcoast Fishery Sectors: 1995 to 2005

2000

Non-Treaty Sectors

	Trawl Sectors				Non-Trawl Sectors					
Stock or Complex	**At-Sea Catcher-Processors**	**At Sea Motherships**	**Shoreside Whiting LE Trawl**	**Shoreside Non-whiting LE Trawl**	**Shoreside LE Line Gear**	**Shoreside LE Pot Gear**	**Shoreside Directed OA**	**Shoreside Incidental OA**	**Recreational**	**Non-Treaty Total (mt)**
Lingcod - coastwide	-	0.1%	0.2%	15.5%	3.6%	0.1%	8.8%	6.5%	65.3%	**426.4**
N. of 42° (OR & WA)	-	0.2%	0.5%	21.5%	5.9%	0.1%	9.7%	14.4%	47.7%	**177.2**
S. of 42° (CA)	-	-	0.0%	11.2%	2.0%	0.0%	8.1%	0.8%	77.8%	**249.2**
Pacific Cod	0.1%	-	0.0%	98.8%	0.4%	-	0.0%	0.7%	-	**277.2**
Pacific Whiting (Coastwide)	34.5%	21.7%	43.7%	0.0%	0.0%	-	0.0%	0.0%	-	**196,269.5**
Sablefish (Coastwide)	0.8%	0.0%	0.0%	47.5%	30.2%	12.3%	7.8%	1.2%	0.0%	**5,661.8**
N. of 36° (Monterey north)	0.8%	0.0%	0.0%	47.9%	29.6%	12.6%	7.7%	1.3%	0.0%	**5,539.7**
S. of 36° (Conception area)	-	-	-	29.7%	56.8%	-	13.2%	0.4%	-	**122.0**
PACIFIC OCEAN PERCH	4.5%	1.4%	0.2%	93.3%	0.2%	-	0.0%	0.3%	0.0%	**145.1**
Shortbelly Rockfish	4.2%	0.0%	11.5%	84.3%	-	-	-	-	-	**20.3**
WIDOW ROCKFISH	1.7%	3.5%	2.1%	91.8%	0.1%	-	0.4%	0.1%	0.4%	**4,051.8**
CANARY ROCKFISH	0.5%	0.2%	0.7%	22.6%	4.8%	-	3.4%	8.7%	59.1%	**159.6**
Chilipepper Rockfish	-	-	-	78.7%	1.8%	-	10.4%	0.5%	8.6%	**457.0**
BOCACCIO	-	-	-	12.5%	1.7%	-	3.6%	0.6%	81.6%	**137.2**
Splitnose Rockfish	-	-	-	93.8%	5.8%	-	0.3%	0.0%	-	**89.0**
Yellowtail Rockfish	7.8%	6.6%	5.5%	76.2%	0.1%	-	0.1%	2.9%	0.7%	**3,440.0**
Shortspine Thornyhead - coastwide	2.3%	0.0%	0.2%	90.4%	6.1%	0.0%	0.9%	0.0%	-	**843.7**
N. of 34°27'	3.8%	0.0%	0.4%	93.4%	2.3%	0.0%	0.1%	0.0%	-	**516.1**
S. of 34°27'	-	-	-	85.7%	12.1%	-	2.2%	0.1%	-	**327.6**
Longspine Thornyhead - coastwide	0.0%	-	0.0%	96.0%	3.5%	-	0.5%	0.1%	-	**1,486.4**
N. of 34°27'	0.0%	-	0.0%	97.7%	2.1%	-	0.0%	0.1%	-	**1,459.6**
S. of 34°27'	-	-	-	-	74.6%	-	25.4%	-	-	**26.8**
Other thornyheads	-	-	-	81.2%	13.6%	-	5.2%	0.0%	-	**72.1**
COWCOD	-	-	-	-	0.6%	-	3.8%	1.0%	94.6%	**6.6**
DARKBLOTCHED	1.4%	1.8%	1.4%	90.9%	3.6%	-	0.2%	0.6%	-	**262.8**
YELLOWEYE	10.3%	-	0.0%	3.1%	10.8%	-	5.3%	0.6%	70.0%	**39.7**
Black Rockfish - coastwide	0.2%	-	0.0%	0.2%	2.7%	-	17.0%	0.5%	79.4%	**750.5**
Black Rockfish (WA)	-	-	-	-	-	-	-	-	100.0%	**143.3**
Black Rockfish (OR-CA)	0.2%	-	0.0%	0.3%	3.3%	-	21.1%	0.6%	74.5%	**607.2**
Minor Rockfish North	11.2%	4.8%	6.4%	49.1%	11.3%	0.8%	5.2%	2.2%	9.0%	**707.3**
Nearshore Species	-	-	-	0.3%	11.7%	0.7%	28.2%	0.8%	58.3%	**97.7**
Shelf Species	0.7%	19.1%	19.3%	33.4%	15.5%	0.2%	4.3%	3.5%	4.0%	**158.0**
BOCACCIO: N. of Monterrey	5.7%	21.8%	6.2%	52.3%	0.2%	-	0.3%	0.4%	13.0%	**7.8**
Chilipepper Rockfish: Eureka	-	17.1%	54.1%	27.5%	0.3%	-	0.0%	1.1%	0.0%	**51.6**
Redstripe Rockfish	9.6%	12.5%	0.1%	77.3%	-	-	-	-	0.6%	**6.2**
Silvergrey Rockfish	1.2%	6.6%	-	86.1%	-	-	-	0.2%	5.9%	**1.5**
Other Northern Shelf Rockfish	0.0%	20.7%	2.4%	31.3%	26.7%	0.3%	7.5%	5.5%	5.7%	**91.0**
Slope Species	17.3%	0.8%	3.2%	65.2%	9.8%	1.1%	0.6%	2.0%	0.0%	**451.5**
Bank Rockfish	0.4%	-	2.7%	91.4%	3.2%	-	0.2%	2.1%	-	**3.3**
Sharpchin Rockfish, north	0.3%	0.0%	0.3%	98.0%	1.2%	-	0.1%	0.1%	-	**12.6**
Splitnose Rockfish: N. of Monterrey	21.6%	3.8%	16.3%	55.8%	1.5%	-	0.1%	0.9%	-	**60.6**
Yellowmouth Rockfish	0.9%	0.0%	-	99.1%	-	-	-	-	-	**11.5**
Other Northern Slope Rockfish	17.9%	0.4%	1.2%	64.3%	11.9%	1.3%	0.7%	2.3%	0.0%	**363.6**
Minor Rockfish South	-	-	-	13.5%	5.6%	0.0%	12.9%	0.7%	67.3%	**1,305.7**
Nearshore Species	-	-	-	0.1%	3.3%	0.1%	23.0%	0.5%	73.0%	**580.1**
Shelf Species	-	-	-	5.6%	2.3%	-	5.1%	1.2%	85.8%	**526.8**
Redstripe Rockfish	-	-	-	-	11.1%	-	45.1%	-	43.8%	**0.4**
Yellowtail Rockfish	-	-	-	13.3%	1.1%	-	2.8%	0.5%	82.4%	**162.8**
Other Southern Shelf Rockfish	-	-	-	2.2%	2.8%	-	6.0%	1.5%	87.4%	**363.6**
Slope Species	-	-	-	73.3%	21.1%	0.0%	3.9%	0.3%	1.4%	**198.9**
Bank Rockfish	-	-	-	87.0%	7.1%	-	2.9%	0.0%	3.0%	**90.6**
Blackgill Rockfish	-	-	-	61.6%	33.8%	0.0%	4.2%	0.3%	-	**86.0**
Sharpchin Rockfish	-	-	-	92.9%	7.1%	-	-	-	-	**0.4**
Yellowmouth Rockfish										**-**
Other Southern Slope Rockfish	-	-	-	62.0%	29.7%	-	7.3%	1.0%	-	**21.9**
California scorpionfish	-	-	-	-	0.0%	-	10.7%	5.6%	83.6%	**107.0**
Cabezon (off CA only)	-	-	-	0.0%	1.7%	0.3%	69.2%	2.7%	26.1%	**157.8**
Dover Sole	0.0%	0.0%	0.0%	99.2%	0.0%	0.0%	0.0%	0.7%	-	**8,881.1**
English Sole	0.0%	0.0%	0.1%	96.5%	0.0%	-	0.0%	3.4%	-	**770.5**
Petrale Sole (coastwide)	-	-	0.0%	97.3%	0.0%	-	0.0%	2.6%	0.0%	**1,900.7**
N of 40°10'	-	-	0.0%	97.1%	0.0%	-	-	2.8%	0.0%	**1,661.2**
S of 40°10'	-	-	-	98.5%	0.0%	-	0.0%	1.4%	0.1%	**239.4**
Arrowtooth Flounder	0.1%	0.1%	0.1%	99.1%	0.0%	0.0%	0.0%	0.6%	-	**3,306.9**
Starry Flounder	-	-	-	57.5%	0.0%	-	0.6%	27.9%	14.1%	**43.7**
Other Flatfish	0.3%	0.1%	0.0%	92.4%	0.0%	-	0.5%	2.8%	3.9%	**1,647.1**
Kelp Greenling	-	-	-	-	5.5%	0.2%	48.7%	0.4%	45.2%	**78.1**
Spiny Dogfish	3.6%	6.7%	4.9%	38.5%	44.0%	-	0.7%	0.3%	1.4%	**713.2**
Other Fish	0.2%	0.0%	0.1%	50.5%	7.4%	0.0%	25.4%	4.6%	11.8%	**468.7**

Table 2a. Share (%) of Non-Treaty Landings or Deliveries of PFMC-managed Groundfish by Westcoast Fishery Sectors: 1995 to 2005

2001

Non-Treaty Sectors

	Trawl Sectors				Non-Trawl Sectors					
Stock or Complex	**At-Sea Catcher-Processors**	**At Sea Motherships**	**Shoreside Whiting LE Trawl**	**Shoreside Non-whiting LE Trawl**	**Shoreside LE Line Gear**	**Shoreside LE Pot Gear**	**Shoreside Directed OA**	**Shoreside Incidental OA**	**Recreational**	**Non-Treaty Total (mt)**
Lingcod - coastwide	0.0%	0.1%	0.2%	14.1%	3.9%	0.3%	14.1%	4.1%	63.0%	**410.2**
N. of 42° (OR & WA)	0.1%	0.3%	0.4%	16.9%	6.7%	0.7%	15.2%	7.8%	51.9%	**185.4**
S. of 42° (CA)	-	-	-	11.8%	1.6%	0.0%	13.2%	1.1%	72.2%	**224.8**
Pacific Cod	0.0%	0.0%	0.0%	99.0%	0.4%	-	0.1%	0.5%	0.0%	**318.4**
Pacific Whiting (Coastwide)	35.0%	21.2%	43.8%	0.0%	0.0%	-	-	0.0%	0.0%	**167,690.4**
Sablefish (Coastwide)	0.4%	0.0%	0.9%	50.3%	26.9%	11.1%	9.4%	0.9%	0.1%	**4,993.1**
N. of 36° (Monterey north)	0.4%	0.0%	1.0%	51.2%	25.6%	11.4%	9.4%	0.9%	0.1%	**4,851.4**
S. of 36° (Conception area)	-	-	-	20.0%	69.7%	-	9.3%	0.9%	0.1%	**141.7**
PACIFIC OCEAN PERCH	9.5%	0.0%	0.0%	90.4%	0.0%	0.0%	0.0%	0.0%	-	**207.1**
Shortbelly Rockfish	0.1%	83.6%	1.9%	13.5%	-	-	0.9%	-	0.1%	**32.5**
WIDOW ROCKFISH	7.1%	1.4%	2.2%	87.8%	0.1%	0.0%	0.7%	0.1%	0.7%	**1,970.7**
CANARY ROCKFISH	0.7%	1.3%	1.6%	26.7%	7.9%	0.0%	5.5%	4.1%	52.2%	**88.6**
Chilipepper Rockfish	-	-	-	78.3%	0.8%	-	7.1%	0.2%	13.7%	**379.9**
BOCACCIO	-	-	-	10.2%	1.8%	-	4.6%	0.4%	83.0%	**131.3**
Splitnose Rockfish	-	-	-	97.7%	1.0%	-	1.2%	0.2%	-	**92.5**
Yellowtail Rockfish	1.8%	4.9%	5.7%	82.4%	0.2%	-	0.1%	3.8%	1.1%	**1,801.1**
Shortspine Thornyhead - coastwide	2.8%	0.0%	0.0%	87.3%	9.4%	0.0%	0.3%	0.1%	-	**539.7**
N. of 34°27'	4.1%	0.0%	0.0%	93.5%	2.3%	0.1%	0.0%	0.1%	-	**373.8**
S. of 34°27'	-	-	-	73.4%	25.5%	-	0.9%	0.2%	-	**165.9**
Longspine Thornyhead - coastwide	-	-	0.0%	96.2%	3.1%	0.0%	0.6%	0.1%	-	**1,175.9**
N. of 34°27'	-	-	0.0%	98.8%	1.1%	0.0%	0.0%	0.1%	-	**1,145.2**
S. of 34°27'	-	-	-	-	79.0%	-	20.8%	0.3%	-	**30.7**
Other thornyheads	-	-	-	44.9%	47.5%	-	7.1%	0.5%	-	**48.0**
COWCOD										**-**
DARKBLOTCHED	6.7%	0.3%	2.7%	88.6%	1.3%	0.0%	0.2%	0.2%	-	**172.2**
YELLOWEYE	-	-	0.0%	5.6%	18.3%	-	8.2%	0.0%	67.9%	**35.5**
Black Rockfish - coastwide	-	0.0%	-	0.1%	4.6%	0.0%	20.0%	0.3%	75.0%	**988.8**
Black Rockfish (WA)	-	-	-	-	-	-	-	-	100.0%	**175.7**
Black Rockfish (OR-CA)	-	0.0%	-	0.1%	5.6%	0.0%	24.3%	0.3%	69.6%	**813.1**
Minor Rockfish North	8.2%	3.0%	0.9%	57.4%	10.8%	0.5%	8.0%	1.0%	10.2%	**570.7**
Nearshore Species	-	-	-	0.5%	17.7%	0.1%	33.9%	0.4%	47.6%	**110.3**
Shelf Species	0.3%	6.1%	1.0%	78.3%	8.4%	0.0%	2.0%	1.3%	2.5%	**241.1**
BOCACCIO: N. of Monterrey	1.4%	0.6%	4.7%	82.3%	-	-	0.0%	0.0%	10.9%	**14.7**
Chilipepper Rockfish: Eureka	0.2%	2.4%	0.6%	96.7%	0.1%	-	-	0.1%	0.0%	**141.3**
Redstripe Rockfish	0.4%	64.2%	-	34.6%	-	-	-	-	0.8%	**17.6**
Silvergrey Rockfish	2.3%	0.3%	0.0%	94.3%	2.0%	-	0.1%	-	1.1%	**4.6**
Other Northern Shelf Rockfish	0.3%	0.1%	1.5%	47.1%	31.8%	0.0%	7.7%	4.9%	6.6%	**62.9**
Slope Species	20.9%	1.0%	1.2%	63.1%	10.0%	1.2%	1.7%	1.0%	0.0%	**219.4**
Bank Rockfish	45.3%	1.0%	-	53.7%	-	-	-	-	-	**0.5**
Sharpchin Rockfish, north	26.1%	0.1%	0.0%	73.8%	-	-	-	0.0%	-	**6.4**
Splitnose Rockfish: N. of Monterrey	56.3%	3.7%	4.6%	35.0%	-	-	-	0.4%	-	**42.4**
Yellowmouth Rockfish	-	-	-	100.0%	-	-	-	0.0%	-	**4.5**
Other Northern Slope Rockfish	12.1%	0.3%	0.4%	68.9%	13.2%	1.6%	2.3%	1.3%	0.0%	**165.5**
Minor Rockfish South	-	-	-	17.7%	5.4%	-	14.2%	0.7%	62.0%	**1,213.5**
Nearshore Species	-	-	-	0.0%	2.6%	-	20.7%	0.4%	76.3%	**634.9**
Shelf Species	-	-	-	7.1%	2.9%	-	5.2%	1.5%	83.3%	**320.5**
Redstripe Rockfish	-	-	-	-	33.3%	-	66.7%	-	-	**0.0**
Yellowtail Rockfish	-	-	-	2.2%	1.8%	-	2.0%	0.3%	93.7%	**59.8**
Other Southern Shelf Rockfish	-	-	-	8.3%	3.1%	-	5.9%	1.8%	80.9%	**260.7**
Slope Species	-	-	-	74.3%	15.6%	-	9.4%	0.5%	0.2%	**258.1**
Bank Rockfish	-	-	-	83.9%	4.7%	-	10.6%	0.3%	0.4%	**97.6**
Blackgill Rockfish	-	-	-	69.5%	20.9%	-	9.3%	0.3%	-	**129.4**
Sharpchin Rockfish	-	-	-	100.0%	-	-	-	-	-	**0.0**
Yellowmouth Rockfish	-	-	-	100.0%	-	-	-	-	-	**0.0**
Other Southern Slope Rockfish	-	-	-	63.8%	27.6%	-	5.7%	2.4%	0.5%	**31.1**
California scorpionfish	-	-	-	0.0%	0.0%	-	10.8%	3.7%	85.4%	**132.8**
Cabezon (off CA only)	-	-	-	0.0%	0.9%	-	51.0%	4.2%	44.0%	**129.7**
Dover Sole	0.0%	0.0%	0.0%	99.5%	0.0%	0.0%	0.0%	0.5%	-	**6,867.3**
English Sole	0.0%	0.0%	0.1%	97.4%	0.0%	-	0.0%	2.4%	-	**984.3**
Petrale Sole (coastwide)	-	-	0.1%	97.8%	0.0%	0.0%	0.1%	2.0%	0.0%	**1,815.0**
N of 40°10'	-	-	0.1%	97.8%	0.0%	0.0%	0.0%	2.1%	0.0%	**1,543.1**
S of 40°10'	-	-	-	98.4%	-	-	0.4%	1.3%	0.0%	**271.9**
Arrowtooth Flounder	0.1%	0.0%	0.1%	99.7%	0.0%	0.0%	0.0%	0.1%	0.0%	**2,458.5**
Starry Flounder	-	-	-	1.8%	0.0%	-	0.0%	3.8%	94.3%	**404.3**
Other Flatfish	1.0%	0.0%	0.0%	91.3%	0.0%	-	0.5%	4.4%	2.8%	**1,748.9**
Kelp Greenling	-	-	-	0.0%	4.6%	0.1%	30.5%	0.3%	64.6%	**111.8**
Spiny Dogfish	10.4%	1.0%	1.9%	51.2%	33.3%	-	0.1%	0.6%	1.4%	**649.6**
Other Fish	0.1%	0.0%	0.0%	49.2%	13.3%	1.5%	18.2%	4.3%	13.4%	**475.9**

Table 2a. Share (%) of Non-Treaty Landings or Deliveries of PFMC-managed Groundfish by Westcoast Fishery Sectors: 1995 to 2005

2002

Non-Treaty Sectors

	Trawl Sectors				Non-Trawl Sectors					
Stock or Complex	**At-Sea Catcher-Processors**	**At Sea Motherships**	**Shoreside Whiting LE Trawl**	**Shoreside Non-whiting LE Trawl**	**Shoreside LE Line Gear**	**Shoreside LE Pot Gear**	**Shoreside Directed OA**	**Shoreside Incidental OA**	**Recreational**	**Non-Treaty Total (mt)**
Lingcod - coastwide	0.0%	0.0%	0.0%	12.8%	1.3%	0.2%	8.5%	1.7%	75.4%	**802.3**
N. of 42° (OR & WA)	0.1%	0.0%	0.1%	22.8%	2.2%	0.4%	10.5%	3.8%	60.0%	**288.4**
S. of 42° (CA)	-	-	0.0%	7.1%	0.9%	0.0%	7.4%	0.5%	84.1%	**513.9**
Pacific Cod	-	-	0.1%	98.8%	0.1%	-	0.0%	0.3%	0.7%	**698.6**
Pacific Whiting (Coastwide)	33.4%	24.5%	41.9%	0.0%	0.0%	-	-	0.2%	0.0%	**108,661.4**
Sablefish (Coastwide)	0.6%	0.0%	3.9%	42.3%	30.5%	10.5%	11.2%	0.9%	0.2%	**3,414.4**
N. of 36° (Monterey north)	0.6%	0.0%	4.1%	43.3%	28.8%	11.2%	11.1%	0.7%	0.2%	**3,224.7**
S. of 36° (Conception area)	-	-	-	25.9%	58.2%	-	12.9%	3.1%	-	**189.7**
PACIFIC OCEAN PERCH	1.0%	1.4%	0.1%	97.2%	0.1%	0.1%	0.0%	0.0%	0.0%	**151.5**
Shortbelly Rockfish	67.7%	14.3%	7.3%	10.7%	-	-	-	-	-	**0.7**
WIDOW ROCKFISH	28.8%	5.1%	1.3%	63.9%	0.0%	0.0%	0.1%	0.1%	0.7%	**399.0**
CANARY ROCKFISH	2.2%	1.1%	0.7%	58.5%	2.2%	-	0.3%	1.9%	33.1%	**72.4**
Chilipepper Rockfish	-	-	-	62.2%	0.2%	-	1.3%	0.1%	36.2%	**247.2**
BOCACCIO	-	-	-	57.9%	1.8%	-	8.8%	1.2%	30.4%	**30.6**
Splitnose Rockfish	-	-	-	95.5%	2.2%	-	2.2%	0.2%	-	**58.4**
Yellowtail Rockfish	1.6%	0.2%	5.3%	86.4%	0.1%	0.0%	0.3%	3.6%	2.6%	**803.3**
Shortspine Thornyhead - coastwide	1.5%	0.0%	0.0%	84.7%	13.1%	0.0%	0.3%	0.2%	0.1%	**785.7**
N. of 34°27'	2.7%	0.0%	0.1%	95.2%	1.7%	0.0%	0.0%	0.0%	0.2%	**448.4**
S. of 34°27'	-	-	-	70.7%	28.2%	-	0.7%	0.4%	-	**337.3**
Longspine Thornyhead - coastwide	-	-	-	99.2%	0.6%	0.0%	0.1%	0.0%	-	**1,911.1**
N. of 34°27'	-	-	-	99.9%	0.1%	0.0%	0.0%	0.0%	-	**1,898.5**
S. of 34°27'	-	-	-	3.6%	79.2%	-	16.3%	0.9%	-	**12.7**
Other thornyheads	-	-	-	89.5%	9.1%	-	1.3%	0.1%	-	**58.3**
COWCOD	-	-	-	3.3%	6.9%	-	-	-	89.8%	**0.3**
DARKBLOTCHED	2.0%	0.8%	0.0%	96.1%	0.2%	0.1%	0.4%	0.5%	0.0%	**111.4**
YELLOWEYE	0.2%	-	0.0%	10.8%	0.3%	0.0%	0.6%	3.5%	84.6%	**8.8**
Black Rockfish - coastwide	-	-	-	0.4%	2.6%	0.0%	23.1%	0.2%	73.7%	**842.1**
Black Rockfish (WA)	-	-	-	0.2%	-	-	-	-	99.8%	**176.5**
Black Rockfish (OR-CA)	-	-	-	0.4%	3.3%	0.1%	29.2%	0.3%	66.8%	**665.6**
Minor Rockfish North	7.5%	1.1%	0.3%	41.6%	19.4%	0.7%	14.6%	0.5%	14.3%	**298.7**
Nearshore Species	-	-	0.0%	0.8%	13.3%	0.1%	43.9%	0.1%	41.9%	**86.1**
Shelf Species	14.2%	3.1%	1.1%	60.7%	4.8%	0.2%	5.6%	1.2%	9.1%	**72.5**
BOCACCIO: N. of Monterrey	0.5%	1.9%	0.9%	72.2%	-	-	-	0.1%	24.4%	**7.9**
Chilipepper Rockfish: Eureka	21.3%	13.8%	3.8%	60.9%	-	-	-	-	0.0%	**13.9**
Redstripe Rockfish	55.5%	0.1%	0.0%	43.8%	-	-	-	0.0%	0.5%	**5.9**
Silvergrey Rockfish	1.5%	-	2.0%	80.3%	2.9%	-	-	10.1%	3.2%	**2.9**
Other Northern Shelf Rockfish	9.4%	0.4%	0.3%	59.5%	8.1%	0.4%	9.6%	1.3%	10.9%	**41.8**
Slope Species	8.7%	0.7%	0.1%	56.7%	30.6%	1.4%	1.2%	0.5%	0.1%	**140.1**
Bank Rockfish	-	91.1%	0.1%	8.8%	-	-	-	-	-	**0.1**
Sharpchin Rockfish, north	2.2%	0.3%	0.1%	97.3%	-	-	-	0.0%	-	**5.6**
Splitnose Rockfish: N. of Monterrey	59.5%	1.9%	0.0%	38.5%	0.0%	-	-	0.0%	-	**18.6**
Yellowmouth Rockfish	21.1%	-	-	75.3%	-	-	-	-	3.5%	**2.8**
Other Northern Slope Rockfish	0.3%	0.4%	0.1%	57.3%	38.0%	1.7%	1.5%	0.6%	0.0%	**113.0**
Minor Rockfish South	-	-	-	26.2%	3.8%	-	11.5%	0.3%	58.1%	**1,494.3**
Nearshore Species	-	-	-	0.1%	1.2%	-	15.8%	0.3%	82.6%	**644.6**
Shelf Species	-	-	-	4.0%	1.3%	-	3.3%	0.5%	90.9%	**365.2**
Redstripe Rockfish										**-**
Yellowtail Rockfish	-	-	-	6.9%	0.2%	-	1.6%	0.4%	90.9%	**27.1**
Other Southern Shelf Rockfish	-	-	-	3.8%	1.3%	-	3.5%	0.5%	90.9%	**338.1**
Slope Species	-	-	-	77.7%	9.2%	-	12.2%	0.1%	0.8%	**484.4**
Bank Rockfish	-	-	-	92.9%	0.7%	-	6.4%	0.0%	0.0%	**296.8**
Blackgill Rockfish	-	-	-	43.9%	27.0%	-	26.7%	0.3%	2.1%	**144.0**
Sharpchin Rockfish	-	-	-	100.0%	-	-	-	-	-	**0.3**
Yellowmouth Rockfish										**-**
Other Southern Slope Rockfish	-	-	-	86.0%	9.0%	-	3.2%	0.4%	1.4%	**43.3**
California scorpionfish	-	-	-	0.1%	0.8%	-	13.6%	4.7%	80.8%	**69.8**
Cabezon (off CA only)	-	-	-	0.1%	2.1%	-	57.4%	3.1%	37.4%	**80.6**
Dover Sole	0.0%	0.0%	0.0%	99.7%	0.0%	0.0%	0.0%	0.3%	-	**6,339.0**
English Sole	0.0%	0.0%	0.2%	99.0%	-	-	0.0%	0.8%	0.0%	**1,136.1**
Petrale Sole (coastwide)	-	-	0.0%	98.9%	0.0%	0.0%	0.0%	0.8%	0.2%	**1,802.9**
N of 40°10'	-	-	0.0%	99.1%	0.0%	0.0%	-	0.8%	0.0%	**1,576.2**
S of 40°10'	-	-	-	97.7%	-	-	0.1%	0.5%	1.8%	**226.7**
Arrowtooth Flounder	0.1%	0.0%	0.0%	99.5%	0.2%	0.0%	0.0%	0.1%	0.0%	**2,085.1**
Starry Flounder	-	-	0.0%	41.1%	0.4%	-	0.3%	25.0%	33.1%	**44.6**
Other Flatfish	0.7%	0.0%	0.0%	94.2%	0.0%	-	0.4%	2.4%	2.3%	**1,721.1**
Kelp Greenling	-	-	-	0.0%	2.9%	0.1%	25.9%	0.1%	70.9%	**212.0**
Spiny Dogfish	3.8%	0.1%	1.2%	47.8%	43.1%	0.0%	0.5%	2.0%	1.5%	**935.7**
Other Fish	-	-	-	36.7%	12.1%	1.4%	20.2%	3.6%	26.0%	**498.7**

Table 2a. Share (%) of Non-Treaty Landings or Deliveries of PFMC-managed Groundfish by Westcoast Fishery Sectors: 1995 to 2005

2003

Non-Treaty Sectors

	Trawl Sectors				Non-Trawl Sectors					
Stock or Complex	**At-Sea Catcher-Processors**	**At Sea Motherships**	**Shoreside Whiting LE Trawl**	**Shoreside Non-whiting LE Trawl**	**Shoreside LE Line Gear**	**Shoreside LE Pot Gear**	**Shoreside Directed OA**	**Shoreside Incidental OA**	**Recreational**	**Non-Treaty Total (mt)**
Lingcod - coastwide	0.0%	0.0%	0.0%	4.5%	0.5%	0.1%	4.8%	0.8%	89.3%	**1,352.0**
N. of 42° (OR & WA)	0.1%	0.0%	0.1%	16.1%	1.7%	0.3%	10.4%	2.2%	69.1%	**300.2**
S. of 42° (CA)	-	-	0.0%	1.2%	0.2%	0.0%	3.2%	0.4%	95.0%	**1,051.8**
Pacific Cod	0.0%	-	0.0%	97.9%	0.2%	0.0%	0.0%	0.7%	1.1%	**1,062.6**
Pacific Whiting (Coastwide)	34.8%	22.0%	43.2%	0.0%	0.0%	-	-	0.0%	0.0%	**118,492.2**
Sablefish (Coastwide)	0.3%	0.0%	0.8%	47.3%	26.5%	12.3%	11.9%	0.7%	0.2%	**4,917.3**
N. of 36° (Monterey north)	0.4%	0.0%	0.9%	47.8%	25.5%	12.8%	11.9%	0.6%	0.2%	**4,698.2**
S. of 36° (Conception area)	-	-	-	35.5%	48.7%	-	12.6%	3.2%	-	**219.0**
PACIFIC OCEAN PERCH	3.7%	0.1%	0.2%	95.8%	0.2%	0.0%	0.0%	0.0%	-	**137.4**
Shortbelly Rockfish	45.5%	2.1%	3.9%	22.0%	-	-	26.5%	-	-	**1.1**
WIDOW ROCKFISH	36.8%	2.2%	39.9%	12.8%	0.0%	-	3.6%	0.6%	4.1%	**31.4**
CANARY ROCKFISH	0.5%	0.2%	0.3%	20.1%	0.2%	0.0%	-	0.6%	78.1%	**38.0**
Chilipepper Rockfish	-	-	-	96.0%	1.1%	-	1.7%	1.0%	0.1%	**7.7**
BOCACCIO	-	-	-	1.0%	1.9%	-	1.9%	0.2%	95.1%	**11.3**
Splitnose Rockfish	-	-	-	99.5%	0.3%	-	0.1%	0.0%	0.1%	**151.3**
Yellowtail Rockfish	1.0%	0.3%	24.9%	57.0%	0.3%	0.0%	0.8%	2.7%	13.0%	**176.2**
Shortspine Thornyhead - coastwide	1.8%	0.0%	0.0%	79.3%	18.5%	0.0%	0.3%	0.1%	0.0%	**839.1**
N. of 34°27'	3.2%	0.0%	0.0%	95.3%	1.4%	0.1%	0.0%	0.0%	0.0%	**485.2**
S. of 34°27'	-	-	-	57.3%	42.0%	-	0.6%	0.1%	-	**353.9**
Longspine Thornyhead - coastwide	-	-	0.0%	98.7%	1.2%	0.0%	0.0%	0.0%	-	**1,571.8**
N. of 34°27'	-	-	0.0%	99.4%	0.6%	0.0%	0.0%	0.0%	-	**1,561.1**
S. of 34°27'	-	-	-	-	98.5%	-	1.5%	0.1%	-	**10.7**
Other thornyheads	-	-	-	90.5%	8.4%	-	0.7%	0.4%	-	**41.1**
COWCOD										**-**
DARKBLOTCHED	5.0%	0.1%	0.3%	93.9%	0.2%	0.0%	0.3%	0.0%	-	**84.4**
YELLOWEYE	0.0%	-	-	8.5%	0.5%	0.1%	0.1%	1.4%	89.4%	**11.4**
Black Rockfish - coastwide	-	-	-	0.1%	1.2%	0.0%	11.6%	0.1%	87.1%	**1,351.7**
Black Rockfish (WA)	-	-	-	-	-	-	-	-	100.0%	**175.9**
Black Rockfish (OR-CA)	-	-	-	0.1%	1.4%	0.0%	13.3%	0.1%	85.1%	**1,175.8**
Minor Rockfish North	8.1%	0.6%	3.5%	49.8%	10.4%	1.3%	9.8%	0.3%	16.2%	**298.8**
Nearshore Species	-	-	-	0.4%	4.0%	0.0%	34.3%	0.3%	61.0%	**68.4**
Shelf Species	15.4%	2.0%	18.5%	35.4%	8.5%	0.1%	6.5%	0.8%	12.7%	**53.3**
BOCACCIO: N. of Monterrey	0.6%	-	-	84.6%	-	-	0.2%	0.1%	14.5%	**8.9**
Chilipepper Rockfish: Eureka	1.0%	9.4%	84.4%	5.1%	-	-	-	-	0.1%	**11.3**
Redstripe Rockfish	86.3%	0.0%	-	11.6%	-	-	-	0.9%	1.2%	**5.8**
Silvergrey Rockfish	0.3%	0.8%	-	94.7%	-	-	-	-	4.2%	**1.9**
Other Northern Shelf Rockfish	11.8%	0.0%	1.4%	32.6%	17.9%	0.1%	13.6%	1.5%	20.9%	**25.3**
Slope Species	9.1%	0.3%	0.3%	73.2%	13.4%	2.1%	1.3%	0.1%	0.0%	**177.1**
Bank Rockfish	-	-	-	100.0%	-	-	-	-	-	**0.0**
Sharpchin Rockfish, north	39.0%	2.0%	-	59.0%	-	-	-	-	-	**6.1**
Splitnose Rockfish: N. of Monterrey	66.6%	1.7%	0.0%	31.5%	0.2%	-	0.0%	-	-	**17.4**
Yellowmouth Rockfish	0.0%	0.1%	-	99.9%	-	-	-	-	-	**3.2**
Other Northern Slope Rockfish	1.4%	0.1%	0.3%	78.1%	15.8%	2.5%	1.6%	0.1%	0.0%	**150.4**
Minor Rockfish South	-	-	-	13.2%	5.7%	-	10.7%	0.4%	70.1%	**1,436.8**
Nearshore Species	-	-	-	0.1%	0.2%	-	9.1%	0.2%	90.4%	**706.7**
Shelf Species	-	-	-	0.7%	0.5%	-	1.8%	0.7%	96.3%	**379.5**
Redstripe Rockfish										**-**
Yellowtail Rockfish	-	-	-	1.8%	-	-	1.9%	3.2%	93.1%	**20.3**
Other Southern Shelf Rockfish	-	-	-	0.7%	0.5%	-	1.8%	0.5%	96.4%	**359.1**
Slope Species	-	-	-	53.2%	22.3%	-	23.6%	0.3%	0.6%	**350.6**
Bank Rockfish	-	-	-	83.6%	0.1%	-	15.3%	0.0%	1.0%	**103.2**
Blackgill Rockfish	-	-	-	28.8%	37.8%	-	33.0%	0.4%	-	**189.6**
Sharpchin Rockfish										**-**
Yellowmouth Rockfish										**-**
Other Southern Slope Rockfish	-	-	-	78.7%	11.1%	-	7.7%	0.6%	1.9%	**57.8**
California scorpionfish	-	-	-	-	-	-	2.3%	2.3%	95.4%	**93.8**
Cabezon (off CA only)	-	-	-	-	0.1%	-	27.8%	1.4%	70.7%	**135.9**
Dover Sole	0.0%	0.0%	0.0%	99.8%	0.0%	0.0%	0.0%	0.2%	0.0%	**7,474.4**
English Sole	0.0%	0.0%	0.0%	97.8%	-	-	0.0%	2.2%	0.0%	**873.2**
Petrale Sole (coastwide)	0.0%	-	0.0%	97.3%	0.0%	-	0.0%	2.6%	0.0%	**1,993.3**
N of 40°10'	0.0%	-	0.0%	97.0%	0.0%	-	0.0%	2.9%	0.0%	**1,744.6**
S of 40°10'	-	-	-	99.5%	-	-	-	0.5%	0.0%	**248.8**
Arrowtooth Flounder	0.1%	0.0%	0.0%	99.1%	0.2%	0.0%	0.0%	0.6%	0.0%	**2,326.3**
Starry Flounder	-	-	0.0%	49.0%	0.0%	-	0.1%	23.8%	27.0%	**59.0**
Other Flatfish	0.4%	0.0%	0.0%	93.5%	0.0%	0.0%	0.1%	2.5%	3.4%	**1,572.2**
Kelp Greenling	-	-	-	0.0%	2.8%	0.0%	19.2%	0.1%	77.9%	**114.0**
Spiny Dogfish	2.1%	0.2%	0.9%	41.4%	40.5%	-	11.1%	0.0%	3.8%	**476.2**
Other Fish	0.0%	0.0%	-	47.8%	10.2%	0.2%	22.4%	3.2%	16.2%	**467.9**

Table 2a. Share (%) of Non-Treaty Landings or Deliveries of PFMC-managed Groundfish by Westcoast Fishery Sectors: 1995 to 2005

2004

	Non-Treaty Sectors									
	Trawl Sectors				Non-Trawl Sectors					
Stock or Complex	**At-Sea Catcher-Processors**	**At Sea Motherships**	**Shoreside Whiting LE Trawl**	**Shoreside Non-whiting LE Trawl**	**Shoreside LE Line Gear**	**Shoreside LE Pot Gear**	**Shoreside Directed OA**	**Shoreside Incidental OA**	**Recreational**	**Non-Treaty Total (mt)**
Lingcod - coastwide	0.1%	0.2%	0.9%	12.6%	1.9%	0.6%	15.9%	1.9%	65.9%	**461.5**
N. of 42° (OR & WA)	0.1%	0.3%	1.5%	15.7%	2.3%	0.8%	12.4%	2.0%	64.9%	**269.1**
S. of 42° (CA)	-	-	0.0%	8.1%	1.4%	0.4%	20.8%	1.9%	67.4%	**192.3**
Pacific Cod	0.0%	-	0.1%	98.3%	0.4%	0.0%	0.0%	0.0%	1.1%	**1,121.2**
Pacific Whiting (Coastwide)	38.5%	12.7%	48.8%	0.0%	0.0%	-	-	0.0%	0.0%	**190,172.0**
Sablefish (Coastwide)	0.4%	0.2%	2.5%	46.5%	28.1%	11.9%	9.8%	0.6%	0.1%	**5,260.8**
N. of 36° (Monterey north)	0.4%	0.2%	2.6%	46.6%	27.6%	12.3%	9.7%	0.6%	0.1%	**5,077.4**
S. of 36° (Conception area)	-	-	-	43.7%	41.9%	-	11.8%	2.6%	0.0%	**183.4**
PACIFIC OCEAN PERCH	0.7%	0.1%	0.7%	98.4%	0.0%	0.0%	0.0%	-	-	**132.3**
Shortbelly Rockfish	4.1%	14.5%	6.7%	72.5%	-	-	2.2%	-	-	**0.1**
WIDOW ROCKFISH	10.5%	14.6%	43.8%	11.2%	0.1%	0.0%	0.1%	0.1%	19.5%	**78.3**
CANARY ROCKFISH	1.7%	14.3%	4.1%	22.6%	0.1%	-	0.1%	0.3%	56.9%	**28.8**
Chilipepper Rockfish	-	-	-	79.4%	4.6%	-	2.6%	1.2%	12.1%	**49.3**
BOCACCIO	-	-	-	8.1%	2.8%	-	5.0%	0.1%	83.8%	**74.5**
Splitnose Rockfish	-	-	-	99.9%	0.0%	-	0.0%	0.0%	-	**163.8**
Yellowtail Rockfish	2.2%	4.2%	44.6%	32.5%	0.4%	-	0.8%	2.8%	12.5%	**286.0**
Shortspine Thornyhead - coastwide	0.7%	0.0%	0.1%	82.5%	16.6%	0.0%	0.1%	0.0%	0.0%	**803.6**
N. of 34°27'	1.2%	0.0%	0.1%	97.4%	1.2%	0.1%	0.1%	0.0%	-	**449.9**
S. of 34°27'	-	-	-	63.7%	36.2%	-	0.1%	0.1%	0.0%	**353.6**
Longspine Thornyhead - coastwide	0.0%	-	0.0%	98.8%	1.2%	-	0.0%	0.0%	-	**731.0**
N. of 34°27'	0.0%	-	0.0%	99.8%	0.1%	-	0.0%	0.0%	-	**723.4**
S. of 34°27'	-	-	-	-	99.0%	-	0.6%	0.4%	-	**7.6**
Other thornyheads	-	-	-	3.1%	93.3%	-	3.4%	0.2%	-	**25.9**
COWCOD	-	-	-	-	-	-	-	-	100.0%	**0.5**
DARKBLOTCHED	2.2%	1.5%	1.0%	94.9%	0.1%	0.0%	0.3%	0.0%	-	**196.7**
YELLOWEYE	-	0.1%	0.0%	4.2%	0.5%	0.1%	-	6.6%	88.6%	**7.9**
Black Rockfish - coastwide	-	-	-	0.3%	1.4%	0.0%	19.4%	0.2%	78.7%	**853.0**
Black Rockfish (WA)	-	-	-	-	-	-	-	-	100.0%	**214.8**
Black Rockfish (OR-CA)	-	-	-	0.4%	1.9%	0.0%	26.0%	0.2%	71.5%	**638.2**
Minor Rockfish North	6.6%	0.4%	6.6%	54.3%	9.5%	0.9%	7.0%	0.2%	14.5%	**397.4**
Nearshore Species	-	-	-	1.7%	2.2%	-	29.5%	0.1%	66.5%	**74.2**
Shelf Species	6.0%	2.7%	41.7%	21.9%	6.4%	0.3%	4.6%	0.9%	15.5%	**53.5**
BOCACCIO: N. of Monterrey	1.6%	2.0%	0.1%	87.9%	-	-	-	-	8.4%	**4.5**
Chilipepper Rockfish: Eureka	4.5%	3.6%	84.8%	7.1%	-	-	-	0.0%	0.0%	**24.3**
Redstripe Rockfish	76.6%	13.6%	-	9.1%	-	-	-	0.0%	0.7%	**2.6**
Silvergrey Rockfish	0.6%	12.0%	-	72.8%	8.3%	-	5.1%	-	1.2%	**0.9**
Other Northern Shelf Rockfish	0.2%	0.0%	8.1%	24.3%	15.6%	0.9%	11.5%	2.3%	37.0%	**21.3**
Slope Species	8.6%	0.1%	1.4%	75.3%	12.1%	1.2%	1.2%	0.1%	0.0%	**269.7**
Bank Rockfish	1.8%	-	0.7%	97.5%	-	-	-	-	-	**4.8**
Sharpchin Rockfish, north	1.5%	-	0.0%	98.5%	-	-	-	-	-	**22.3**
Splitnose Rockfish: N. of Monterrey	24.8%	0.6%	1.7%	72.8%	-	-	0.0%	0.1%	-	**33.8**
Yellowmouth Rockfish	0.0%	-	-	99.8%	-	0.1%	-	-	-	**15.6**
Other Northern Slope Rockfish	7.4%	0.0%	1.7%	70.5%	16.9%	1.7%	1.7%	0.1%	0.0%	**193.1**
Minor Rockfish South	-	-	-	22.2%	5.2%	0.1%	14.3%	0.3%	57.9%	**1,080.6**
Nearshore Species	-	-	-	0.0%	0.4%	-	19.3%	0.3%	80.0%	**426.1**
Shelf Species	-	-	-	0.6%	2.0%	-	6.6%	0.5%	90.3%	**315.1**
Redstripe Rockfish										**-**
Yellowtail Rockfish	-	-	-	1.6%	0.2%	-	7.9%	1.7%	88.6%	**13.7**
Other Southern Shelf Rockfish	-	-	-	0.5%	2.1%	-	6.6%	0.4%	90.4%	**301.4**
Slope Species	-	-	-	70.1%	14.3%	0.3%	15.1%	0.2%	0.1%	**339.4**
Bank Rockfish	-	-	-	84.0%	0.0%	-	15.6%	-	0.3%	**130.3**
Blackgill Rockfish	-	-	-	53.1%	28.5%	-	18.2%	0.2%	0.0%	**150.1**
Sharpchin Rockfish										**-**
Yellowmouth Rockfish										**-**
Other Southern Slope Rockfish	-	-	-	82.5%	9.6%	1.6%	5.9%	0.4%	-	**59.0**
California scorpionfish	-	-	-	-	0.0%	-	3.5%	3.9%	92.6%	**47.4**
Cabezon (off CA only)	-	-	-	-	0.4%	-	53.0%	2.0%	44.6%	**89.2**
Dover Sole	0.0%	0.0%	0.0%	99.9%	0.0%	0.0%	0.0%	0.1%	0.0%	**7,134.3**
English Sole	0.0%	0.0%	0.1%	99.2%	-	-	0.0%	0.7%	-	**893.4**
Petrale Sole (coastwide)	-	-	0.0%	99.6%	0.1%	0.0%	0.0%	0.3%	0.0%	**1,911.1**
N of 40°10'	-	-	0.0%	99.7%	0.1%	0.0%	0.0%	0.2%	0.0%	**1,644.0**
S of 40°10'	-	-	-	99.4%	-	-	-	0.5%	0.1%	**267.1**
Arrowtooth Flounder	0.0%	0.0%	0.0%	99.8%	0.0%	0.0%	0.0%	0.0%	0.0%	**2,390.3**
Starry Flounder	-	-	0.0%	81.5%	-	-	0.1%	14.7%	3.8%	**145.1**
Other Flatfish	0.1%	0.0%	0.0%	93.2%	0.0%	-	0.3%	3.0%	3.3%	**1,362.3**
Kelp Greenling	-	-	-	-	4.1%	-	36.2%	0.0%	59.7%	**62.9**
Spiny Dogfish	46.3%	1.4%	4.2%	16.6%	18.3%	-	12.8%	0.0%	0.3%	**716.2**
Other Fish	0.2%	0.1%	0.0%	33.4%	7.3%	-	30.9%	3.4%	24.6%	**328.1**

Table 2a. Share (%) of Non-Treaty Landings or Deliveries of PFMC-managed Groundfish by Westcoast Fishery Sectors: 1995 to 2005

2005

Non-Treaty Sectors

	Trawl Sectors				Non-Trawl Sectors					
Stock or Complex	**At-Sea Catcher-Processors**	**At Sea Motherships**	**Shoreside Whiting LE Trawl**	**Shoreside Non-whiting LE Trawl**	**Shoreside LE Line Gear**	**Shoreside LE Pot Gear**	**Shoreside Directed OA**	**Shoreside Incidental OA**	**Recreational**	**Non-Treaty Total (mt)**
Lingcod - coastwide	0.1%	0.3%	0.9%	11.4%	1.7%	0.4%	10.4%	0.5%	74.2%	**679.0**
N. of 42° (OR & WA)	0.1%	0.6%	1.8%	18.0%	2.8%	0.7%	10.6%	1.0%	64.3%	**317.8**
S. of 42° (CA)	-	-	0.0%	5.6%	0.8%	0.2%	10.3%	0.1%	83.0%	**361.2**
Pacific Cod	-	0.0%	0.2%	98.4%	0.3%	0.0%	0.1%	0.0%	1.0%	**742.4**
Pacific Whiting (Coastwide)	35.1%	21.6%	43.4%	0.0%	0.0%	-	-	0.0%	0.0%	**224,942.5**
Sablefish (Coastwide)	0.2%	0.0%	0.4%	42.5%	29.1%	11.1%	16.6%	0.0%	0.0%	**5,561.5**
N. of 36° (Monterey north)	0.2%	0.0%	0.4%	42.6%	28.5%	11.4%	16.7%	0.0%	0.0%	**5,416.7**
S. of 36° (Conception area)	-	-	-	37.9%	50.2%	-	11.6%	0.1%	0.0%	**144.8**
PACIFIC OCEAN PERCH	1.3%	1.4%	0.8%	96.0%	0.2%	0.0%	0.3%	0.0%	-	**61.6**
Shortbelly Rockfish	0.3%	99.7%	-	-	-	-	-	-	-	**2.7**
WIDOW ROCKFISH	26.5%	21.8%	47.1%	1.9%	0.1%	0.0%	0.2%	0.5%	1.9%	**162.9**
CANARY ROCKFISH	1.9%	3.9%	12.4%	30.8%	0.0%	-	0.4%	0.0%	50.6%	**18.1**
Chilipepper Rockfish	-	-	0.3%	80.9%	7.7%	-	1.2%	0.4%	9.5%	**37.4**
BOCACCIO	-	-	0.0%	8.3%	3.6%	-	3.2%	0.6%	84.2%	**45.2**
Splitnose Rockfish	-	-	0.0%	99.2%	0.8%	-	0.1%	-	-	**87.0**
Yellowtail Rockfish	14.8%	8.0%	54.1%	9.5%	0.2%	0.0%	0.7%	2.2%	10.6%	**319.9**
Shortspine Thornyhead - coastwide	1.0%	0.1%	0.0%	77.0%	21.7%	0.0%	0.1%	0.0%	-	**654.0**
N. of 34°27'	1.7%	0.2%	0.1%	96.1%	1.8%	0.1%	0.1%	0.0%	-	**374.3**
S. of 34°27'	-	-	-	51.6%	48.2%	-	0.1%	0.1%	-	**279.8**
Longspine Thornyhead - coastwide	-	-	0.0%	97.7%	2.3%	-	0.0%	-	-	**646.3**
N. of 34°27'	-	-	0.0%	98.9%	1.1%	-	0.0%	-	-	**638.4**
S. of 34°27'	-	-	-	-	100.0%	-	-	-	-	**7.9**
Other thornyheads	-	-	-	60.2%	35.4%	-	4.4%	-	-	**13.2**
COWCOD	-	-	-	-	-	-	1.5%	-	98.5%	**0.1**
DARKBLOTCHED	6.1%	5.2%	5.6%	78.8%	2.0%	0.0%	2.2%	0.0%	-	**97.9**
YELLOWEYE	-	-	0.1%	2.2%	-	-	0.3%	-	97.4%	**11.2**
Black Rockfish - coastwide	-	0.0%	-	0.1%	1.5%	-	16.3%	0.2%	82.0%	**956.7**
Black Rockfish (WA)	-	-	-	-	-	-	-	-	100.0%	**271.3**
Black Rockfish (OR-CA)	-	0.0%	-	0.1%	2.0%	-	22.7%	0.3%	74.9%	**685.3**
Minor Rockfish North	10.4%	4.4%	8.0%	27.8%	14.5%	1.0%	11.8%	0.1%	22.1%	**389.3**
Nearshore Species	-	-	0.0%	0.2%	2.3%	-	29.2%	0.1%	68.2%	**107.4**
Shelf Species	0.9%	8.7%	42.9%	14.7%	6.3%	0.0%	5.8%	0.5%	20.1%	**63.2**
BOCACCIO: N. of Monterrey	11.0%	16.1%	2.4%	50.1%	0.3%	-	1.0%	-	19.2%	**1.0**
Chilipepper Rockfish: Eureka	0.9%	3.1%	89.7%	6.3%	-	-	-	-	0.0%	**28.6**
Redstripe Rockfish	1.8%	95.2%	-	1.7%	-	-	-	-	1.3%	**4.6**
Silvergrey Rockfish	5.9%	7.3%	-	74.3%	-	-	-	-	12.6%	**0.5**
Other Northern Shelf Rockfish	0.2%	0.1%	5.1%	22.9%	14.0%	0.0%	12.9%	1.2%	43.5%	**28.5**
Slope Species	18.2%	5.3%	1.8%	45.2%	22.8%	1.8%	4.9%	0.0%	0.0%	**218.8**
Bank Rockfish	2.7%	0.8%	-	96.5%	-	-	-	-	-	**0.9**
Sharpchin Rockfish, north	0.2%	0.4%	-	99.4%	-	-	-	-	-	**5.0**
Splitnose Rockfish: N. of Monterrey	35.6%	22.3%	2.2%	39.6%	0.0%	-	0.2%	-	-	**26.0**
Yellowmouth Rockfish	-	-	-	100.0%	-	-	-	-	-	**1.7**
Other Northern Slope Rockfish	16.5%	3.1%	1.8%	43.7%	26.9%	2.1%	5.8%	0.0%	0.0%	**185.2**
Minor Rockfish South	-	-	-	12.0%	3.6%	-	13.1%	0.1%	71.1%	**971.5**
Nearshore Species	-	-	-	0.0%	0.3%	-	16.4%	0.0%	83.3%	**488.3**
Shelf Species	-	-	-	1.8%	2.4%	-	5.7%	0.2%	89.9%	**316.0**
Redstripe Rockfish										**-**
Yellowtail Rockfish	-	-	-	29.8%	0.1%	-	6.6%	1.4%	62.1%	**13.0**
Other Southern Shelf Rockfish	-	-	-	0.6%	2.5%	-	5.7%	0.2%	91.1%	**302.9**
Slope Species	-	-	-	66.3%	15.7%	-	17.7%	0.1%	0.2%	**167.2**
Bank Rockfish	-	-	-	65.8%	1.2%	-	31.8%	0.1%	1.1%	**37.6**
Blackgill Rockfish	-	-	-	58.7%	26.4%	-	14.9%	0.0%	-	**86.9**
Sharpchin Rockfish										**-**
Yellowmouth Rockfish										**-**
Other Southern Slope Rockfish	-	-	-	82.1%	6.5%	-	11.2%	0.2%	-	**42.7**
California scorpionfish	-	-	-	-	0.1%	-	8.4%	0.2%	91.3%	**25.2**
Cabezon (off CA only)	-	-	-	-	0.2%	-	39.0%	0.1%	60.6%	**78.8**
Dover Sole	0.0%	0.0%	0.0%	99.9%	0.0%	0.0%	0.0%	0.1%	0.0%	**6,959.0**
English Sole	0.0%	0.0%	0.0%	99.4%	-	-	-	0.6%	0.0%	**873.1**
Petrale Sole (coastwide)	-	-	0.0%	99.6%	0.0%	-	0.0%	0.4%	0.0%	**2,765.9**
N of 40°10'	-	-	0.0%	99.5%	0.0%	-	0.0%	0.5%	0.0%	**2,393.2**
S of 40°10'	-	-	-	100.0%	-	-	0.0%	0.0%	0.0%	**372.7**
Arrowtooth Flounder	0.0%	0.0%	0.0%	99.6%	0.1%	0.1%	0.0%	0.1%	0.0%	**2,128.4**
Starry Flounder	-	-	0.0%	72.8%	-	-	-	0.9%	26.3%	**34.4**
Other Flatfish	0.2%	0.1%	0.0%	96.6%	0.0%	-	0.2%	0.1%	2.8%	**1,129.5**
Kelp Greenling	0.0%	-	-	-	2.9%	-	39.9%	-	57.2%	**52.6**
Spiny Dogfish	7.9%	5.2%	17.8%	23.5%	42.9%	-	1.9%	0.1%	0.5%	**535.3**
Other Fish	0.2%	0.3%	0.0%	30.2%	8.8%	0.0%	29.7%	0.1%	30.7%	**328.4**

Table 2b. LE Trawl Sector* Share (%) of Non-Treaty Landings or Deliveries of PFMC-managed Groundfish: 1995 to 2005

Stock or Complex	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	Average** Share
Lingcod - coastwide	57.3%	58.1%	58.4%	30.8%	26.1%	15.8%	14.5%	12.8%	4.5%	13.7%	12.7%	27.7%
N. of 42° (OR & WA)	72.9%	74.2%	69.7%	47.3%	39.0%	22.1%	17.7%	23.0%	16.4%	17.7%	20.6%	38.2%
S. of 42° (CA)	36.6%	34.7%	40.5%	18.5%	17.0%	11.2%	11.8%	7.1%	1.2%	8.2%	5.6%	17.5%
Pacific Cod	97.8%	97.5%	99.0%	98.7%	98.7%	98.9%	99.0%	98.9%	98.0%	98.4%	98.6%	98.5%
Pacific Whiting (Coastwide)	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	99.8%	100.0%	100.0%	100.0%	100.0%
Sablefish (Coastwide)	52.9%	55.6%	52.4%	55.1%	52.9%	48.4%	51.7%	46.8%	48.4%	49.5%	43.2%	50.6%
N. of 36° (Monterey north)	52.4%	55.3%	52.1%	55.1%	53.1%	48.8%	52.6%	48.0%	49.0%	49.7%	43.3%	50.9%
S. of 36° (Conception area)	63.3%	62.6%	58.6%	53.6%	45.7%	29.7%	20.0%	25.9%	35.5%	43.7%	37.9%	43.3%
PACIFIC OCEAN PERCH	98.8%	98.1%	98.9%	99.8%	98.1%	99.5%	100.0%	99.7%	99.7%	100.0%	99.5%	99.3%
Shortbelly Rockfish	99.4%	98.7%	99.9%	98.6%	95.2%	100.0%	99.1%	100.0%	73.5%	97.8%	100.0%	96.6%
WIDOW ROCKFISH	98.2%	98.5%	98.2%	94.5%	97.6%	99.0%	98.5%	99.1%	91.7%	80.1%	97.3%	95.7%
CANARY ROCKFISH	68.9%	74.2%	63.3%	70.9%	65.8%	24.0%	30.2%	62.5%	21.0%	42.7%	48.9%	52.0%
Chilipepper Rockfish	77.9%	80.8%	76.0%	77.5%	84.6%	78.7%	78.3%	62.2%	96.0%	79.4%	81.1%	79.3%
BOCACCIO	45.8%	52.4%	48.0%	29.9%	17.1%	12.5%	10.2%	57.9%	1.0%	8.1%	8.3%	26.5%
Splitnose Rockfish	91.9%	98.6%	98.2%	96.0%	99.5%	93.8%	97.7%	95.5%	99.5%	99.9%	99.2%	97.3%
Yellowtail Rockfish	93.8%	92.1%	84.5%	87.0%	94.5%	96.2%	94.9%	93.5%	83.2%	83.5%	86.4%	90.0%
Shortspine Thornyhead - coastwide	97.3%	94.2%	96.0%	95.2%	86.8%	92.9%	90.2%	86.3%	81.1%	83.3%	78.2%	89.2%
N. of 34°27'	97.8%	98.0%	97.5%	97.9%	96.7%	97.5%	97.6%	97.9%	98.5%	98.6%	98.0%	97.8%
S. of 34°27'	96.4%	85.8%	92.5%	88.8%	67.3%	85.7%	73.4%	70.7%	57.3%	63.7%	51.6%	75.7%
Longspine Thornyhead - coastwide	99.0%	97.8%	97.8%	99.2%	98.3%	96.0%	96.2%	99.2%	98.7%	98.8%	97.7%	98.1%
N. of 34°27'	99.0%	98.2%	98.2%	99.7%	99.1%	97.8%	98.8%	99.9%	99.4%	99.8%	98.9%	99.0%
S. of 34°27'		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.6%	0.0%	0.0%	0.0%	0.4%
Other thornyheads	4.6%	39.8%	29.6%	34.2%	87.2%	81.2%	44.9%	89.5%	90.5%	3.1%	60.2%	51.3%
COWCOD	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%		3.3%		0.0%	0.0%	0.4%
DARKBLOTCHED	99.1%	99.4%	99.2%	97.1%	97.6%	95.6%	98.3%	98.9%	99.4%	99.6%	95.7%	98.2%
YELLOWEYE	57.4%	49.8%	38.0%	27.7%	18.1%	13.4%	5.6%	11.0%	8.5%	4.3%	2.3%	21.5%
Black Rockfish - coastwide	0.9%	1.7%	2.6%	8.3%	0.6%	0.4%	0.1%	0.4%	0.1%	0.3%	0.1%	1.4%
Black Rockfish (WA)	1.5%	0.0%	0.5%	7.5%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.9%
Black Rockfish (OR-CA)	0.8%	2.2%	3.0%	8.6%	0.7%	0.5%	0.1%	0.4%	0.1%	0.4%	0.1%	1.5%
Minor Rockfish North	64.5%	66.0%	71.4%	70.3%	61.7%	71.5%	69.4%	50.5%	62.0%	68.0%	50.6%	64.2%
Nearshore Species	1.0%	0.0%	0.2%	2.9%	0.1%	0.3%	0.5%	0.8%	0.4%	1.7%	0.2%	0.7%
Shelf Species	58.2%	60.7%	66.2%	71.5%	56.3%	72.5%	85.8%	79.1%	71.4%	72.3%	67.2%	69.2%
BOCACCIO: N. of Monterrey	87.8%	80.9%	94.2%	90.3%	81.9%	86.1%	89.0%	75.5%	85.2%	91.6%	79.5%	85.6%
Chilipepper Rockfish: Eureka	89.5%	87.6%	75.5%	96.4%	92.8%	98.6%	99.8%	100.0%	99.9%	100.0%	100.0%	94.6%
Redstripe Rockfish	99.8%	99.6%	99.4%	99.6%	99.2%	99.4%	99.2%	99.5%	97.9%	99.3%	98.7%	99.2%
Silvergrey Rockfish	97.6%	99.0%	95.3%	99.4%	98.9%	93.9%	96.9%	83.8%	95.8%	85.3%	87.4%	93.9%
Other Northern Shelf Rockfish	33.5%	38.1%	51.6%	59.3%	42.2%	54.4%	49.0%	69.7%	45.9%	32.7%	28.4%	45.9%
Slope Species	83.1%	87.4%	96.5%	85.3%	95.5%	86.5%	86.1%	66.2%	83.0%	85.3%	70.5%	84.1%
Bank Rockfish	95.8%	96.9%	97.8%	76.0%	98.9%	94.5%	100.0%	100.0%	100.0%	100.0%	100.0%	96.3%
Sharpchin Rockfish, north	99.3%	99.8%	99.8%	99.3%	99.2%	98.6%	100.0%	100.0%	100.0%	100.0%	100.0%	99.6%
Splitnose Rockfish: N. of Monterrey	98.8%	99.9%	99.4%	98.2%	98.3%	97.5%	99.6%	99.9%	99.8%	99.9%	99.7%	99.2%
Yellowmouth Rockfish	96.0%	99.1%	99.4%	99.9%	100.0%	100.0%	100.0%	96.5%	100.0%	99.9%	100.0%	99.2%
Other Northern Slope Rockfish	63.8%	71.7%	90.9%	69.4%	92.5%	83.8%	81.7%	58.2%	80.0%	79.6%	65.2%	76.1%
Minor Rockfish South	26.2%	30.9%	29.5%	30.8%	7.5%	13.5%	17.7%	26.2%	13.2%	22.2%	12.0%	20.9%
Nearshore Species	1.4%	2.2%	1.5%	0.1%	1.8%	0.1%	0.0%	0.1%	0.1%	0.0%	0.0%	0.7%
Shelf Species	15.3%	16.9%	18.8%	23.4%	4.3%	5.6%	7.1%	4.0%	0.7%	0.6%	1.8%	9.0%
Redstripe Rockfish	100.0%	0.0%	91.1%	87.9%	60.2%	0.0%	0.0%					48.5%
Yellowtail Rockfish	19.3%	33.5%	24.1%	28.8%	5.8%	13.3%	2.2%	6.9%	1.8%	1.6%	29.8%	15.2%
Other Southern Shelf Rockfish	14.4%	13.4%	12.5%	19.5%	3.7%	2.2%	8.3%	3.8%	0.7%	0.5%	0.6%	7.2%
Slope Species	63.0%	71.9%	77.0%	67.6%	64.4%	73.3%	74.3%	77.7%	53.2%	70.1%	66.3%	69.0%
Bank Rockfish	80.7%	89.9%	89.5%	73.6%	59.5%	87.0%	83.9%	92.9%	83.6%	84.0%	65.8%	81.0%
Blackgill Rockfish	38.2%	41.8%	48.2%	50.3%	52.6%	61.6%	69.5%	43.9%	28.8%	53.1%	58.7%	49.7%
Sharpchin Rockfish	87.4%	99.3%	99.9%	99.0%	100.0%	92.9%	100.0%	100.0%				97.3%
Yellowmouth Rockfish		80.9%	100.0%				100.0%					93.6%
Other Southern Slope Rockfish	79.2%	77.5%	82.4%	73.2%	88.3%	62.0%	63.8%	86.0%	78.7%	82.5%	82.1%	77.8%
California scorpionfish	0.0%	0.0%	4.2%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.4%
Cabezon (off CA only)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%
Dover Sole	99.1%	99.1%	99.3%	99.3%	98.7%	99.2%	99.5%	99.7%	99.8%	99.9%	99.9%	99.4%
English Sole	98.7%	97.3%	95.6%	97.7%	96.3%	96.6%	97.5%	99.2%	97.8%	99.3%	99.4%	97.8%
Petrale Sole (coastwide)	98.6%	98.5%	96.7%	98.2%	97.5%	97.3%	97.9%	98.9%	97.3%	99.6%	99.6%	98.2%
N of 40°10'	99.3%	98.5%	96.1%	98.5%	97.3%	97.0%	97.9%	99.1%	97.0%	99.7%	99.5%	98.2%
S of 40°10'	95.7%	98.3%	98.3%	96.9%	98.6%	98.6%	98.4%	97.7%	99.4%	99.4%	100.0%	98.3%
Arrowtooth Flounder	99.0%	99.7%	99.8%	99.8%	99.7%	99.4%	99.9%	99.7%	99.2%	99.9%	99.7%	99.6%
Starry Flounder	80.1%	60.8%	64.4%	61.3%	42.3%	57.5%	1.8%	41.1%	49.0%	81.5%	72.8%	55.7%
Other Flatfish	97.0%	92.8%	90.1%	94.8%	95.2%	92.8%	92.4%	94.9%	94.0%	93.3%	96.9%	94.0%
Kelp Greenling	3.6%	0.1%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%
Spiny Dogfish	95.1%	82.6%	85.7%	99.2%	92.7%	53.6%	64.6%	52.9%	44.6%	68.5%	54.5%	72.2%
Other Fish	69.1%	43.2%	51.8%	65.8%	50.3%	50.8%	49.4%	36.7%	47.8%	33.8%	30.7%	48.1%

* "LE Trawl Sector" includes At Sea Catcher Processors, At Sea Motherships, Shoreside Whiting, and Shoreside Non-whiting Trawl sectors.

** Arithmetic average of non-empty cells in each row. Empty cell means total recorded species catch by non-treaty sectors in that year = 0.

Table 2c. LE Fixed Gear Sector* Share (%) of Non-Treaty Landings or Deliveries of PFMC-managed Groundfish: 1995 to 2005

Stock or Complex	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	Average** Share
Lingcod - coastwide	2.3%	2.6%	3.3%	3.6%	3.9%	3.7%	4.3%	1.5%	0.6%	2.5%	2.2%	2.8%
N. of 42° (OR & WA)	0.9%	0.8%	2.3%	4.6%	6.5%	6.1%	7.4%	2.6%	2.0%	3.1%	3.5%	3.6%
S. of 42° (CA)	4.1%	5.2%	4.8%	2.8%	2.1%	2.0%	1.6%	0.9%	0.2%	1.8%	1.0%	2.4%
Pacific Cod	0.2%	0.3%	0.1%	0.2%	0.4%	0.4%	0.4%	0.1%	0.2%	0.4%	0.3%	0.3%
Pacific Whiting (Coastwide)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Sablefish (Coastwide)	37.9%	34.7%	39.9%	39.6%	40.9%	42.5%	38.0%	41.0%	38.8%	40.0%	40.2%	39.4%
N. of 36° (Monterey north)	39.1%	35.2%	39.9%	39.3%	40.7%	42.2%	37.0%	40.0%	38.3%	40.0%	39.9%	39.2%
S. of 36° (Conception area)	13.5%	25.1%	39.3%	44.6%	47.5%	56.8%	69.7%	58.2%	48.7%	41.9%	50.2%	45.0%
PACIFIC OCEAN PERCH	0.5%	1.1%	0.3%	0.0%	0.2%	0.2%	0.0%	0.2%	0.3%	0.0%	0.3%	0.3%
Shortbelly Rockfish	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
WIDOW ROCKFISH	0.1%	0.1%	0.1%	0.3%	0.4%	0.1%	0.1%	0.0%	0.0%	0.1%	0.1%	0.1%
CANARY ROCKFISH	6.1%	5.2%	6.3%	8.3%	7.9%	4.8%	7.9%	2.2%	0.2%	0.1%	0.0%	4.4%
Chilipepper Rockfish	0.8%	0.7%	0.7%	1.2%	1.4%	1.8%	0.8%	0.2%	1.1%	4.6%	7.7%	1.9%
BOCACCIO	0.6%	1.3%	2.6%	4.0%	2.4%	1.7%	1.8%	1.8%	1.9%	2.8%	3.6%	2.2%
Splitnose Rockfish	0.5%	0.2%	0.2%	0.0%	0.3%	5.8%	1.0%	2.2%	0.3%	0.0%	0.8%	1.0%
Yellowtail Rockfish	0.3%	0.6%	1.7%	1.5%	1.1%	0.1%	0.2%	0.1%	0.3%	0.4%	0.2%	0.6%
Shortspine Thornyhead - coastwide	1.7%	4.9%	3.6%	4.6%	12.1%	6.1%	9.4%	13.1%	18.5%	16.6%	21.7%	10.2%
N. of 34°27'	1.5%	1.7%	2.1%	1.9%	3.0%	2.3%	2.3%	1.8%	1.4%	1.3%	1.9%	1.9%
S. of 34°27'	2.0%	11.8%	7.1%	11.0%	29.9%	12.1%	25.5%	28.2%	42.0%	36.2%	48.2%	23.1%
Longspine Thornyhead - coastwide	0.5%	2.0%	1.8%	0.7%	1.4%	3.5%	3.1%	0.6%	1.2%	1.2%	2.3%	1.7%
N. of 34°27'	0.5%	1.6%	1.4%	0.2%	0.7%	2.1%	1.1%	0.1%	0.6%	0.1%	1.1%	0.9%
S. of 34°27'		98.2%	100.0%	99.1%	95.0%	74.6%	79.0%	79.2%	98.5%	99.0%	100.0%	92.2%
Other thornyheads	19.8%	44.8%	66.1%	61.1%	10.0%	13.6%	47.5%	9.1%	8.4%	93.3%	35.4%	37.2%
COWCOD	16.6%	8.6%	16.9%	13.6%	4.0%	0.6%		6.9%		0.0%	0.0%	7.5%
DARKBLOTCHED	0.3%	0.2%	0.1%	0.6%	0.2%	3.6%	1.3%	0.2%	0.3%	0.1%	2.1%	0.8%
YELLOWEYE	11.2%	17.5%	21.6%	14.8%	35.8%	10.8%	18.3%	0.3%	0.6%	0.6%	0.0%	12.0%
Black Rockfish - coastwide	3.4%	2.2%	4.6%	3.4%	2.3%	2.7%	4.6%	2.6%	1.2%	1.4%	1.5%	2.7%
Black Rockfish (WA)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Black Rockfish (OR-CA)	4.3%	2.8%	5.6%	4.5%	2.8%	3.3%	5.6%	3.3%	1.4%	1.9%	2.0%	3.4%
Minor Rockfish North	20.3%	16.1%	12.9%	15.9%	21.5%	12.2%	11.3%	20.1%	11.7%	10.4%	15.5%	15.3%
Nearshore Species	13.9%	12.3%	7.8%	12.1%	12.4%	12.4%	17.7%	13.4%	4.0%	2.2%	2.3%	10.1%
Shelf Species	23.2%	19.0%	19.3%	17.4%	32.0%	15.6%	8.4%	5.0%	8.6%	6.7%	6.3%	14.7%
BOCACCIO: N. of Monterrey	2.0%	4.8%	1.6%	0.9%	5.4%	0.2%	0.0%	0.0%	0.0%	0.0%	0.3%	1.4%
Chilipepper Rockfish: Eureka	7.6%	3.5%	3.8%	0.2%	0.0%	0.3%	0.1%	0.0%	0.0%	0.0%	0.0%	1.4%
Redstripe Rockfish	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Silvergrey Rockfish	0.0%	0.1%	1.5%	0.0%	0.7%	0.0%	2.0%	2.9%	0.0%	8.3%	0.0%	1.4%
Other Northern Shelf Rockfish	37.9%	31.0%	29.1%	25.7%	43.6%	27.0%	31.8%	8.5%	18.1%	16.5%	14.0%	25.7%
Slope Species	15.3%	9.8%	2.2%	13.1%	1.9%	10.9%	11.1%	32.0%	15.6%	13.4%	24.6%	13.6%
Bank Rockfish	0.0%	0.9%	0.0%	13.2%	0.0%	3.2%	0.0%	0.0%	0.0%	0.0%	0.0%	1.6%
Sharpchin Rockfish, north	0.4%	0.0%	0.0%	0.0%	0.0%	1.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
Splitnose Rockfish: N. of Monterrey	0.6%	0.0%	0.0%	0.0%	0.0%	1.5%	0.0%	0.0%	0.2%	0.0%	0.0%	0.2%
Yellowmouth Rockfish	1.6%	0.7%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.2%
Other Northern Slope Rockfish	33.9%	22.4%	6.3%	28.6%	3.5%	13.2%	14.7%	39.7%	18.3%	18.6%	29.0%	20.8%
Minor Rockfish South	6.1%	7.7%	8.1%	8.6%	4.1%	5.7%	5.4%	3.8%	5.7%	5.3%	3.6%	5.8%
Nearshore Species	2.8%	4.3%	6.2%	4.9%	2.7%	3.4%	2.6%	1.2%	0.2%	0.4%	0.3%	2.6%
Shelf Species	6.9%	7.0%	9.0%	8.4%	3.9%	2.3%	2.9%	1.3%	0.5%	2.0%	2.4%	4.2%
Redstripe Rockfish	0.0%	0.0%	0.0%	0.5%	0.0%	11.1%	33.3%					6.4%
Yellowtail Rockfish	16.4%	3.9%	5.4%	5.8%	2.5%	1.1%	1.8%	0.2%	0.0%	0.2%	0.1%	3.4%
Other Southern Shelf Rockfish	4.7%	7.6%	12.9%	10.2%	4.5%	2.8%	3.1%	1.3%	0.5%	2.1%	2.5%	4.8%
Slope Species	7.8%	11.5%	8.6%	12.1%	14.3%	21.2%	15.6%	9.2%	22.3%	14.6%	15.7%	13.9%
Bank Rockfish	1.0%	0.2%	0.1%	1.6%	0.0%	7.1%	4.7%	0.7%	0.1%	0.0%	1.2%	1.5%
Blackgill Rockfish	16.3%	31.1%	26.3%	39.8%	30.6%	33.9%	20.9%	27.0%	37.8%	28.5%	26.4%	29.0%
Sharpchin Rockfish	2.1%	0.1%	0.0%	0.2%	0.0%	7.1%	0.0%	0.0%				1.2%
Yellowmouth Rockfish		0.0%	0.0%				0.0%					0.0%
Other Southern Slope Rockfish	5.5%	2.9%	1.0%	6.0%	1.6%	29.7%	27.6%	9.0%	11.1%	11.2%	6.5%	10.2%
California scorpionfish	2.4%	1.9%	0.5%	0.7%	0.0%	0.0%	0.0%	0.8%	0.0%	0.0%	0.1%	0.6%
Cabezon (off CA only)	1.0%	0.3%	4.8%	2.1%	2.2%	2.0%	0.9%	2.1%	0.1%	0.4%	0.2%	1.5%
Dover Sole	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
English Sole	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Petrale Sole (coastwide)	0.1%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%
N of 40°10'	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%
S of 40°10'	0.3%	0.0%	0.3%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%
Arrowtooth Flounder	0.1%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.3%	0.2%	0.1%	0.2%	0.1%
Starry Flounder	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.4%	0.0%	0.0%	0.0%	0.1%
Other Flatfish	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Kelp Greenling	1.4%	0.7%	4.1%	4.6%	7.1%	5.7%	4.7%	3.0%	2.8%	4.1%	2.9%	3.7%
Spiny Dogfish	1.3%	5.2%	0.4%	0.1%	4.8%	44.0%	33.3%	43.1%	40.5%	18.3%	42.9%	21.3%
Other Fish	5.1%	33.4%	27.1%	16.7%	16.0%	7.4%	14.8%	13.5%	10.4%	7.3%	8.9%	14.6%

* "LE Fixed Gear Sector" includes LE line gear and LE pot gear sectors.

** Arithmetic average of non-empty cells in each row. Empty cell means total recorded species catch by non-treaty sectors in that year = 0.

Table 2d. Open Access Sector* Share (%) of Non-Treaty Landings or Deliveries of PFMC-managed Groundfish: 1995 to 2005

Stock or Complex	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	Average** Share
Lingcod - coastwide	18.6%	14.6%	16.9%	15.4%	14.4%	15.2%	18.3%	10.2%	5.6%	17.8%	10.9%	14.4%
N. of 42° (OR & WA)	13.0%	13.0%	14.6%	14.9%	20.1%	24.1%	23.0%	14.3%	12.5%	14.4%	11.5%	16.0%
S. of 42° (CA)	25.9%	17.1%	20.5%	15.8%	10.3%	8.9%	14.3%	7.9%	3.6%	22.6%	10.4%	14.3%
Pacific Cod	1.9%	2.0%	0.8%	0.7%	0.7%	0.7%	0.6%	0.3%	0.7%	0.1%	0.1%	0.8%
Pacific Whiting (Coastwide)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%
Sablefish (Coastwide)	9.1%	9.6%	7.7%	5.3%	6.2%	9.1%	10.3%	12.0%	12.6%	10.4%	16.6%	9.9%
N. of 36° (Monterey north)	8.4%	9.5%	7.9%	5.5%	6.2%	9.0%	10.3%	11.8%	12.5%	10.3%	16.8%	9.8%
S. of 36° (Conception area)	23.1%	12.3%	2.2%	1.8%	6.7%	13.6%	10.2%	15.9%	15.8%	14.4%	11.8%	11.6%
PACIFIC OCEAN PERCH	0.7%	0.8%	0.8%	0.2%	1.7%	0.3%	0.0%	0.0%	0.0%	0.0%	0.3%	0.5%
Shortbelly Rockfish	0.5%	1.1%	0.1%	1.3%	4.8%	0.0%	0.9%	0.0%	26.5%	2.2%	0.0%	3.4%
WIDOW ROCKFISH	1.6%	1.0%	1.1%	3.9%	1.3%	0.4%	0.7%	0.2%	4.2%	0.3%	0.7%	1.4%
CANARY ROCKFISH	13.9%	13.9%	18.9%	14.5%	13.8%	12.1%	9.7%	2.2%	0.6%	0.4%	0.4%	9.1%
Chilipepper Rockfish	20.7%	16.6%	19.7%	20.8%	11.3%	10.9%	7.3%	1.4%	2.8%	3.8%	1.6%	10.6%
BOCACCIO	49.0%	28.7%	15.3%	38.6%	12.9%	4.2%	5.0%	10.0%	2.0%	5.2%	3.8%	15.9%
Splitnose Rockfish	7.6%	1.1%	1.6%	4.0%	0.2%	0.4%	1.3%	2.3%	0.1%	0.0%	0.1%	1.7%
Yellowtail Rockfish	5.4%	6.7%	11.9%	9.4%	3.5%	3.0%	3.8%	3.8%	3.4%	3.6%	2.9%	5.2%
Shortspine Thornyhead - coastwide	1.0%	1.0%	0.4%	0.2%	1.1%	1.0%	0.4%	0.5%	0.3%	0.1%	0.1%	0.5%
N. of 34°27'	0.6%	0.3%	0.4%	0.2%	0.2%	0.1%	0.1%	0.0%	0.0%	0.1%	0.1%	0.2%
S. of 34°27'	1.6%	2.4%	0.4%	0.2%	2.8%	2.3%	1.1%	1.1%	0.7%	0.1%	0.2%	1.2%
Longspine Thornyhead - coastwide	0.5%	0.2%	0.4%	0.1%	0.2%	0.5%	0.6%	0.1%	0.0%	0.0%	0.0%	0.3%
N. of 34°27'	0.5%	0.2%	0.4%	0.1%	0.2%	0.1%	0.1%	0.0%	0.0%	0.0%	0.0%	0.2%
S. of 34°27'		1.8%	0.0%	0.9%	5.0%	25.4%	21.0%	17.2%	1.5%	1.0%	0.0%	7.4%
Other thornyheads	75.6%	15.4%	4.3%	4.7%	2.9%	5.2%	7.6%	1.5%	1.1%	3.6%	4.4%	11.5%
COWCOD	74.0%	65.0%	51.8%	27.2%	23.6%	4.8%		0.0%		0.0%	1.5%	27.6%
DARKBLOTCHED	0.6%	0.4%	0.7%	2.3%	2.2%	0.8%	0.4%	0.9%	0.4%	0.3%	2.2%	1.0%
YELLOWEYE	17.5%	17.9%	24.1%	21.0%	12.0%	5.9%	8.2%	4.0%	1.5%	6.6%	0.3%	10.8%
Black Rockfish - coastwide	22.6%	21.2%	25.9%	17.9%	19.8%	17.5%	20.3%	23.3%	11.6%	19.6%	16.4%	19.7%
Black Rockfish (WA)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Black Rockfish (OR-CA)	28.8%	27.4%	32.1%	23.8%	24.7%	21.7%	24.7%	29.4%	13.4%	26.2%	23.0%	25.0%
Minor Rockfish North	13.7%	15.9%	11.6%	9.6%	10.7%	7.4%	9.1%	15.1%	10.1%	7.1%	11.9%	11.1%
Nearshore Species	47.1%	41.3%	38.5%	32.3%	35.8%	28.9%	34.2%	43.9%	34.6%	29.6%	29.3%	36.0%
Shelf Species	18.2%	20.0%	14.0%	10.4%	10.4%	7.8%	3.4%	6.7%	7.4%	5.6%	6.4%	10.0%
BOCACCIO: N. of Monterrey	9.3%	14.1%	3.9%	8.4%	11.1%	0.7%	0.1%	0.1%	0.3%	0.0%	1.0%	4.5%
Chilipepper Rockfish: Eureka	2.8%	8.9%	20.6%	3.4%	7.2%	1.1%	0.1%	0.0%	0.0%	0.0%	0.0%	4.0%
Redstripe Rockfish	0.0%	0.3%	0.3%	0.2%	0.6%	0.0%	0.0%	0.0%	0.9%	0.0%	0.0%	0.2%
Silvergrey Rockfish	2.3%	1.0%	3.2%	0.5%	0.2%	0.2%	0.1%	10.1%	0.0%	5.1%	0.0%	2.1%
Other Northern Shelf Rockfish	28.2%	30.5%	18.7%	14.2%	12.5%	12.9%	12.6%	11.0%	15.2%	13.8%	14.1%	16.7%
Slope Species	1.6%	2.6%	1.3%	1.6%	2.6%	2.6%	2.7%	1.7%	1.5%	1.3%	5.0%	2.2%
Bank Rockfish	4.2%	2.3%	2.2%	10.8%	1.1%	2.3%	0.0%	0.0%	0.0%	0.0%	0.0%	2.1%
Sharpchin Rockfish, north	0.3%	0.2%	0.2%	0.7%	0.8%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%
Splitnose Rockfish: N. of Monterrey	0.6%	0.1%	0.5%	1.8%	1.6%	1.0%	0.4%	0.0%	0.0%	0.1%	0.2%	0.6%
Yellowmouth Rockfish	2.4%	0.2%	0.6%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.3%
Other Northern Slope Rockfish	2.3%	5.7%	2.8%	1.9%	4.0%	3.0%	3.5%	2.1%	1.7%	1.8%	5.8%	3.1%
Minor Rockfish South	40.4%	28.0%	23.8%	30.2%	17.7%	13.6%	14.9%	11.8%	11.1%	14.6%	13.2%	19.9%
Nearshore Species	44.2%	34.8%	30.0%	30.6%	26.0%	23.5%	21.0%	16.0%	9.3%	19.6%	16.4%	24.7%
Shelf Species	46.0%	34.6%	26.4%	38.1%	10.6%	6.3%	6.7%	3.8%	2.5%	7.1%	5.9%	17.1%
Redstripe Rockfish	0.0%	0.0%	0.0%	4.5%	0.0%	45.1%	66.7%					16.6%
Yellowtail Rockfish	49.4%	17.8%	15.3%	39.3%	9.6%	3.3%	2.3%	2.1%	5.1%	9.6%	8.0%	14.7%
Other Southern Shelf Rockfish	45.2%	38.1%	38.8%	37.3%	11.1%	7.5%	7.7%	4.0%	2.4%	7.0%	5.9%	18.6%
Slope Species	28.8%	14.4%	13.0%	19.9%	16.5%	4.2%	9.9%	12.3%	23.9%	15.2%	17.8%	16.0%
Bank Rockfish	18.2%	6.0%	7.6%	24.3%	24.9%	2.9%	10.9%	6.4%	15.3%	15.6%	31.9%	14.9%
Blackgill Rockfish	44.6%	27.1%	25.5%	10.0%	16.1%	4.5%	9.5%	27.0%	33.4%	18.4%	14.9%	21.0%
Sharpchin Rockfish	10.5%	0.6%	0.1%	0.9%	0.0%	0.0%	0.0%	0.0%				1.5%
Yellowmouth Rockfish		19.1%	0.0%				0.0%					6.4%
Other Southern Slope Rockfish	15.2%	19.3%	15.5%	19.4%	8.9%	8.3%	8.1%	3.6%	8.3%	6.2%	11.3%	11.3%
California scorpionfish	21.4%	11.2%	19.4%	32.2%	21.4%	16.3%	14.5%	18.3%	4.6%	7.4%	8.7%	16.0%
Cabezon (off CA only)	55.8%	56.9%	64.0%	68.6%	72.0%	71.9%	55.2%	60.5%	29.2%	55.0%	39.2%	57.1%
Dover Sole	0.8%	0.8%	0.7%	0.7%	1.3%	0.7%	0.5%	0.3%	0.2%	0.1%	0.1%	0.6%
English Sole	1.3%	2.7%	4.4%	2.3%	3.7%	3.4%	2.5%	0.8%	2.2%	0.7%	0.6%	2.2%
Petrale Sole (coastwide)	1.3%	1.5%	3.2%	1.8%	2.4%	2.7%	2.0%	0.8%	2.7%	0.3%	0.4%	1.7%
N of 40°10'	0.6%	1.5%	3.9%	1.5%	2.7%	2.9%	2.1%	0.8%	3.0%	0.2%	0.5%	1.8%
S of 40°10'	3.9%	1.5%	1.4%	2.9%	1.4%	1.3%	1.5%	0.6%	0.5%	0.5%	0.0%	1.4%
Arrowtooth Flounder	0.9%	0.3%	0.2%	0.2%	0.3%	0.6%	0.1%	0.1%	0.6%	0.0%	0.1%	0.3%
Starry Flounder	13.8%	32.4%	32.0%	29.5%	48.3%	28.4%	3.8%	25.3%	23.9%	14.8%	0.9%	23.0%
Other Flatfish	2.3%	4.5%	7.9%	4.3%	3.7%	3.2%	4.8%	2.8%	2.6%	3.3%	0.2%	3.6%
Kelp Greenling	7.9%	6.8%	33.3%	43.7%	55.5%	49.1%	30.7%	26.0%	19.3%	36.2%	39.9%	31.7%
Spiny Dogfish	0.2%	7.0%	13.1%	0.3%	1.1%	0.9%	0.7%	2.4%	11.1%	12.8%	2.1%	4.7%
Other Fish	7.6%	18.5%	15.1%	10.5%	21.6%	30.0%	22.5%	23.8%	25.6%	34.3%	29.8%	21.8%

* "Open Access Sector" includes Directed OA and Incidental OA sectors.

** Arithmetic average of non-empty cells in each row. Empty cell means total recorded species catch by non-treaty sectors in that year = 0.

Table 2e. Recreational Sector* Share (%) of Non-Treaty Landings or Deliveries of PFMC-managed Groundfish: 1995 to 2005

Stock or Complex	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	Average** Share
Lingcod - coastwide	21.9%	24.6%	21.5%	50.1%	55.6%	65.3%	63.0%	75.4%	89.3%	65.9%	74.2%	55.2%
N. of 42° (OR & WA)	13.2%	12.0%	13.5%	33.2%	34.5%	47.7%	51.9%	60.0%	69.1%	64.9%	64.3%	42.2%
S. of 42° (CA)	33.4%	43.0%	34.2%	62.9%	70.6%	77.8%	72.2%	84.1%	95.0%	67.4%	83.0%	65.8%
Pacific Cod	0.1%	0.1%	0.1%	0.4%	0.1%	0.0%	0.0%	0.7%	1.1%	1.1%	1.0%	0.4%
Pacific Whiting (Coastwide)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Sablefish (Coastwide)	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.1%	0.2%	0.2%	0.1%	0.0%	0.1%
N. of 36° (Monterey north)	0.0%	0.0%	0.1%	0.1%	0.0%	0.0%	0.1%	0.2%	0.2%	0.1%	0.0%	0.1%
S. of 36° (Conception area)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
PACIFIC OCEAN PERCH	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Shortbelly Rockfish	0.0%	0.2%	0.1%	0.1%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%
WIDOW ROCKFISH	0.1%	0.4%	0.6%	1.2%	0.8%	0.4%	0.7%	0.7%	4.1%	19.5%	1.9%	2.8%
CANARY ROCKFISH	11.1%	6.6%	11.6%	6.4%	12.5%	59.1%	52.2%	33.1%	78.1%	56.9%	50.6%	34.4%
Chilipepper Rockfish	0.6%	1.9%	3.6%	0.5%	2.6%	8.6%	13.7%	36.2%	0.1%	12.1%	9.5%	8.1%
BOCACCIO	4.7%	17.7%	34.1%	27.5%	67.6%	81.6%	83.0%	30.4%	95.1%	83.8%	84.2%	55.4%
Splitnose Rockfish	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%
Yellowtail Rockfish	0.6%	0.6%	1.9%	2.1%	0.9%	0.7%	1.1%	2.6%	13.0%	12.5%	10.6%	4.2%
Shortspine Thornyhead - coastwide	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%
N. of 34°27'	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%
S. of 34°27'	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Longspine Thornyhead - coastwide	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
N. of 34°27'	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
S. of 34°27'		0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Other thornyheads	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
COWCOD	9.4%	26.3%	31.3%	59.2%	72.5%	94.6%		89.8%		100.0%	98.5%	64.6%
DARKBLOTCHED	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
YELLOWEYE	13.9%	14.8%	16.3%	36.5%	34.1%	70.0%	67.9%	84.6%	89.4%	88.6%	97.4%	55.8%
Black Rockfish - coastwide	73.1%	74.9%	67.0%	70.4%	77.3%	79.4%	75.0%	73.7%	87.1%	78.7%	82.0%	76.2%
Black Rockfish (WA)	98.5%	100.0%	99.5%	92.5%	100.0%	100.0%	100.0%	99.8%	100.0%	100.0%	100.0%	99.1%
Black Rockfish (OR-CA)	66.1%	67.6%	59.2%	63.1%	71.7%	74.5%	69.6%	66.8%	85.1%	71.5%	74.9%	70.0%
Minor Rockfish North	1.5%	2.0%	4.1%	4.2%	6.0%	9.0%	10.2%	14.3%	16.2%	14.5%	22.1%	9.5%
Nearshore Species	38.0%	46.3%	53.5%	52.7%	51.7%	58.3%	47.6%	41.9%	61.0%	66.5%	68.2%	53.2%
Shelf Species	0.4%	0.2%	0.5%	0.6%	1.4%	4.0%	2.5%	9.1%	12.7%	15.5%	20.1%	6.1%
BOCACCIO: N. of Monterrey	0.8%	0.2%	0.3%	0.5%	1.6%	13.0%	10.9%	24.4%	14.5%	8.4%	19.2%	8.5%
Chilipepper Rockfish: Eureka	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%
Redstripe Rockfish	0.2%	0.1%	0.2%	0.2%	0.2%	0.6%	0.8%	0.5%	1.2%	0.7%	1.3%	0.5%
Silvergrey Rockfish	0.1%	0.0%	0.1%	0.1%	0.2%	5.9%	1.1%	3.2%	4.2%	1.2%	12.6%	2.6%
Other Northern Shelf Rockfish	0.4%	0.4%	0.7%	0.8%	1.7%	5.7%	6.6%	10.9%	20.9%	37.0%	43.5%	11.7%
Slope Species	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%	0.0%	0.1%	0.0%	0.0%	0.0%	0.0%
Bank Rockfish	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Sharpchin Rockfish, north	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Splitnose Rockfish: N. of Monterrey	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Yellowmouth Rockfish	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	3.5%	0.0%	0.0%	0.0%	0.3%
Other Northern Slope Rockfish	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Minor Rockfish South	27.3%	33.3%	38.6%	30.4%	70.8%	67.3%	62.0%	58.1%	70.1%	57.9%	71.1%	53.3%
Nearshore Species	51.7%	58.7%	62.3%	64.4%	69.6%	73.0%	76.3%	82.6%	90.4%	80.0%	83.3%	72.0%
Shelf Species	31.8%	41.5%	45.8%	30.1%	81.1%	85.8%	83.3%	90.9%	96.3%	90.3%	89.9%	69.7%
Redstripe Rockfish	0.0%	100.0%	8.9%	7.1%	39.8%	43.8%	0.0%					28.5%
Yellowtail Rockfish	15.0%	44.7%	55.1%	26.1%	82.2%	82.4%	93.7%	90.9%	93.1%	88.6%	62.1%	66.7%
Other Southern Shelf Rockfish	35.6%	40.9%	35.8%	33.0%	80.7%	87.4%	80.9%	90.9%	96.4%	90.4%	91.1%	69.4%
Slope Species	0.4%	2.2%	1.5%	0.4%	4.8%	1.4%	0.2%	0.8%	0.6%	0.1%	0.2%	1.1%
Bank Rockfish	0.0%	3.9%	2.8%	0.4%	15.6%	3.0%	0.4%	0.0%	1.0%	0.3%	1.1%	2.6%
Blackgill Rockfish	0.8%	0.0%	0.0%	0.0%	0.6%	0.0%	0.0%	2.1%	0.0%	0.0%	0.0%	0.3%
Sharpchin Rockfish	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%				0.0%
Yellowmouth Rockfish		0.0%	0.0%				0.0%					0.0%
Other Southern Slope Rockfish	0.1%	0.3%	1.0%	1.5%	1.2%	0.0%	0.5%	1.4%	1.9%	0.0%	0.0%	0.7%
California scorpionfish	76.2%	86.8%	75.8%	67.1%	78.6%	83.6%	85.4%	80.8%	95.4%	92.6%	91.3%	83.1%
Cabezon (off CA only)	43.2%	42.8%	31.2%	29.3%	25.7%	26.1%	44.0%	37.4%	70.7%	44.6%	60.6%	41.4%
Dover Sole	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
English Sole	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Petrale Sole (coastwide)	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.2%	0.0%	0.0%	0.0%	0.0%
N of 40°10'	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
S of 40°10'	0.2%	0.1%	0.0%	0.0%	0.0%	0.1%	0.0%	1.7%	0.0%	0.1%	0.0%	0.2%
Arrowtooth Flounder	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%
Starry Flounder	6.1%	6.7%	3.6%	9.2%	9.4%	14.1%	94.3%	33.1%	27.0%	3.8%	26.3%	21.2%
Other Flatfish	0.7%	2.7%	1.9%	0.9%	1.1%	3.9%	2.8%	2.3%	3.4%	3.3%	2.8%	2.3%
Kelp Greenling	87.1%	92.5%	62.6%	51.5%	37.5%	45.2%	64.6%	70.9%	77.9%	59.7%	57.2%	64.2%
Spiny Dogfish	3.5%	5.1%	0.8%	0.4%	1.4%	1.4%	1.4%	1.5%	3.8%	0.3%	0.5%	1.8%
Other Fish	18.2%	4.8%	6.0%	6.9%	12.1%	11.8%	13.4%	26.0%	16.2%	24.6%	30.7%	15.5%

* "Recreational Sector" includes Washington, Oregon and California sport fisheries for Council-managed groundfish.

** Arithmetic average of non-empty cells in each row. Empty cell means total recorded species catch by non-treaty sectors in that year = 0.

Table 2f. Treaty Sector* Landings or Deliveries as a share (%) of associated OYs: 1995 to 2005

Stock or Complex	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	Average** Share
Lingcod - coastwide	-	0	0.03%	0.28%	0.44%	0.82%	0.70%	1.95%	3.43%	3.24%	1.28%	1.22%
N. of 42° (OR & WA)	-	-	-	-	-	-	-	-	-	-	1.71%	1.71%
S. of 42° (CA)	-	-	-	-	-	-	-	-	-	-	-	-
Pacific Cod	-	-	-	-	-	-	-	1.82%	6.70%	9.62%	7.73%	6.47%
Pacific Whiting (Coastwide)	-	7.08%	10.70%	10.56%	11.14%	2.69%	3.19%	16.83%	15.83%	11.38%	13.14%	10.25%
Sablefish (Coastwide)	-	-	-	-	-	-	-	-	-	9.15%	9.02%	9.08%
N. of 36° (Monterey north)	9.86%	10.94%	10.33%	8.55%	8.97%	8.91%	9.55%	10.01%	9.27%	9.49%	9.35%	9.57%
S. of 36° (Conception area)	-	-	-	-	-	-	-	-	-	-	-	-
PACIFIC OCEAN PERCH	-	0.00%	0.87%	0.06%	0.20%	0.02%	0.24%	0.13%	0.31%	0.88%	0.78%	0.35%
Shortbelly Rockfish	-	-	-	-	0.00%	-	-	-	-	-	-	0.00%
WIDOW ROCKFISH	-	0.18%	0.15%	0.30%	0.73%	0.24%	0.46%	3.76%	1.38%	8.08%	10.52%	2.58%
CANARY ROCKFISH	0.00%	0.01%	0.17%	0.30%	0.57%	0.66%	5.28%	6.52%	4.86%	7.82%	10.01%	3.29%
Chilipepper Rockfish	-	-	-	-	-	-	-	-	-	-	-	-
BOCACCIO	-	-	-	-	-	-	-	-	-	-	-	-
Splitnose Rockfish	-	-	-	-	-	-	-	-	-	-	-	-
Yellowtail Rockfish	0.00%	1.51%	4.43%	5.30%	14.14%	3.80%	5.90%	13.96%	9.76%	8.79%	14.84%	7.50%
Shortspine Thornyhead - coastwide	0.47%	0.48%	0.56%	0.28%	0.46%	0.36%	0.66%	0.50%	0.60%	0.66%	1.08%	0.56%
N. of 34°27'	-	-	-	-	-	-	-	-	-	-	1.08%	1.08%
S. of 34°27'	-	-	-	-	-	-	-	-	-	-	-	-
Longspine Thornyhead - coastwide	-	-	-	-	-	-	-	-	-	-	0.01%	0.01%
N. of 34°27'	0.01%	0.00%	0.00%	0.00%	-	-	-	-	0.01%	0.00%	0.01%	0.00%
S. of 34°27'	-	-	-	-	-	-	-	-	-	-	-	-
Other thornyheads	-	-	-	-	-	-	-	-	-	-	-	-
COWCOD	-	-	-	-	-	-	-	-	-	-	-	-
DARKBLOTCHED	-	-	-	-	-	-	0.08%	0.93%	0.02%	0.06%	0.04%	0.23%
YELLOWEYE	-	-	-	-	-	-	-	16.57%	1.22%	3.59%	3.19%	6.14%
Black Rockfish - coastwide	-	-	-	-	-	-	-	-	-	-	-	-
Black Rockfish (WA)	-	-	-	-	-	-	-	-	-	-	-	-
Black Rockfish (OR-CA)	-	-	-	-	-	-	-	-	-	-	-	-
Minor Rockfish North	1.13%	0.87%	1.04%	1.10%	1.43%	0.84%	1.21%	0.89%	1.00%	1.22%	1.72%	1.13%
Nearshore Species	-	-	-	-	-	-	-	-	-	-	0.14%	0.14%
Shelf Species	-	-	-								0.94%	0.94%
BOCACCIO: N. of Monterrey	-	-	-	-	-	-	-	-	-	-	0.34%	0.34%
Chilipepper Rockfish: Eureka	-	-	-	-	-	-	-	-	-	-	-	-
Redstripe Rockfish	-	-	-	-	-	-	-	-	-	-	0.41%	0.41%
Silvergrey Rockfish	-	-	-	-	-	-	-	-	-	-	0.11%	0.11%
Other Northern Shelf Rockfish	-	-	-	-	-	-	-	-	-	-	2.75%	2.75%
Slope Species	-	-	-								2.53%	2.53%
Bank Rockfish	-	-	-	-	-	-	-	-	-	-	-	-
Sharpchin Rockfish, north	-	-	-	-	-	-	-	-	-	-	0.07%	0.07%
Splitnose Rockfish: N. of Monterrey	-	-	-	-	-	-	-	-	-	-	0.01%	0.01%
Yellowmouth Rockfish	-	-	-	-	-	-	-	-	-	-	-	-
Other Northern Slope Rockfish	-	-	-	-	-	-	-	-	-	-	4.32%	4.32%
Minor Rockfish South	-	-	-	-	-	-	-	-	-	-	-	-
Nearshore Species	-	-	-	-	-	-	-	-	-	-	-	-
Shelf Species	-	-	-	-	-	-	-	-	-	-	-	-
Redstripe Rockfish	-	-	-	-	-	-	-	-	-	-	-	-
Yellowtail Rockfish	-	-	-	-	-	-	-	-	-	-	-	-
Other Southern Shelf Rockfish	-	-	-	-	-	-	-	-	-	-	-	-
Slope Species	-	-	-	-	-	-	-	-	-	-	-	-
Bank Rockfish	-	-	-	-	-	-	-	-	-	-	-	-
Blackgill Rockfish	-	-	-	-	-	-	-	-	-	-	-	-
Sharpchin Rockfish	-	-	-	-	-	-	-	-	-	-	-	-
Yellowmouth Rockfish	-	-	-	-	-	-	-	-	-	-	-	-
Other Southern Slope Rockfish	-	-	-	-	-	-	-	-	-	-	-	-
California scorpionfish	-	-	-	-	-	-	-	-	-	-	-	-
Cabezon (off CA only)	-	-	-	-	-	-	-	-	-	-	-	-
Dover Sole	0.01%	0.01%	0.01%	0.02%	0.06%	0.01%	0.03%	0.22%	0.44%	1.12%	1.94%	0.35%
English Sole	-	-	-	-	-	-	-	-	2.18%	2.61%	2.13%	2.31%
Petrale Sole (coastwide)	-	-	-	-	-	-	-	-	3.05%	3.05%	1.07%	2.39%
N of 40°10'	-	-	-	-	-	-	-	-	-	-	-	-
S of 40°10'	-	-	-	-	-	-	-	-	-	-	-	-
Arrowtooth Flounder	-	-	-	-	-	-	-	-	0.41%	1.44%	2.77%	1.54%
Starry Flounder	-	-	-	-	-	-	-	-	-	-	-	-
Other Flatfish	-	-	-	-	-	-	-	-	0.14%	0.23%	0.95%	0.44%
Kelp Greenling	-	-	-	-	-	-	-	-	-	-	-	-
Spiny Dogfish	-	-	-	-	-	-	-	-	-	-	-	-
Other Fish	-	-	-	-	-	-	-	-	0.00%	0.00%	0.01%	0.00%

* "Treaty Sector" includes shoreside landings and at-sea deliveries of Council-managed groundfish species.

** Arithmetic average of non-empty cells in each row. Empty cell (-) means total recorded catch by treaty sectors of that species in that year = 0.

Table 3. Maximum, Minimum and Average Shares (%) of Non-Treaty Landings or Deliveries of PFMC-managed Groundfish by Westcoast Fishery Sectors: 1995 to 2005

MAXIMUM shares (%)

Stock or Complex	At-Sea Catcher-Processors	At Sea Motherships	Shoreside Whiting LE Trawl	Shoreside Non-whiting LE Trawl	Shoreside LE Line Gear	Shoreside LE Pot Gear	Shoreside Directed OA	Shoreside Incidental OA	Recreational
Lingcod - coastwide	0.08%	0.30%	0.90%	58.34%	3.94%	0.60%	15.87%	6.48%	89.25%
N. of 42° (OR & WA)	0.14%	0.64%	1.84%	74.15%	6.73%	0.76%	15.23%	14.44%	69.12%
S. of 42° (CA)	-	-	0.07%	40.48%	5.19%	0.38%	24.66%	1.92%	95.00%
Pacific Cod	0.07%	0.01%	0.20%	99.00%	0.45%	0.01%	0.21%	1.93%	1.13%
Pacific Whiting (Coastwide)	38.48%	24.47%	48.84%	0.06%	0.00%	0.00%	0.02%	0.17%	0.00%
Sablefish (Coastwide)	0.81%	0.18%	3.86%	55.02%	33.86%	12.35%	16.59%	1.25%	0.19%
N. of 36° (Monterey north)	0.82%	0.18%	4.09%	54.66%	33.66%	12.83%	16.72%	1.27%	0.21%
S. of 36° (Conception area)	-	-	-	63.34%	69.68%	0.09%	22.93%	3.22%	0.10%
PACIFIC OCEAN PERCH	9.51%	3.10%	3.74%	98.41%	1.10%	0.11%	0.29%	1.65%	0.00%
Shortbelly Rockfish	67.69%	99.69%	67.78%	98.85%	0.09%	-	26.54%	4.77%	0.18%
WIDOW ROCKFISH	36.78%	21.78%	47.14%	92.81%	0.37%	0.01%	3.68%	0.61%	19.51%
CANARY ROCKFISH	2.20%	14.29%	12.36%	74.02%	8.26%	0.02%	17.05%	8.66%	78.11%
Chilipepper Rockfish	-	-	-	96.03%	7.73%	-	20.19%	1.18%	36.23%
BOCACCIO	-	-	-	57.86%	4.01%	-	48.51%	1.18%	95.06%
Splitnose Rockfish	-	-	-	99.93%	5.82%	-	7.47%	0.66%	0.09%
Yellowtail Rockfish	14.83%	11.25%	54.11%	86.43%	1.68%	0.00%	4.61%	7.27%	13.05%
Shortspine Thornyhead - coastwide	2.81%	0.11%	0.22%	97.01%	21.67%	0.05%	0.90%	0.19%	0.14%
N. of 34°27'	4.06%	0.20%	0.36%	97.78%	3.00%	0.09%	0.42%	0.26%	0.24%
S. of 34°27'	-	-	-	96.41%	48.22%	0.00%	2.66%	0.36%	0.02%
Longspine Thornyhead - coastwide	0.00%	0.00%	0.05%	99.25%	3.46%	0.00%	0.56%	0.14%	-
N. of 34°27'	0.00%	0.00%	0.05%	99.89%	2.15%	0.00%	0.50%	0.14%	-
S. of 34°27'	-	-	-	3.58%	100.00%	-	25.43%	0.89%	-
Other thornyheads	-	-	-	90.49%	93.35%	0.01%	75.41%	1.22%	-
COWCOD	-	-	-	3.27%	16.93%	-	71.26%	4.41%	100.00%
DARKBLOTCHED	6.68%	5.21%	5.61%	98.85%	3.63%	0.05%	2.25%	2.13%	0.00%
YELLOWEYE	10.30%	0.05%	0.18%	57.34%	35.78%	0.13%	23.83%	6.58%	97.36%
Black Rockfish - coastwide	0.16%	0.00%	0.07%	8.23%	4.58%	0.05%	25.22%	0.70%	87.07%
Black Rockfish (WA)	-	-	0.29%	7.25%	-	-	-	-	100.00%
Black Rockfish (OR-CA)	0.20%	0.00%	0.03%	8.55%	5.65%	0.06%	31.26%	0.87%	85.14%
Minor Rockfish North	11.21%	4.82%	7.97%	68.95%	21.28%	1.29%	14.57%	8.30%	22.07%
Nearshore Species	-	0.09%	0.01%	2.92%	17.68%	0.68%	46.94%	0.77%	68.19%
Shelf Species	15.38%	19.15%	42.88%	78.29%	31.63%	0.36%	10.97%	11.75%	20.13%
BOCACCIO: N. of Monterrey	10.98%	21.83%	6.20%	93.79%	5.35%	-	12.57%	2.24%	24.40%
Chilipepper Rockfish: Eureka	21.34%	17.08%	89.69%	96.66%	7.64%	-	19.68%	7.11%	0.10%
Redstripe Rockfish	86.32%	95.20%	5.29%	99.22%	0.02%	-	0.29%	0.85%	1.28%
Silvergrey Rockfish	5.89%	11.99%	1.99%	98.66%	8.29%	-	5.15%	10.11%	12.57%
Other Northern Shelf Rockfish	11.77%	20.74%	8.11%	59.51%	43.11%	0.85%	15.81%	19.38%	43.54%
Slope Species	20.90%	5.28%	3.21%	92.32%	30.63%	2.15%	4.95%	2.22%	0.08%
Bank Rockfish	45.32%	91.10%	2.68%	100.00%	13.22%	-	9.57%	2.08%	-
Sharpchin Rockfish, north	39.04%	1.95%	0.80%	99.78%	1.16%	-	0.30%	0.75%	-
Splitnose Rockfish: N. of Monterrey	66.62%	22.33%	16.27%	87.98%	1.47%	-	0.45%	1.65%	-
Yellowmouth Rockfish	21.15%	6.71%	0.42%	100.00%	1.60%	0.12%	2.43%	0.58%	3.52%
Other Northern Slope Rockfish	17.88%	3.73%	1.82%	85.85%	37.97%	2.53%	5.81%	3.25%	0.18%
Minor Rockfish South	-	-	-	30.95%	8.46%	0.27%	39.36%	1.03%	71.13%
Nearshore Species	-	-	-	2.23%	6.18%	0.58%	43.56%	0.62%	90.44%
Shelf Species	-	-	-	23.37%	8.95%	0.02%	44.21%	2.08%	96.26%
Redstripe Rockfish	-	-	-	100.00%	33.33%	-	66.67%	-	100.00%
Yellowtail Rockfish	-	-	-	33.47%	16.37%	0.00%	48.93%	3.16%	93.70%
Other Southern Shelf Rockfish	-	-	-	19.55%	12.86%	0.03%	43.16%	3.57%	96.44%
Slope Species	-	-	-	77.70%	22.30%	0.29%	28.60%	0.56%	4.84%
Bank Rockfish	-	-	-	92.86%	7.06%	-	31.83%	1.25%	15.58%
Blackgill Rockfish	-	-	-	69.53%	39.76%	0.70%	44.46%	0.37%	2.08%
Sharpchin Rockfish	-	-	-	100.00%	7.11%	-	10.54%	0.02%	-
Yellowmouth Rockfish	-	-	-	100.00%	-	-	19.11%	-	-
Other Southern Slope Rockfish	-	-	-	88.32%	29.71%	1.65%	18.08%	3.01%	1.87%
California scorpionfish	-	-	-	4.23%	2.43%	0.00%	26.09%	11.12%	95.38%
Cabezon (off CA only)	-	-	-	0.06%	4.79%	1.72%	70.81%	4.16%	70.71%
Dover Sole	0.02%	0.00%	0.04%	99.91%	0.03%	0.02%	0.03%	1.29%	0.00%
English Sole	0.01%	0.02%	0.15%	99.39%	0.00%	-	0.17%	4.39%	0.00%
Petrale Sole (coastwide)	0.00%	0.00%	0.10%	99.63%	0.08%	0.00%	0.43%	3.23%	0.22%
N of 40°10'	0.00%	0.00%	0.12%	99.67%	0.06%	0.00%	0.01%	3.89%	0.01%
S of 40°10'	-	-	-	99.96%	0.29%	-	1.94%	2.81%	1.76%
Arrowtooth Flounder	0.12%	0.09%	0.06%	99.83%	0.24%	0.06%	0.04%	0.86%	0.01%
Starry Flounder	-	-	0.04%	81.48%	0.42%	-	0.58%	47.84%	94.34%
Other Flatfish	1.03%	0.11%	0.25%	96.98%	0.07%	0.00%	0.47%	7.57%	3.93%
Kelp Greenling	-	-	-	3.58%	6.13%	1.07%	55.40%	0.41%	92.48%
Spiny Dogfish	46.30%	24.60%	17.85%	62.37%	44.02%	0.02%	13.00%	1.96%	5.13%
Other Fish	0.23%	0.33%	0.07%	69.14%	33.42%	1.48%	30.90%	5.41%	30.71%

Table 3. Maximum, Minimum and Average Shares (%) of Non-Treaty Landings or Deliveries of PFMC-managed Groundfish by Westcoast Fishery Sectors: 1995 to 2005

MINIMUM shares (%)

Stock or Complex	At-Sea Catcher-Processors	At Sea Motherships	Shoreside Whiting LE Trawl	Shoreside Non-whiting LE Trawl	Shoreside LE Line Gear	Shoreside LE Pot Gear	Shoreside Directed OA	Shoreside Incidental OA	Recreational
Lingcod - coastwide	-	-	0.01%	4.46%	0.53%	0.01%	4.80%	0.54%	21.48%
N. of 42° (OR & WA)	-	-	0.01%	15.73%	0.83%	0.01%	7.47%	0.98%	11.99%
S. of 42° (CA)	-	-	-	1.16%	0.19%	-	3.21%	0.15%	33.39%
Pacific Cod	-	-	0.00%	97.40%	0.07%	-	0.01%	0.02%	-
Pacific Whiting (Coastwide)	33.44%	12.67%	41.88%	0.00%	0.00%	-	-	0.00%	-
Sablefish (Coastwide)	0.01%	0.00%	0.03%	42.31%	26.51%	6.06%	4.51%	0.04%	0.00%
N. of 36° (Monterey north)	0.01%	0.00%	0.03%	42.62%	25.48%	6.28%	4.67%	0.04%	0.00%
S. of 36° (Conception area)	-	-	-	20.02%	13.52%	-	1.55%	0.07%	-
PACIFIC OCEAN PERCH	0.29%	0.03%	0.02%	90.41%	0.00%	-	0.00%	-	-
Shortbelly Rockfish	-	-	0.00%	0.00%	-	-	-	-	-
WIDOW ROCKFISH	1.08%	1.40%	1.28%	1.87%	0.00%	-	0.11%	0.07%	0.09%
CANARY ROCKFISH	0.01%	0.02%	0.05%	20.06%	0.03%	-	-	0.02%	6.36%
Chilipepper Rockfish	-	-	-	62.20%	0.19%	-	1.23%	0.08%	0.09%
BOCACCIO	-	-	-	0.99%	0.60%	-	1.86%	0.13%	4.66%
Splitnose Rockfish	-	-	-	91.92%	0.00%	-	0.04%	0.00%	-
Yellowtail Rockfish	0.99%	0.18%	5.30%	9.47%	0.07%	-	0.07%	2.18%	0.56%
Shortspine Thornyhead - coastwide	0.00%	-	0.01%	77.04%	1.69%	0.00%	0.06%	0.04%	-
N. of 34°27'	0.00%	-	0.01%	93.36%	1.20%	0.01%	0.00%	0.00%	-
S. of 34°27'	-	-	-	51.58%	1.99%	-	0.05%	0.02%	-
Longspine Thornyhead - coastwide	-	-	-	95.96%	0.48%	-	0.00%	0.00%	-
N. of 34°27'	-	-	-	97.72%	0.10%	-	0.00%	0.00%	-
S. of 34°27'	-	-	-	-	74.57%	-	-	-	-
Other thornyheads	-	-	-	3.06%	8.38%	-	0.73%	0.00%	-
COWCOD	-	-	-	-	-	-	-	-	9.37%
DARKBLOTCHED	0.22%	0.09%	0.01%	78.78%	0.06%	-	0.02%	0.00%	-
YELLOWEYE	-	-	-	2.24%	0.00%	-	-	0.00%	13.92%
Black Rockfish - coastwide	-	-	-	0.05%	1.24%	-	11.56%	0.06%	66.97%
Black Rockfish (WA)	-	-	-	-	-	-	-	-	92.46%
Black Rockfish (OR-CA)	-	-	-	0.07%	1.42%	-	13.29%	0.07%	59.19%
Minor Rockfish North	0.52%	0.18%	0.11%	27.82%	9.50%	0.08%	5.22%	0.11%	1.51%
Nearshore Species	-	-	-	0.02%	2.23%	-	28.16%	0.00%	38.02%
Shelf Species	0.02%	0.07%	0.14%	14.68%	4.77%	0.00%	2.01%	0.54%	0.25%
BOCACCIO: N. of Monterrey	0.03%	-	-	50.11%	-	-	-	-	0.23%
Chilipepper Rockfish: Eureka	-	-	0.01%	5.13%	-	-	-	-	-
Redstripe Rockfish	0.02%	0.02%	-	1.72%	-	-	-	-	0.06%
Silvergrey Rockfish	0.01%	-	-	72.76%	-	-	-	-	0.01%
Other Northern Shelf Rockfish	0.00%	0.00%	0.22%	22.91%	8.07%	0.00%	5.35%	1.20%	0.37%
Slope Species	1.78%	0.08%	0.04%	45.16%	1.89%	-	0.27%	0.01%	0.00%
Bank Rockfish	-	-	-	8.83%	-	-	-	-	-
Sharpchin Rockfish, north	-	-	-	59.01%	-	-	-	-	-
Splitnose Rockfish: N. of Monterrey	2.62%	-	0.00%	31.51%	-	-	-	-	-
Yellowmouth Rockfish	-	-	-	75.33%	-	-	-	-	-
Other Northern Slope Rockfish	0.31%	0.01%	0.01%	43.74%	3.45%	-	0.28%	0.01%	0.00%
Minor Rockfish South	-	-	-	7.46%	3.61%	-	10.70%	0.11%	27.26%
Nearshore Species	-	-	-	0.00%	0.22%	-	9.05%	0.04%	51.69%
Shelf Species	-	-	-	0.57%	0.49%	-	1.85%	0.24%	30.15%
Redstripe Rockfish	-	-	-	-	-	-	-	-	-
Yellowtail Rockfish	-	-	-	1.62%	-	-	1.61%	0.08%	14.98%
Other Southern Shelf Rockfish	-	-	-	0.52%	0.51%	-	1.84%	0.19%	32.99%
Slope Species	-	-	-	53.18%	7.81%	-	3.93%	0.06%	0.13%
Bank Rockfish	-	-	-	59.55%	0.01%	-	2.88%	-	0.03%
Blackgill Rockfish	-	-	-	28.85%	16.25%	-	4.20%	0.01%	-
Sharpchin Rockfish	-	-	-	87.36%	-	-	-	-	-
Yellowmouth Rockfish	-	-	-	80.89%	-	-	-	-	-
Other Southern Slope Rockfish	-	-	-	62.02%	1.00%	-	3.16%	0.17%	-
California scorpionfish	-	-	-	-	-	-	2.30%	0.23%	67.07%
Cabezon (off CA only)	-	-	-	-	0.10%	-	27.78%	0.14%	25.74%
Dover Sole	-	-	0.00%	98.68%	0.01%	0.00%	0.00%	0.05%	-
English Sole	-	0.00%	0.00%	95.55%	-	-	0.00%	0.60%	-
Petrale Sole (coastwide)	-	-	0.00%	96.61%	0.01%	-	0.00%	0.27%	0.00%
N of 40°10'	-	-	0.00%	96.05%	0.00%	-	-	0.23%	0.00%
S of 40°10'	-	-	-	95.69%	-	-	-	0.01%	-
Arrowtooth Flounder	0.00%	0.00%	0.01%	98.96%	0.01%	0.00%	0.00%	0.03%	-
Starry Flounder	-	-	-	1.81%	-	-	0.00%	0.88%	3.61%
Other Flatfish	0.00%	0.00%	0.00%	89.95%	0.01%	-	0.14%	0.08%	0.69%
Kelp Greenling	-	-	-	-	0.67%	-	6.54%	0.00%	37.46%
Spiny Dogfish	2.12%	0.13%	0.02%	16.64%	0.10%	-	0.11%	0.00%	0.34%
Other Fish	-	-	-	30.16%	5.14%	-	6.24%	0.08%	4.80%

Table 3. Maximum, Minimum and Average Shares (%) of Non-Treaty Landings or Deliveries of PFMC-managed Groundfish by Westcoast Fishery Sectors: 1995 to 2005

AVERAGE shares (%) (average of annual percentages)

Stock or Complex	At-Sea Catcher-Processors	At Sea Motherships	Shoreside Whiting LE Trawl	Shoreside Non-whiting LE Trawl	Shoreside LE Line Gear	Shoreside LE Pot Gear	Shoreside Directed OA	Shoreside Incidental OA	Recreational
Lingcod - coastwide	0.02%	0.06%	0.22%	27.39%	2.60%	0.17%	11.29%	3.07%	55.17%
N. of 42° (OR & WA)	0.05%	0.14%	0.44%	37.62%	3.33%	0.29%	10.54%	5.41%	42.19%
S. of 42° (CA)	-	-	0.01%	17.47%	2.34%	0.07%	13.12%	1.20%	65.78%
Pacific Cod	0.01%	0.00%	0.07%	98.42%	0.28%	0.00%	0.10%	0.69%	0.43%
Pacific Whiting (Coastwide)	34.88%	21.61%	43.46%	0.03%	0.00%	0.00%	0.00%	0.02%	0.00%
Sablefish (Coastwide)	0.33%	0.03%	1.00%	49.26%	28.97%	10.44%	9.11%	0.80%	0.06%
N. of 36° (Monterey north)	0.34%	0.03%	1.05%	49.45%	28.39%	10.85%	9.04%	0.78%	0.07%
S. of 36° (Conception area)	-	-	-	43.32%	45.03%	0.01%	10.61%	1.02%	0.01%
PACIFIC OCEAN PERCH	2.44%	0.91%	1.26%	94.65%	0.26%	0.02%	0.09%	0.36%	0.00%
Shortbelly Rockfish	13.58%	20.47%	9.60%	52.90%	0.01%	-	2.76%	0.64%	0.04%
WIDOW ROCKFISH	11.00%	5.38%	14.95%	64.37%	0.13%	0.00%	1.15%	0.25%	2.77%
CANARY ROCKFISH	0.70%	1.95%	1.84%	47.55%	4.44%	0.00%	6.66%	2.47%	34.38%
Chilipepper Rockfish	-	-	0.02%	79.29%	1.91%	-	10.06%	0.57%	8.14%
BOCACCIO	-	-	0.00%	26.47%	2.23%	-	15.33%	0.54%	55.43%
Splitnose Rockfish	-	-	0.00%	97.25%	1.03%	-	1.58%	0.12%	0.01%
Yellowtail Rockfish	5.16%	6.26%	17.93%	60.61%	0.58%	0.00%	1.37%	3.85%	4.23%
Shortspine Thornyhead - coastwide	0.98%	0.02%	0.05%	88.18%	10.20%	0.02%	0.44%	0.11%	0.02%
N. of 34°27'	1.59%	0.03%	0.08%	96.14%	1.90%	0.04%	0.10%	0.10%	0.03%
S. of 34°27'	-	-	-	75.74%	23.08%	0.00%	1.06%	0.11%	0.00%
Longspine Thornyhead - coastwide	0.00%	0.00%	0.01%	98.06%	1.66%	0.00%	0.21%	0.05%	-
N. of 34°27'	0.00%	0.00%	0.01%	98.96%	0.87%	0.00%	0.10%	0.05%	-
S. of 34°27'	-	-	-	0.36%	92.24%	-	7.19%	0.21%	-
Other thornyheads	-	-	-	51.33%	37.18%	0.00%	11.11%	0.38%	-
COWCOD	-	-	-	0.37%	7.47%	-	26.34%	1.22%	64.61%
DARKBLOTCHED	3.04%	1.18%	1.15%	92.80%	0.81%	0.01%	0.47%	0.55%	0.00%
YELLOWEYE	0.98%	0.01%	0.05%	20.42%	11.93%	0.02%	9.60%	1.23%	55.77%
Black Rockfish - coastwide	0.01%	0.00%	0.01%	1.37%	2.71%	0.01%	19.40%	0.25%	76.23%
Black Rockfish (WA)	-	-	0.03%	0.86%	-	-	-	-	99.11%
Black Rockfish (OR-CA)	0.02%	0.00%	0.00%	1.51%	3.43%	0.01%	24.69%	0.32%	70.02%
Minor Rockfish North	5.27%	1.51%	2.78%	54.61%	14.72%	0.53%	8.70%	2.41%	9.47%
Nearshore Species	-	0.01%	0.00%	0.72%	9.98%	0.08%	35.77%	0.19%	53.25%
Shelf Species	3.59%	3.90%	11.85%	49.86%	14.53%	0.16%	6.41%	3.61%	6.09%
BOCACCIO: N. of Monterrey	1.95%	4.00%	1.41%	78.27%	1.38%	-	3.86%	0.60%	8.52%
Chilipepper Rockfish: Eureka	4.34%	4.71%	28.91%	56.59%	1.42%	-	2.86%	1.14%	0.03%
Redstripe Rockfish	21.15%	17.68%	0.55%	59.87%	0.00%	-	0.03%	0.18%	0.54%
Silvergrey Rockfish	1.10%	2.50%	0.43%	89.89%	1.41%	-	1.04%	1.03%	2.60%
Other Northern Shelf Rockfish	2.02%	1.96%	2.34%	39.54%	25.46%	0.29%	10.82%	5.88%	11.68%
Slope Species	8.92%	1.29%	1.17%	72.75%	12.82%	0.81%	1.28%	0.94%	0.02%
Bank Rockfish	4.57%	8.44%	0.32%	83.01%	1.57%	-	1.60%	0.48%	-
Sharpchin Rockfish, north	6.31%	0.26%	0.18%	92.89%	0.14%	-	0.04%	0.18%	-
Splitnose Rockfish: N. of Monterrey	28.23%	4.75%	3.54%	62.68%	0.22%	-	0.09%	0.49%	-
Yellowmouth Rockfish	2.09%	0.63%	0.05%	96.38%	0.21%	0.01%	0.23%	0.07%	0.32%
Other Northern Slope Rockfish	6.55%	0.97%	0.66%	67.88%	19.73%	1.03%	1.71%	1.44%	0.03%
Minor Rockfish South	-	-	-	20.89%	5.78%	0.05%	19.28%	0.65%	53.35%
Nearshore Species	-	-	-	0.67%	2.54%	0.09%	24.30%	0.37%	72.03%
Shelf Species	-	-	-	8.96%	4.21%	0.00%	15.91%	1.19%	69.72%
Redstripe Rockfish	-	-	-	48.46%	6.42%	-	16.61%	-	28.52%
Yellowtail Rockfish	-	-	-	15.18%	3.40%	0.00%	13.86%	0.85%	66.71%
Other Southern Shelf Rockfish	-	-	-	7.24%	4.75%	0.01%	17.05%	1.58%	69.37%
Slope Species	-	-	-	68.97%	13.82%	0.07%	15.73%	0.26%	1.14%
Bank Rockfish	-	-	-	80.95%	1.53%	-	14.72%	0.19%	2.61%
Blackgill Rockfish	-	-	-	49.70%	28.84%	0.13%	20.81%	0.20%	0.32%
Sharpchin Rockfish	-	-	-	97.30%	1.19%	-	1.51%	0.01%	-
Yellowmouth Rockfish	-	-	-	93.63%	-	-	6.37%	-	-
Other Southern Slope Rockfish	-	-	-	77.80%	10.02%	0.18%	10.28%	1.01%	0.71%
California scorpionfish	-	-	-	0.39%	0.59%	0.00%	10.95%	5.00%	83.06%
Cabezon (off CA only)	-	-	-	0.01%	1.17%	0.30%	55.31%	1.80%	41.42%
Dover Sole	0.00%	0.00%	0.01%	99.40%	0.02%	0.01%	0.01%	0.54%	0.00%
English Sole	0.00%	0.00%	0.06%	97.69%	0.00%	-	0.03%	2.21%	0.00%
Petrale Sole (coastwide)	0.00%	0.00%	0.03%	98.17%	0.04%	0.00%	0.06%	1.67%	0.03%
N of 40°10'	0.00%	0.00%	0.04%	98.16%	0.02%	0.00%	0.00%	1.77%	0.00%
S of 40°10'	-	-	-	98.27%	0.07%	-	0.29%	1.14%	0.22%
Arrowtooth Flounder	0.06%	0.03%	0.04%	99.50%	0.07%	0.01%	0.01%	0.29%	0.00%
Starry Flounder	-	-	0.01%	55.69%	0.05%	-	0.24%	22.77%	21.24%
Other Flatfish	0.25%	0.03%	0.06%	93.68%	0.03%	0.00%	0.30%	3.30%	2.34%
Kelp Greenling	0.00%	-	-	0.35%	3.52%	0.22%	31.54%	0.14%	64.23%
Spiny Dogfish	14.20%	9.06%	4.15%	44.79%	21.28%	0.00%	4.40%	0.29%	1.83%
Other Fish	0.08%	0.05%	0.02%	47.98%	14.31%	0.29%	18.87%	2.88%	15.52%

Table 4. Total Mortality (Ocean and Estuary) of PFMC-managed Groundfish by Recreational Sector by Subregion (mt): 1995 to 2005

	1995					1996					1997					1998				
Stock/Category	**S CA**	**N CA**	**OR**	**WA**	**TOTAL**	**S CA**	**N CA**	**OR**	**WA**	**TOTAL**	**S CA**	**N CA**	**OR**	**WA**	**TOTAL**	**S CA**	**N CA**	**OR**	**WA**	**TOTAL**
Lingcod - coastwide	19.1	249.9	78.8	61.4	409.2	26.7	336.2	93.5	53.8	510.2	15.5	249.9	117.1	48.4	430.8	17.1	236.4	73.6	27.1	354.2
N. of 42° (OR & WA)	-	-	78.8	61.4	140.2	-	-	93.5	53.8	147.3	-	-	117.1	48.4	165.4	-	-	73.6	27.1	100.7
S. of 42° (CA)	19.1	249.9	-	-	269.0	26.7	336.2	-	-	362.9	15.5	249.9	-	-	265.4	17.1	236.4	-	-	253.5
Pacific Cod	-	-	-	0.3	0.3	-	-	-	0.6	0.6	-	-	-	0.3	0.3	-	-	-	1.5	1.5
Pacific Whiting (Coastwide)	0.3	-	0.0	-	0.4	1.1	0.2	-	-	1.3	-	0.7	-	-	0.7	-	-	0.1	-	0.1
Sablefish (Coastwide)	-	-	2.8	-	2.8	-	0.3	2.6	-	2.8	-	-	3.5	-	3.5	-	-	2.9	-	2.9
N. of 36° (Monterey north)	-	-	2.8	-	2.8	-	0.3	2.6	-	2.8	-	-	3.5	-	3.5	-	-	2.9	-	2.9
S. of 36° (Conception area)	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
PACIFIC OCEAN PERCH	-	-	0.0	-	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shortbelly Rockfish	-	-	-	-	-	-	0.1	-	-	0.1	0.0	0.0	-	-	0.0	0.0	-	-	-	0.0
WIDOW ROCKFISH	0.1	4.1	1.8	-	6.1	0.7	21.6	2.2	-	24.6	0.2	38.7	4.1	-	42.9	0.3	36.0	16.1	-	52.4
CANARY ROCKFISH	2.3	67.3	35.8	3.9	109.3	2.3	60.8	18.7	5.1	86.8	1.4	101.2	39.4	3.9	145.9	1.5	25.1	43.6	11.1	81.3
Chilipepper Rockfish	9.0	1.8	-	-	10.9	12.2	20.6	-	-	32.8	1.0	72.7	-	-	73.6	6.2	1.0	-	-	7.3
BOCACCIO	30.5	2.7	-	-	33.2	67.1	25.9	-	-	93.0	49.2	107.4	-	-	156.6	28.5	22.9	-	-	51.4
Splitnose Rockfish	-	-	-	-	-	0.1	0.0	-	-	0.1	-	-	-	-	-	-	0.3	-	-	0.3
Yellowtail Rockfish	-	-	25.2	4.6	29.8	-	-	19.7	12.0	31.7	-	-	29.9	11.2	41.1	-	-	34.7	29.3	64.0
Shortspine Thornyhead - coastwide	-	-	-	-	-	-	0.0	-	-	0.0	-	-	-	-	-	-	-	-	-	-
N. of 34°27'	-	-	-	-	-	-	0.0	-	-	0.0	-	-	-	-	-	-	-	-	-	-
S. of 34°27'	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Longspine Thornyhead - coastwide	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N. of 34°27'	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
S. of 34°27'	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other thornyheads	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
COWCOD	1.7	-	-	-	1.7	5.4	0.3	-	-	5.6	1.8	0.6	-	-	2.5	2.8	-	-	-	2.8
DARKBLOTCHED	-	-	-	-	-	0.0	-	-	-	0.0	-	-	-	-	-	-	-	-	-	-
YELLOWEYE	0.0	12.5	16.8	3.4	32.8	-	12.5	8.2	9.5	30.2	0.5	14.6	15.4	5.3	35.8	-	5.8	18.8	14.4	39.0
Black Rockfish - coastwide	-	157.9	359.0	212.9	729.8	-	153.8	389.0	234.9	777.7	-	90.7	358.0	180.4	629.1	-	116.7	352.0	224.4	693.0
Black Rockfish (WA)	-	-	-	212.9	212.9	-	-	-	234.9	234.9	-	-	-	180.4	180.4	-	-	-	224.4	224.4
Black Rockfish (OR-CA)	-	157.9	359.0	-	516.9	-	153.8	389.0	-	542.8	-	90.7	358.0	-	448.7	-	116.7	352.0	-	468.7
Minor Rockfish North	-	-	38.1	2.6	40.7	-	-	47.5	5.1	52.7	-	-	86.7	4.4	91.1	-	-	87.0	5.7	92.7
Nearshore Species	-	-	32.3	2.2	34.5	-	-	43.4	4.2	47.6	-	-	80.4	4.0	84.5	-	-	78.3	5.1	83.4
Shelf Species	-	-	5.7	0.3	6.1	-	-	4.1	0.4	4.4	-	-	6.2	0.4	6.6	-	-	8.5	0.6	9.1
BOCACCIO: N. of Monterrey	-	-	1.5	0.2	1.7	-	-	0.3	0.1	0.4	-	-	0.4	-	0.4	-	-	0.3	0.2	0.5
Chilipepper Rockfish: Eureka	-	-	0.1	-	0.1	-	-	-	-	-	-	-	0.1	-	0.1	-	-	-	-	-
Redstripe Rockfish	-	-	0.6	-	0.6	-	-	0.1	-	0.1	-	-	0.4	-	0.4	-	-	0.2	-	0.2
Silvergrey Rockfish	-	-	0.1	-	0.1	-	-	0.0	-	0.0	-	-	0.0	-	0.0	-	-	0.2	-	0.2
Other Northern Shelf Rockfish	-	-	3.5	0.2	3.7	-	-	3.6	0.3	3.9	-	-	5.3	0.4	5.7	-	-	7.8	0.4	8.2
Slope Species	-	-	0.0	-	0.0	-	-	-	0.6	0.6	-	-	0.0	-	0.0	-	-	0.1	-	0.1
Bank Rockfish	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sharpchin Rockfish, north	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Splitnose Rockfish: N. of Monterrey	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Yellowmouth Rockfish	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Northern Slope Rockfish	-	-	0.0	-	0.0	-	-	-	0.6	0.6	-	-	0.0	-	0.0	-	-	0.1	-	0.1
Minor Rockfish South	358.1	371.2	-	-	729.3	500.8	523.1	-	-	1,023.9	116.4	1,079.8	-	-	1,196.2	198.0	606.1	-	-	804.1
Nearshore Species	66.3	273.0	-	-	339.4	153.0	336.8	-	-	489.9	32.8	511.4	-	-	544.2	66.5	419.8	-	-	486.3
Shelf Species	288.8	98.1	-	-	386.9	326.0	185.9	-	-	512.0	71.3	568.5	-	-	639.8	129.1	185.7	-	-	314.8
Redstripe Rockfish	-	-	-	-	-	-	0.1	-	-	0.1	-	0.3	-	-	0.3	-	0.0	-	-	0.0
Yellowtail Rockfish	-	33.3	-	-	33.3	0.8	95.3	-	-	96.1	1.0	400.8	-	-	401.8	2.0	109.5	-	-	111.6
Other Southern Shelf Rockfish	288.8	64.8	-	-	353.6	325.3	90.5	-	-	415.8	70.3	167.4	-	-	237.7	127.0	76.2	-	-	203.2
Slope Species	3.0	0.1	-	-	3.0	21.7	0.3	-	-	22.0	12.2	-	-	-	12.2	2.4	0.6	-	-	3.0
Bank Rockfish	0.2	-	-	-	0.2	21.7	0.1	-	-	21.8	11.7	-	-	-	11.7	2.4	-	-	-	2.4
Blackgill Rockfish	2.8	-	-	-	2.8	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sharpchin Rockfish	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Yellowmouth Rockfish	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Southern Slope Rockfish	-	0.1	-	-	0.1	-	0.2	-	-	0.2	0.5	-	-	-	0.5	-	0.6	-	-	0.6
California scorpionfish	101.8	-	-	-	101.8	166.6	-	-	-	166.6	103.9	-	-	-	103.9	82.9	-	-	-	82.9
Cabezon (off CA only)	4.7	64.2	-	-	68.8	13.2	71.7	-	-	84.9	4.5	55.4	-	-	60.0	9.4	63.8	-	-	73.3
Dover Sole	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
English Sole	-	-	-	-	-	-	-	0.0	-	0.0	-	-	-	-	-	-	-	-	-	-
Petrale Sole (coastwide)	-	0.7	0.1	-	0.7	0.3	0.3	0.0	-	0.6	0.1	0.1	0.1	-	0.3	-	-	0.0	-	0.0
N of 40°10'	-	-	0.1	-	0.1	-	-	0.0	-	0.0	-	-	0.1	-	0.1	-	-	0.0	-	0.0
S of 40°10'	-	0.7	-	-	0.7	0.3	0.3	-	-	0.6	0.1	0.1	-	-	0.2	-	-	-	-	-
Arrowtooth Flounder	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Starry Flounder	-	3.8	0.0	-	3.8	0.8	2.0	0.2	-	3.1	-	3.0	0.3	-	3.3	-	6.1	1.8	-	8.0
Other Flatfish	6.3	10.2	0.4	-	16.8	41.0	12.4	0.3	-	53.7	8.9	27.2	2.4	-	38.6	7.0	6.7	0.6	-	14.3
Kelp Greenling	-	23.8	12.7	0.5	37.0	-	34.9	17.2	2.0	54.1	-	14.9	20.2	1.2	36.2	-	9.6	8.5	0.5	18.6
Spiny Dogfish	14.4	4.9	0.4	-	19.8	16.7	3.3	0.0	1.7	21.7	1.3	3.8	0.0	-	5.1	-	2.5	0.0	-	2.5
Other Fish	6.9	199.4	15.4	1.2	222.9	8.2	55.6	16.1	3.0	82.9	0.8	40.3	22.2	1.9	65.2	3.3	40.4	17.9	4.2	65.9
Subregion TOTALS	**555.3**	**1,174.4**	**587.3**	**290.9**	**2,608.0**	**863.2**	**1,335.6**	**615.2**	**328.3**	**3,142.2**	**305.5**	**1,901.1**	**699.2**	**257.0**	**3,162.8**	**357.1**	**1,179.5**	**657.6**	**318.3**	**2,512.5**

Note: Recreational entries include estimated weight of retained plus observed discarded dead (A+B1). Recreational data is divided into four regions: WA, OR, Northern CA (34° 27' N. latitude and north to OR border), and Southern CA (34° 27' and south to Mexico border). Note that this division is different than the 40°10' N. latitude line used for managing commercial catch of rockfish species. However since groundfish recreational angler effort and catch in CA is concentrated south of 40°10' N. latitude, for 1995 - 2003, all catch of "minor rockfish" species in both the Northern CA and Southern CA regions is included as "minor rockfish- south". For 2004 and 2005, catch recorded using new more detailed geographical strata was used to split Northern CA catch of Minor Rockfish north and south of 40° 10'.

Table 4. Total Mortality (Ocean and Estuary) of PFMC-managed Groundfish by Recreational Sector by Subregion (mt): 1995 to 2005

	1999					2000					2001					2002				
Stock/Category	**S CA**	**N CA**	**OR**	**WA**	**TOTAL**	**S CA**	**N CA**	**OR**	**WA**	**TOTAL**	**S CA**	**N CA**	**OR**	**WA**	**TOTAL**	**S CA**	**N CA**	**OR**	**WA**	**TOTAL**
Lingcod - coastwide	30.2	312.8	83.1	35.9	462.0	5.1	188.9	56.3	28.2	278.5	22.8	139.6	63.9	32.2	258.5	0.2	432.1	91.6	81.4	605.3
N. of 42° (OR & WA)	-	-	83.1	35.9	119.0	-	-	56.3	28.2	84.5	-	-	63.9	32.2	96.2	-	-	91.6	81.4	173.0
S. of 42° (CA)	30.2	312.8	-	-	343.0	5.1	188.9	-	-	194.0	22.8	139.6	-	-	162.4	0.2	432.1	-	-	432.3
Pacific Cod	-	-	-	0.4	0.4	-	-	-	-	-	-	-	0.0	0.0	0.0	-	-	0.0	5.0	5.0
Pacific Whiting (Coastwide)	0.1	2.2	-	-	2.3	-	-	-	-	-	-	-	0.0	-	0.0	0.0	0.3	0.0	-	0.3
Sablefish (Coastwide)	-	0.0	0.3	-	0.3	-	0.2	-	-	0.2	0.1	-	2.8	-	2.9	-	1.2	5.4	-	6.6
N. of 36° (Monterey north)	-	0.0	0.3	-	0.3	-	0.2	-	-	0.2	-	-	2.8	-	2.8	-	1.2	5.4	-	6.6
S. of 36° (Conception area)	-	-	-	-	-	-	-	-	-	-	0.1	-	-	-	0.1	-	-	-	-	-
PACIFIC OCEAN PERCH	-	-	-	-	-	-	-	0.0	-	0.0	-	-	-	-	-	-	-	0.0	-	0.0
Shortbelly Rockfish	-	-	-	-	-	-	-	-	-	-	-	0.0	-	-	0.0	-	-	-	-	-
WIDOW ROCKFISH	0.1	30.3	2.3	-	32.7	0.1	12.1	3.2	-	15.4	0.3	9.2	4.3	-	13.8	0.7	0.9	1.3	-	2.9
CANARY ROCKFISH	1.8	63.1	28.7	4.9	98.5	0.4	76.7	14.5	2.8	94.3	-	33.4	10.4	2.4	46.2	7.0	6.0	9.1	1.8	23.9
Chilipepper Rockfish	6.1	18.4	-	-	24.5	7.8	31.4	-	-	39.2	1.3	50.5	-	-	51.9	83.9	5.6	-	-	89.6
BOCACCIO	71.1	53.0	-	-	124.1	51.6	60.3	-	-	111.9	60.2	48.8	-	-	109.0	1.1	8.2	-	-	9.3
Splitnose Rockfish	-	0.0	-	-	0.0	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Yellowtail Rockfish	-	-	19.4	6.5	25.8	-	-	15.1	8.8	23.9	-	-	15.9	3.4	19.2	-	-	18.9	2.1	21.0
Shortspine Thornyhead - coastwide	0.1	0.5	-	-	0.6	-	-	-	-	-	-	-	-	-	-	-	1.1	-	-	1.1
N. of 34°27'	-	0.5	-	-	0.5	-	-	-	-	-	-	-	-	-	-	-	1.1	-	-	1.1
S. of 34°27'	0.1	-	-	-	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Longspine Thornyhead - coastwide	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N. of 34°27'	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
S. of 34°27'	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other thornyheads	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
COWCOD	3.8	1.8	-	-	5.6	4.5	1.7	-	-	6.2	-	-	-	-	-	0.1	0.1	-	-	0.2
DARKBLOTCHED	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	-	0.0
YELLOWEYE	1.6	11.0	17.3	18.5	48.3	-	7.5	9.5	10.7	27.8	-	4.6	4.8	14.7	24.1	0.6	1.5	3.1	2.2	7.4
Black Rockfish - coastwide	0.2	161.9	290.0	154.2	606.4	-	129.4	323.0	143.3	595.8	0.1	248.2	318.0	175.7	742.0	-	146.5	298.0	176.2	620.7
Black Rockfish (WA)	-	-	-	154.2	154.2	-	-	-	143.3	143.3	-	-	-	175.7	175.7	-	-	-	176.2	176.2
Black Rockfish (OR-CA)	0.2	161.9	290.0	-	452.1	-	129.4	323.0	-	452.4	0.1	248.2	318.0	-	566.3	-	146.5	298.0	-	444.5
Minor Rockfish North	-	-	69.4	6.0	75.4	-	-	57.0	6.4	63.4	-	-	53.9	4.6	58.4	-	-	36.8	6.0	42.8
Nearshore Species	-	-	59.9	5.0	64.9	-	-	51.4	5.6	57.0	-	-	49.1	3.4	52.5	-	-	31.6	4.4	36.0
Shelf Species	-	-	9.5	1.0	10.5	-	-	5.6	0.7	6.3	-	-	4.7	1.2	5.9	-	-	5.1	1.6	6.6
BOCACCIO: N. of Monterrey	-	-	0.4	0.4	0.8	-	-	0.7	0.3	1.0	-	-	0.7	0.9	1.6	-	-	0.7	1.2	1.9
Chilipepper Rockfish: Eureka	-	-	0.0	-	0.0	-	-	0.0	-	0.0	-	-	0.0	-	0.0	-	-	0.0	-	0.0
Redstripe Rockfish	-	-	0.1	-	0.1	-	-	0.0	-	0.0	-	-	0.1	-	0.1	-	-	0.0	-	0.0
Silvergrey Rockfish	-	-	0.1	-	0.1	-	-	0.1	-	0.1	-	-	0.0	-	0.0	-	-	0.1	-	0.1
Other Northern Shelf Rockfish	-	-	8.8	0.6	9.4	-	-	4.8	0.4	5.2	-	-	3.9	0.2	4.1	-	-	4.2	0.3	4.5
Slope Species	-	-	0.0	-	0.0	-	-	0.1	-	0.1	-	-	0.0	-	0.0	-	-	0.1	-	0.1
Bank Rockfish	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sharpchin Rockfish, north	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Splitnose Rockfish: N. of Monterrey	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Yellowmouth Rockfish	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.1	-	0.1
Other Northern Slope Rockfish	-	-	0.0	-	0.0	-	-	0.1	-	0.1	-	-	0.0	-	0.0	-	-	0.0	-	0.0
Minor Rockfish South	435.8	735.9	-	-	1,171.7	218.9	659.6	-	-	878.5	160.2	592.0	-	-	752.2	293.7	574.8	-	-	868.5
Nearshore Species	106.1	392.5	-	-	498.6	44.9	378.7	-	-	423.6	61.3	423.4	-	-	484.8	69.5	463.3	-	-	532.8
Shelf Species	324.9	342.6	-	-	667.5	171.5	280.7	-	-	452.1	98.5	168.4	-	-	266.9	221.1	111.0	-	-	332.1
Redstripe Rockfish	-	0.1	-	-	0.1	-	0.2	-	-	0.2	-	-	-	-	-	-	-	-	-	-
Yellowtail Rockfish	9.5	195.9	-	-	205.5	0.0	134.0	-	-	134.0	0.3	55.7	-	-	56.0	0.1	24.5	-	-	24.6
Other Southern Shelf Rockfish	315.3	146.5	-	-	461.9	171.4	146.5	-	-	317.9	98.2	112.6	-	-	210.9	221.0	86.4	-	-	307.4
Slope Species	4.8	0.8	-	-	5.6	2.5	0.2	-	-	2.7	0.4	0.1	-	-	0.6	3.2	0.5	-	-	3.7
Bank Rockfish	4.8	0.1	-	-	4.9	2.5	0.2	-	-	2.7	0.4	-	-	-	0.4	0.1	-	-	-	0.1
Blackgill Rockfish	-	0.3	-	-	0.3	-	-	-	-	-	-	-	-	-	-	3.0	-	-	-	3.0
Sharpchin Rockfish	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Yellowmouth Rockfish	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Southern Slope Rockfish	-	0.4	-	-	0.4	-	-	-	-	-	-	0.1	-	-	0.1	0.1	0.5	-	-	0.6
California scorpionfish	139.6	0.0	-	-	139.6	89.5	-	-	-	89.5	113.5	-	-	-	113.5	56.4	-	-	-	56.4
Cabezon (off CA only)	14.7	28.7	-	-	43.4	6.5	34.7	-	-	41.2	6.9	50.1	-	-	57.0	0.0	30.1	-	-	30.1
Dover Sole	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
English Sole	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0	-	0.0
Petrale Sole (coastwide)	0.0	0.0	0.0	-	0.1	0.1	-	0.0	-	0.2	-	0.1	0.0	-	0.1	4.0	0.0	0.0	-	4.0
N of 40°10'	-	-	0.0	-	0.0	-	-	0.0	-	0.0	-	-	0.0	-	0.0	-	-	0.0	-	0.0
S of 40°10'	0.0	0.0	-	-	0.1	0.1	-	-	-	0.1	-	0.1	-	-	0.1	4.0	0.0	-	-	4.0
Arrowtooth Flounder	-	-	-	-	-	-	-	-	-	-	-	-	0.2	-	0.2	-	-	0.1	-	0.1
Starry Flounder	-	3.9	0.5	0.5	4.9	1.4	4.4	0.4	-	6.2	-	378.8	2.6	-	381.4	-	5.3	9.5	-	14.8
Other Flatfish	13.5	8.7	0.3	-	22.5	56.8	7.5	0.3	-	64.7	33.2	14.8	0.3	-	48.2	12.6	26.5	0.2	-	39.3
Kelp Greenling	0.3	6.7	13.6	2.9	23.4	0.2	11.4	22.4	1.2	35.3	12.5	30.2	28.1	1.3	72.2	73.9	31.1	43.3	2.2	150.4
Spiny Dogfish	8.2	2.8	0.0	-	11.0	9.9	-	0.0	-	10.0	8.2	1.1	0.1	-	9.4	11.6	2.3	0.0	-	13.9
Other Fish	9.8	41.5	19.0	6.5	76.8	10.7	24.5	17.5	2.8	55.5	12.5	30.2	18.7	2.1	63.6	75.1	31.1	18.0	5.7	129.8
Subregion TOTALS	**736.9**	**1,483.2**	**543.9**	**236.3**	**3,000.3**	**463.6**	**1,250.3**	**519.4**	**204.3**	**2,437.6**	**431.8**	**1,631.6**	**524.2**	**236.4**	**2,824.0**	**621.0**	**1,304.5**	**535.5**	**282.5**	**2,743.5**

Note: Recreational entries include estimated weight of retained plus observed discarded dead (A+B1). Recreational data is divided into four regions: WA, OR, Northern CA (34° 27' N. latitude and north to OR border), and Southern CA (34° 27' and south to Mexico border). Note that this division is different than the 40°10' N. latitude line used for managing commercial catch of rockfish species. However since groundfish recreational angler effort and catch in CA is concentrated south of 40°10' N. latitude, for 1995 - 2003, all catch of "minor rockfish" species in both the Northern CA and Southern CA regions is included as "minor rockfish- south". For 2004 and 2005, catch recorded using new more detailed geographical strata was used to split Northern CA catch of Minor Rockfish north and south of 40° 10'.

Table 4. Total Mortality (Ocean and Estuary) of PFMC-managed Groundfish by Recreational Sector by Subregion (mt): 1995 to 2005

	2003					2004					2005				
Stock/Category	**S CA**	**N CA**	**OR**	**WA**	**TOTAL**	**S CA**	**N CA**	**OR**	**WA**	**TOTAL**	**S CA**	**N CA**	**OR**	**WA**	**TOTAL**
Lingcod - coastwide	101.4	897.8	124.6	82.9	1,206.7	22.5	107.1	111.3	63.3	304.2	30.2	269.6	145.7	58.6	504.1
N. of 42° (OR & WA)	-	-	124.6	82.9	207.5	-	-	111.3	63.3	174.6	-	-	145.7	58.6	204.3
S. of 42° (CA)	101.4	897.8	-	-	999.2	22.5	107.1	-	-	129.7	30.2	269.6	-	-	299.8
Pacific Cod	-	-	0.1	11.7	11.8	-	-	0.0	12.6	12.6	-	-	-	7.7	7.7
Pacific Whiting (Coastwide)	-	-	0.1	-	0.1	0.0	0.3	0.6	-	1.0	-	0.0	0.1	-	0.2
Sablefish (Coastwide)	-	0.2	7.8	-	8.0	0.0	-	2.8	-	2.8	0.1	-	1.3	-	1.4
N. of 36° (Monterey north)	-	0.2	7.8	-	8.0	-	-	2.8	-	2.8	-	-	1.3	-	1.3
S. of 36° (Conception area)	-	-	-	-	-	0.0	-	-	-	0.0	0.1	-	-	-	0.1
PACIFIC OCEAN PERCH	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Shortbelly Rockfish	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
WIDOW ROCKFISH	0.0	0.1	1.2	-	1.3	8.9	5.7	0.7	-	15.3	0.8	0.8	1.6	-	3.2
CANARY ROCKFISH	0.2	17.9	9.3	2.3	29.7	0.2	10.4	4.1	1.7	16.4	0.1	2.2	4.9	1.9	9.1
Chilipepper Rockfish	-	0.0	-	-	0.0	6.0	-	-	-	6.0	3.5	0.1	-	-	3.6
BOCACCIO	10.8	0.0	-	-	10.8	60.3	2.2	-	-	62.5	31.8	6.3	-	-	38.1
Splitnose Rockfish	-	0.1	-	-	0.1	-	-	-	-	-	-	-	-	-	-
Yellowtail Rockfish	-	-	15.1	7.9	23.0	-	0.5	11.4	23.9	35.8	-	0.6	12.7	20.5	33.8
Shortspine Thornyhead - coastwide	-	0.1	-	-	0.1	0.0	-	-	-	0.0	-	-	-	-	-
N. of 34°27'	-	0.1	-	-	0.1	-	-	-	-	-	-	-	-	-	-
S. of 34°27'	-	-	-	-	-	0.0	-	-	-	0.0	-	-	-	-	-
Longspine Thornyhead - coastwide	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
N. of 34°27'	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
S. of 34°27'	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other thornyheads	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
COWCOD	-	-	-	-	-	0.5	-	-	-	0.5	0.1	-	-	-	0.1
DARKBLOTCHED	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
YELLOWEYE	-	3.7	3.0	3.5	10.2	0.0	0.7	2.7	3.5	7.0	0.0	1.6	4.1	5.2	10.9
Black Rockfish - coastwide	-	654.8	346.2	175.9	1,176.9	0.0	109.4	346.8	214.8	671.0	0.0	180.8	332.6	271.3	784.8
Black Rockfish (WA)	-	-	-	175.9	175.9	-	-	-	214.8	214.8	-	-	-	271.3	271.3
Black Rockfish (OR-CA)	-	654.8	346.2	-	1,001.1	0.0	109.4	346.8	-	456.2	0.0	180.8	332.6	-	513.4
Minor Rockfish North	-	-	43.4	5.1	48.5	-	15.5	35.3	6.8	57.7	-	25.7	51.5	8.7	85.9
Nearshore Species	-	-	37.5	4.2	41.7	-	11.6	31.4	6.3	49.3	-	19.9	45.2	8.1	73.2
Shelf Species	-	-	5.8	0.9	6.7	-	3.9	3.9	0.5	8.3	-	5.8	6.3	0.6	12.7
BOCACCIO: N. of Monterrey	-	-	0.7	0.6	1.3	-	0.0	0.2	0.2	0.4	-	0.1	0.0	0.1	0.2
Chilipepper Rockfish: Eureka	-	-	0.0	-	0.0	-	-	0.0	-	0.0	-	-	0.0	-	0.0
Redstripe Rockfish	-	-	0.1	-	0.1	-	-	0.0	-	0.0	-	-	0.1	-	0.1
Silvergrey Rockfish	-	-	0.1	-	0.1	-	-	0.0	-	0.0	-	-	0.1	-	0.1
Other Northern Shelf Rockfish	-	-	5.0	0.3	5.3	-	3.9	3.7	0.3	7.9	-	5.7	6.2	0.5	12.4
Slope Species	-	-	0.0	-	0.0	-	-	0.0	-	0.0	-	-	0.0	-	0.0
Bank Rockfish	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Sharpchin Rockfish, north	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Splitnose Rockfish: N. of Monterrey	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Yellowmouth Rockfish	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Northern Slope Rockfish	-	-	0.0	-	0.0	-	-	0.0	-	0.0	-	-	0.0	-	0.0
Minor Rockfish South	209.2	797.4	-	-	1,006.6	249.1	376.6	-	-	625.7	190.1	500.9	-	-	691.1
Nearshore Species	70.2	569.0	-	-	639.2	58.1	282.6	-	-	340.7	49.4	357.3	-	-	406.7
Shelf Species	138.0	227.3	-	-	365.3	190.5	94.0	-	-	284.6	140.3	143.6	-	-	283.9
Redstripe Rockfish	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Yellowtail Rockfish	0.1	18.9	-	-	18.9	0.5	11.6	-	-	12.1	0.7	7.3	-	-	8.1
Other Southern Shelf Rockfish	137.9	208.4	-	-	346.4	190.0	82.4	-	-	272.4	139.6	136.3	-	-	275.9
Slope Species	1.0	1.1	-	-	2.1	0.5	-	-	-	0.5	0.4	-	-	-	0.4
Bank Rockfish	1.0	-	-	-	1.0	0.5	-	-	-	0.5	0.4	-	-	-	0.4
Blackgill Rockfish	-	-	-	-	-	0.0	-	-	-	0.0	-	-	-	-	-
Sharpchin Rockfish	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Yellowmouth Rockfish	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Other Southern Slope Rockfish	-	1.1	-	-	1.1	-	-	-	-	-	-	-	-	-	-
California scorpionfish	89.4	-	-	-	89.4	43.9	0.0	-	-	43.9	23.0	-	-	-	23.0
Cabezon (off CA only)	10.5	85.6	-	-	96.1	7.9	31.9	-	-	39.8	5.3	42.4	-	-	47.7
Dover Sole	-	-	0.0	-	0.0	-	-	0.0	-	0.0	-	-	0.0	-	0.0
English Sole	-	-	0.0	-	0.0	-	-	-	-	-	0.0	-	0.0	-	0.0
Petrale Sole (coastwide)	-	0.1	0.1	-	0.2	0.2	0.1	0.1	-	0.5	-	0.3	0.0	-	0.3
N of 40°10'	-	-	0.1	-	0.1	-	0.0	0.1	-	0.2	-	0.2	0.0	-	0.2
S of 40°10'	-	0.1	-	-	0.1	0.2	0.1	-	-	0.3	-	0.1	-	-	0.1
Arrowtooth Flounder	-	-	0.1	-	0.1	-	-	0.0	-	0.0	-	-	0.0	-	0.0
Starry Flounder	0.7	6.5	8.8	-	16.0	-	2.3	3.2	-	5.5	0.1	5.9	3.0	-	9.0
Other Flatfish	29.5	23.3	0.5	-	53.3	20.1	25.2	0.2	-	45.5	11.4	19.9	0.5	-	31.8
Kelp Greenling	11.0	40.0	36.3	1.6	88.8	-	12.3	23.0	2.3	37.5	0.0	5.3	22.7	2.0	30.1
Spiny Dogfish	14.1	3.9	0.0	-	18.0	1.6	0.8	0.1	-	2.4	1.3	1.5	0.1	-	2.8
Other Fish	12.8	40.0	18.4	4.6	75.7	11.4	43.7	20.0	5.7	80.8	11.7	62.4	19.8	6.9	100.8
Subregion TOTALS	**489.5**	**2,571.5**	**614.9**	**295.5**	**3,971.4**	**432.6**	**744.8**	**562.4**	**334.5**	**2,074.3**	**309.5**	**1,126.5**	**600.7**	**382.9**	**2,419.6**

Note: Recreational entries include estimated weight of retained plus observed discarded dead (A+B1). Recreational data is divided into four regions: WA, OR, Northern CA (34° 27' N. latitude and north to OR border), and Southern CA (34° 27' and south to Mexico border). Note that this division is different than the 40°10' N. latitude line used for managing commercial catch of rockfish species. However since groundfish recreational angler effort and catch in CA is concentrated south of 40°10' N. latitude, for 1995 - 2003, all catch of "minor rockfish" species in both the Northern CA and Southern CA regions is included as "minor rockfish- south". For 2004 and 2005, catch recorded using new more detailed geographical strata was used to split Northern CA catch of Minor Rockfish north and south of 40° 10'.

Notes:

1 - Sources: PacFIN, RecFIN and NorPac downloads. PacFIN source files are <ext_trips_pfmc_mg.dat.XX> where "XX" is the two-digit year 1995-2005. These files have a unique record for each vessel-day-SPID delivery to a given buyer code. Species codes (SPIDs) have been been adjusted by PacFIN using estimated species composition distributions for certain market categories. PacFIN records include roundweight of landings. RecFIN records include estimated weight of retained plus observed discarded dead (A+B1). NorPac records include observed total catch (retained plus discards) for the at-sea fleets (catcher processor, mothership, and treaty).

2 - Recreational entries include estimated weight of retained plus observed discarded dead (A+B1). Recreational data is divided into four regions: WA, OR, Northern CA (34° 27' N. latitude and north to OR border), and Southern CA (34° 27' and south to Mexico border). Note that this division is different than the 40°10' N. latitude line used for managing commercial catch of rockfish species. However since groundfish recreational angler effort and catch in CA is concentrated south of 40°10' N. latitude, for 1995 - 2003, all catch of "minor rockfish" species in both the Northern CA and Southern CA regions is included as "minor rockfish- south". For 2004 and 2005, catch recorded using new more detailed geographical strata was used to split Northern CA catch of Minor Rockfish north and south of 40° 10'.

3 - Recreational totals were provided by the states and include RecFIN ocean, shore and estuary (including SF Bay but excluding Puget Sound) catch of Council-managed species. Oregon shore and estuary boat survey, which was conducted from July 2003 – June 2005, is not currently in the RecFIN database. In order to estimate this mortality, the average mortality of the shore and estuary catch from 1998-2002 was calculated and prorated.

4 - "Shoreside Directed OA" is defined as commercial landings where gear used was not endorsed by an LE permit, where at least 50% of the total round weight was groundfish and less than 100 lbs was pink shrimp, and one or more of the following gear types were used: hook and line gear (longlines, vertical hook and line, setline, pole, jig, and bottom troll gear), fish pots, dive gear, or set net gear.

5 - "Shoreside Incidental OA" is defined as commercial landings containing groundfish where other types of gear such as shrimp trawl, seine, drift net, salmon troll, crab pot, or exempt trawl gear were used. This category includes all groundfish landings by vessels targeting Pink Shrimp, whether or not they held an LE trawl permit, and excludes landings records where groundfish outweighed California halibut.

6 - Numerous occurances of large PacFIN landings by non-LE endorsed vessels were investigated. These landings were concentrated from 1995 to 1999. While investigation showed some of these to actually be LE landings, the vast majority were by Canadian vessels delivering to WA ports. These records were recoded in PacFIN and excluded from this analysis.

7 - Species and species groups listed in the tables are adapted from the ABC/OY tables in the 2007-2008 Groundfish Specifications EIS.

8 - "Other Flatfish" includes all the unassessed flatfish species in the Groundfish FMP. These include butter sole (Isopsetta isolepis), curlfin sole (Pleuronichthys decurrens), flathead sole (Hippoglossoides elassodon), Pacific sanddab (Citharichthys sordidus), rex sole (Glyptocephalus zachirus), rock sole (Lepidopsetta bilineata), and sand sole (Psettichthys melanostictus).

9 - "Other Fish" contains all the unassessed Groundfish FMP species that are neither rockfish (family Scorpaenidae) nor flatfish. These species include big skate (Raja binoculata), California skate (Raja inornata), leopard shark (Triakis semifasciata), longnose skate (Raja rhina), soupfin shark (Galeorhinus zyopterus), finescale codling (Antimora microlepis), Pacific rattail (Coryphaenoides acrolepis), ratfish (Hydrolagus colliei), and cabezon (Scorpaenichthys marmoratus) north of the California-Oregon border at 42° N latitude. "Other Fish" does not include spiny dogfish, kelp greenling or cabezon in California. These species are listed separately in the tables.

10 - The Minor Nearshore Rockfish complex north of 40°10' N latitude includes the following species: black and yellow rockfish (S. chrysomelas); blue rockfish (S. mystinus); brown rockfish (S. auriculatus); calico rockfish (S. dalli); China rockfish (S. nebulosus); copper rockfish (S. caurinus); gopher rockfish (S. carnatus); grass rockfish (S. rastrelliger); kelp rockfish (S. atrovirens); olive rockfish (S. serranoides); quillback rockfish (S. maliger); and treefish (S. serriceps).

11 - The Minor Shelf Rockfish complex north of 40°10' N latitude includes the following species: bronzespotted rockfish (S. gilli); bocaccio (Sebastes paucispinis); chameleon rockfish (S. phillipsi); chilipepper rockfish (S. goodei); cowcod (S. levis); dusky rockfish (S. ciliatus); dwarf-red rockfish (S. rufianus); flag rockfish (S. rubrivinctus); freckled rockfish (S. lentiginosus); greenblotched rockfish (S. rosenblatti); greenspotted rockfish (S. chlorostictus); greenstriped rockfish (S. elongatus); halfbanded rockfish (S. semicinctus); harlequin rockfish (S. variegatus); honeycomb rockfish (S. umbrosus); Mexican rockfish (S. macdonaldi); pink rockfish (S. eos); pinkrose rockfish (S. simulator); pygmy rockfish (S. wilsoni); redstripe rockfish (S. proriger); rosethorn rockfish (S. helvomaculatus); rosy rockfish (S. rosaceus); silvergray rockfish (S. brevispinis); speckled rockfish (S. ovalis); squarespot rockfish (S. hopkinsi); starry rockfish (S. constellatus); stripetail rockfish (S. saxicola); swordspine rockfish (S. ensifer); tiger rockfish (S. nigrocinctus); and vermilion rockfish (S. miniatus).

12 - The Minor Slope Rockfish complex north of 40°10' N latitude includes the following species: aurora rockfish (S. aurora); bank rockfish (S. rufus); blackgill rockfish (S. melanostomus); redbanded rockfish (S. babcocki); rougheye rockfish (S. aleutianus); sharpchin rockfish (S. zacentrus); shortraker rockfish (S. borealis); splitnose rockfish (S. diploproa); and yellowmouth rockfish (S. reedi).

13 - The Minor Nearshore Rockfish complex south of 40°10' N latitude, is further subdivided into the following management categories: 1) shallow nearshore rockfish [black and yellow rockfish (S. chrysomelas); China rockfish (S. nebulosus); gopher rockfish (S. carnatus); grass rockfish (S. rastrelliger), and kelp rockfish (S. atrovirens)]; and 2) deeper nearshore rockfish: [blue rockfish (S. mystinus); brown rockfish (S. auriculatus); calico rockfish (S. dalli); copper rockfish (S. caurinus); olive rockfish (S. serranoides); quillback rockfish (S. maliger); and treefish (S. serriceps)].

14 - The Minor Shelf Rockfish complex south of 40°10' N latitude includes the following species: bronzespotted rockfish (S. gilli); chameleon rockfish (S. phillipsi); dusky rockfish (S. ciliatus); dwarf-red rockfish (S. rufianus); flag rockfish (S. rubrivinctus); freckled rockfish (S. lentiginosus); greenblotched rockfish (S. rosenblatti); greenspotted rockfish (S. chlorostictus); greenstriped rockfish (S. elongatus); halfbanded rockfish (S. semicinctus); harlequin rockfish (S. variegatus); honeycomb rockfish (S. umbrosus); Mexican rockfish (S. macdonaldi); pink rockfish (S. eos); pinkrose rockfish (S. simulator); pygmy rockfish (S. wilsoni); redstripe rockfish (S. proriger); rosethorn rockfish (S. helvomaculatus); rosy rockfish (S. rosaceus); silvergray rockfish (S. brevispinis); speckled rockfish (S. ovalis); squarespot rockfish (S. hopkinsi); starry rockfish (S. constellatus); stripetail rockfish (S. saxicola); swordspine rockfish (S. ensifer); tiger rockfish (S. nigrocinctus); vermilion rockfish (S. miniatus); and yellowtail rockfish (S. flavidus).

15 - The Minor Slope Rockfish complex south of 40°10' N latitude includes the following species: aurora rockfish (S. aurora); bank rockfish (S. rufus); blackgill rockfish (S. melanostomus); Pacific ocean perch (S. alutus); redbanded rockfish (S. babcocki); rougheye rockfish (S. aleutianus); sharpchin rockfish (S. zacentrus); shortraker rockfish (S. borealis); and yellowmouth rockfish (S. reedi).

16 - Some sector totals in these tables were updated and revised in December 2006 - January 2007 based on analysis of permit and vessel catch data for the TIQ allocation process, and receipt of revised recreational catch estimates for 2004. Sector totals for 2005 were also added at that time. Periodic updates and corrections in the PacFIN and RecFIN databases may result in further revisions of these data in the future.

Preliminary Intersector Allocation Alternatives Recommended by the Council in November 2006.

Feature	Status Quo	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5	Alt. 6	Alt. 7	Alt. 8
Species with Allocations a/	Sablefish, Pacific whiting, and all nearshore species allocated by the states	Status quo plus all other species	Status quo plus all other species	Status quo plus all other species	Status quo plus all other species	Status quo plus all but overfished species	Status quo plus all but overfished species	Status quo plus all but overfished species	Status quo plus all but overfished species
Sectors with Allocations b/	Status quo described in scoping information document	LE trawl, LE fixed gear, open access, recreational	LE trawl, LE fixed gear, open access, recreational	LE trawl, LE fixed gear, open access, recreational	LE trawl, LE fixed gear, open access, recreational	LE trawl, LE fixed gear, open access, recreational	LE trawl, LE fixed gear, open access, recreational	LE trawl, LE fixed gear, open access, recreational	LE trawl, LE fixed gear, open access, recreational
Variation in Allocation Percentages (Analytical Basis for an Allocation Scheme)	Status quo described in scoping information document	2003-05 sector total catch percentages (option 2A)	2003-05 sector landed catch percentages (option 2B)	1995-2005 sector percentages (option 3)	2007-08 allocations (option 4)	2003-05 sector total catch percentages (option 2A)	2003-05 sector landed catch percentages (option 2B)	1995-2005 sector percentages (option 3)	2007-08 allocations (option 4)
Set-Asides	Set-asides will be determined for projected research catches, EFPs, incidental open access catches, and tribal catches.								

a/ Under any alternative, there may be different allocation schemes decided for overfished versus non-overfished groundfish species.
b/ Tribal allocations may be considered in a separate process (see October Groundfish Allocation Committee minutes for details). Projected tribal catches by species will be considered as set-asides in the analysis of intersector allocation alternatives.

Table 1. Intersector allocation Alternative 1 (SQ + all other spp., 4 non-tribal sectors, 2003-05 total catch %). a/

Stock or Complex	2004-2005 Average Percent				2003 Total Catch				2004 Total Catch				2005 Total Catch			
	LE Trawl	LE Fixed Gear	Directed OA	Rec.	LE Trawl	LE Fixed Gear	Directed OA	Rec.	LE Trawl	LE Fixed Gear	Directed OA	Rec.	LE Trawl	LE Fixed Gear	Directed OA	Rec.
Lingcod - coastwide	29.6%	12.9%		57.5%	205.2			1,206.7	144.2	89.5		304.2	272.5	91.2		504.1
N. of 42° (OR & WA)								207.5				174.6				204.3
S. of 42° (CA)								999.2				129.7				299.8
Pacific Cod	98.4%	0.5%		1.1%	1,117.3			11.8	1,103.2 b/	5.2	b/	12.6	727.0	5.0		7.7
PACIFIC OCEAN PERCH	99.5%	0.5%		0.0%	159.3				155.6	0.1			68.2	1.0		
WIDOW ROCKFISH	87.8%	1.4%		10.8%	46.1			1.3	67.5	0.3		15.3	83.1	2.1		3.2
CANARY ROCKFISH	61.3%	6.8%		31.9%	22.3			29.7	20.8	3.6		16.4	28.2	1.9		9.1
Chilipepper Rockfish	93.1%	2.8%		4.1%	23.0			0.0	141.2	3.6		6.0	76.0	3.0		3.6
BOCACCIO	28.4%	6.7%		64.9%	9.0		c/	10.8	14.8 c/	5.9	c/	62.5	29.3	4.5		38.1 c/
Splitnose Rockfish	99.7%	0.3%		0.0%	160.4			0.1	163.7 b/	0.1	b/		230.0	1.0		
Yellowtail Rockfish	86.8%	2.1%		11.0%	170.6			23.0	318.8	3.4		35.8	229.0	10.0		33.8
Shortspine Thornyhead - coastwide	83.9%	16.1%		0.0%	1,226.2			0.1	843.1	134.2		0.0	627.0	147.0		
N. of 34°27'								0.1								
S. of 34°27'												0.0				
Longspine Thornyhead - coastwide	98.4%	1.6%		0.0%	1,895.6				859.2	8.5			723.0	17.0		
N. of 34°27'																
S. of 34°27'																
Other thornyheads																
COWCOD	78.7%	0.0%		21.3%	0.2		c/		0.8 c/	0.0	c/	0.5	1.4	0.0		0.1 c/
DARKBLOTCHED	98.3%	1.7%		0.0%	136.1				233.0	1.2			105.9	4.8		
YELLOWEYE	5.9%	25.4%		68.7%	2.6			10.2	0.7	3.7		7.0	0.8	2.9		10.9
Minor Rockfish North								48.5				57.7				85.9
Shelf Species								6.7				8.3				12.7
BOCACCIO: N. of Monterrey								1.3				0.4				0.2
Chilipepper Rockfish: Eureka								0.0				0.0				0.0
Redstripe Rockfish								0.1				0.0				0.1
Silvergrey Rockfish								0.1				0.0				0.1
Other Northern Shelf Rockfish								5.3				7.9				12.4
Slope Species								0.0				0.0				0.0
Bank Rockfish																
Sharpchin Rockfish, north																
Splitnose Rockfish: N. of Monterrey																
Yellowmouth Rockfish																
Other Northern Slope Rockfish								0.0				0.0				0.0
Minor Rockfish South								1,006.6				625.7				691.1
Shelf Species								365.3				284.6				283.9
Redstripe Rockfish																
Yellowtail Rockfish								18.9				12.1				8.1
Other Southern Shelf Rockfish								346.4				272.4				275.9
Slope Species								2.1				0.5				0.4
Bank Rockfish								1.0				0.5				0.4
Blackgill Rockfish	55.6%	44.4%		0.0%					79.7 b/	70.1	b/	0.0	53.0	36.0		
Sharpchin Rockfish																
Yellowmouth Rockfish																
Other Southern Slope Rockfish								1.1								
Dover Sole	99.9%	0.1%		0.0%	8,418.0			0.0	7,483.1	2.5		0.0	7,327.0	6.0		0.0
English Sole	100.0%	0.0%		0.0%	1,193.3			0.0	1,080.3	0.2			1,151.0	0.0		0.0
Petrale Sole (coastwide)	100.0%	0.0%		0.0%	2,048.1			0.2	1,936.6	1.1		0.5	2,732.0	0.0		0.3
N of 40°10'								0.1				0.2				0.2
S of 40°10'								0.1				0.3				0.1
Arrowtooth Flounder	99.0%	1.0%		0.0%	3,216.4			0.1	5,643.0	1.4		0.0	3,451.0	87.0		0.0
Other Flatfish	97.8%	0.2%		2.1%	1,970.8			53.3	1,768.5	4.3		45.5	1,872.0	2.0		31.8
Spiny Dogfish	74.5%	25.3%		0.2%				18.0	490.9 b/	222.7	b/	2.4	1,290.0	383.0		2.8
Other Fish								75.7				80.8				100.8

a/ This table currently depicts only 2004-2005 total catch percentages by non-tribal directed groundfish sector for some species and combines LE fixed gear and directed OA sector catches and percentages due to a lack of discard data in NMFS reports.

b/ Landed catch only.

c/ Discard mortality estimate incomplete due to fewer at-sea observations south of 40°10' N latitude.

Table 2. Intersector allocation Alternative 2 (SQ + all other spp., 4 non-tribal sectors, 2003-05 landed catch %).

Stock or Complex	Non-Treaty Sectors			
	LE Trawl	LE Fixed Gear	Directed OA	Rec.
Lingcod - coastwide	8.5%	1.4%	8.5%	81.6%
N. of 42° (OR & WA)	18.6%	2.9%	11.2%	67.2%
S. of 42° (CA)	3.0%	0.6%	6.9%	89.5%
Pacific Cod	98.5%	0.3%	0.1%	1.1%
PACIFIC OCEAN PERCH	99.8%	0.2%	0.1%	0.0%
WIDOW ROCKFISH	92.1%	0.1%	0.6%	7.3%
CANARY ROCKFISH	34.5%	0.1%	0.1%	65.3%
Chilipepper Rockfish	82.2%	5.6%	2.0%	10.2%
BOCACCIO	7.6%	3.1%	4.1%	85.2%
Splitnose Rockfish	99.6%	0.3%	0.1%	0.0%
Yellowtail Rockfish	86.8%	0.3%	0.8%	12.1%
Shortspine Thornyhead - coastwide	81.1%	18.8%	0.1%	0.0%
N. of 34°27'	98.4%	1.5%	0.0%	0.0%
S. of 34°27'	58.0%	41.7%	0.3%	0.0%
Longspine Thornyhead - coastwide	98.5%	1.5%	0.0%	0.0%
N. of 34°27'	99.4%	0.6%	0.0%	0.0%
S. of 34°27'	0.0%	99.2%	0.8%	0.0%
Other thornyheads	57.4%	40.4%	2.2%	0.0%
COWCOD	0.0%	0.0%	0.4%	99.6%
DARKBLOTCHED	98.6%	0.7%	0.8%	0.0%
YELLOWEYE	5.2%	0.4%	0.2%	94.2%
Minor Rockfish North	60.2%	12.6%	9.5%	17.7%
Shelf Species	70.6%	7.2%	5.7%	16.5%
BOCACCIO: N. of Monterrey	86.8%	0.0%	0.2%	13.0%
Chilipepper Rockfish: Eureka	100.0%	0.0%	0.0%	0.0%
Redstripe Rockfish	98.9%	0.0%	0.0%	1.1%
Silvergrey Rockfish	91.7%	2.2%	1.4%	4.7%
Other Northern Shelf Rockfish	36.1%	16.4%	12.9%	34.6%
Slope Species	79.9%	17.6%	2.5%	0.0%
Bank Rockfish	100.0%	0.0%	0.0%	0.0%
Sharpchin Rockfish, north	100.0%	0.0%	0.0%	0.0%
Splitnose Rockfish: N. of Monterrey	99.9%	0.0%	0.1%	0.0%
Yellowmouth Rockfish	99.9%	0.1%	0.0%	0.0%
Other Northern Slope Rockfish	74.7%	22.2%	3.1%	0.0%
Minor Rockfish South	15.7%	5.0%	12.5%	66.8%
Shelf Species	1.0%	1.6%	4.6%	92.8%
Redstripe Rockfish	0.0%	0.0%	0.0%	0.0%
Yellowtail Rockfish	9.7%	0.1%	5.1%	85.1%
Other Southern Shelf Rockfish	0.6%	1.6%	4.5%	93.2%
Slope Species	62.6%	18.0%	19.1%	0.3%
Bank Rockfish	81.3%	0.2%	17.7%	0.7%
Blackgill Rockfish	43.6%	32.3%	24.2%	0.0%
Sharpchin Rockfish	0.0%	0.0%	0.0%	0.0%
Yellowmouth Rockfish	0.0%	0.0%	0.0%	0.0%
Other Southern Slope Rockfish	81.4%	10.0%	8.0%	0.7%
Dover Sole	100.0%	0.0%	0.0%	0.0%
English Sole	100.0%	0.0%	0.0%	0.0%
Petrale Sole (coastwide)	100.0%	0.0%	0.0%	0.0%
N of 40°10'	100.0%	0.0%	0.0%	0.0%
S of 40°10'	99.9%	0.0%	0.0%	0.1%
Arrowtooth Flounder	99.9%	0.1%	0.0%	0.0%
Other Flatfish	96.5%	0.0%	0.2%	3.3%
Spiny Dogfish	57.6%	32.1%	8.9%	1.3%
Other Fish	39.6%	9.3%	27.6%	23.4%

Table 3. Intersector allocation Alternative 3 (SQ + all other spp., 4 non-tribal sectors, 1995-2005 landed catch %).

Stock or Complex	Non-Treaty Sectors			
	LE Trawl	LE Fixed Gear	Directed OA	Rec.
Lingcod - coastwide	38.3%	2.7%	11.8%	47.2%
N. of 42° (OR & WA)	57.4%	2.6%	10.3%	29.7%
S. of 42° (CA)	20.5%	2.7%	13.2%	63.6%
Pacific Cod	99.0%	0.3%	0.1%	0.6%
PACIFIC OCEAN PERCH	99.5%	0.4%	0.1%	0.0%
WIDOW ROCKFISH	98.0%	0.2%	1.2%	0.6%
CANARY ROCKFISH	68.1%	6.6%	12.6%	12.6%
Chilipepper Rockfish	78.7%	1.0%	16.6%	3.8%
BOCACCIO	38.9%	1.8%	27.2%	32.2%
Splitnose Rockfish	97.2%	0.4%	2.5%	0.0%
Yellowtail Rockfish	96.3%	0.7%	1.6%	1.4%
Shortspine Thornyhead - coastwide	91.2%	8.3%	0.5%	0.0%
N. of 34°27'	97.9%	1.9%	0.1%	0.0%
S. of 34°27'	78.8%	20.1%	1.1%	0.0%
Longspine Thornyhead - coastwide	98.3%	1.5%	0.3%	0.0%
N. of 34°27'	98.9%	0.9%	0.2%	0.0%
S. of 34°27'	0.3%	88.8%	10.9%	0.0%
Other thornyheads	46.6%	37.0%	16.4%	0.0%
COWCOD	0.0%	10.9%	51.2%	37.8%
DARKBLOTCHED	99.0%	0.6%	0.4%	0.0%
YELLOWEYE	37.8%	18.4%	17.0%	26.9%
Minor Rockfish North	69.2%	16.9%	8.4%	5.4%
Shelf Species	68.4%	21.6%	8.9%	1.2%
BOCACCIO: N. of Monterrey	88.6%	2.5%	7.4%	1.4%
Chilipepper Rockfish: Eureka	93.3%	2.6%	4.1%	0.0%
Redstripe Rockfish	99.7%	0.0%	0.1%	0.2%
Silvergrey Rockfish	98.6%	0.3%	0.9%	0.1%
Other Northern Shelf Rockfish	50.0%	35.5%	12.9%	1.6%
Slope Species	87.5%	11.5%	1.0%	0.0%
Bank Rockfish	96.8%	0.9%	2.3%	0.0%
Sharpchin Rockfish, north	99.8%	0.1%	0.1%	0.0%
Splitnose Rockfish: N. of Monterrey	99.7%	0.2%	0.1%	0.0%
Yellowmouth Rockfish	98.7%	0.6%	0.7%	0.0%
Other Northern Slope Rockfish	77.3%	21.1%	1.6%	0.0%
Minor Rockfish South	23.6%	6.4%	22.4%	47.6%
Shelf Species	13.0%	5.8%	23.6%	57.6%
Redstripe Rockfish	79.8%	1.1%	4.6%	14.5%
Yellowtail Rockfish	21.4%	5.5%	21.4%	51.7%
Other Southern Shelf Rockfish	9.7%	5.9%	24.4%	59.9%
Slope Species	69.9%	12.1%	17.0%	1.0%
Bank Rockfish	84.0%	1.0%	13.2%	1.7%
Blackgill Rockfish	46.5%	28.5%	24.8%	0.3%
Sharpchin Rockfish	99.2%	0.1%	0.6%	0.0%
Yellowmouth Rockfish	99.8%	0.0%	0.2%	0.0%
Other Southern Slope Rockfish	79.7%	8.6%	11.0%	0.7%
Dover Sole	100.0%	0.0%	0.0%	0.0%
English Sole	100.0%	0.0%	0.0%	0.0%
Petrale Sole (coastwide)	99.9%	0.0%	0.1%	0.0%
N of 40°10'	100.0%	0.0%	0.0%	0.0%
S of 40°10'	99.4%	0.1%	0.3%	0.2%
Arrowtooth Flounder	99.9%	0.1%	0.0%	0.0%
Other Flatfish	97.4%	0.0%	0.3%	2.3%
Spiny Dogfish	72.4%	21.9%	4.0%	1.6%
Other Fish	52.5%	18.4%	16.4%	12.8%

Table 4. Intersector allocation Alternative 4 (SQ + all other spp., 4 non-tribal sectors, 2007-08 projections). a/

Stock or Complex	Non-Treaty Sectors							
	LE Trawl		LE Fixed Gear		Directed OA		Rec.	
	Projected annual catch	% Directed Non-Treaty Annual Catch	Projected annual catch	% Directed Non-Treaty Annual Catch	Projected annual catch	% Directed Non-Treaty Annual Catch	Projected annual catch	% Directed Non-Treaty Annual Catch
PACIFIC OCEAN PERCH	95.5	99.5%	0.4	0.4%	0.1	0.1%	0.0	0.0%
WIDOW ROCKFISH	221.6	95.7%	0.5	0.2%	0.1	0.0%	9.4	4.1%
CANARY ROCKFISH	12.8	43.2%	1.1	3.7%	1.7	5.7%	14.0	47.3%
BOCACCIO	26.1	17.6%	13.4	9.0%	10.6	7.2%	98.0	66.2%
COWCOD	1.5	71.4%	0.1	4.8%	0.1	4.8%	0.4	19.0%
DARKBLOTCHED	272.4	99.5%	1.3	0.5%	0.2	0.1%	0.0	0.0%
YELLOWEYE	0.4	2.9%	2.9	21.0%	2.6	18.8%	7.9	57.2%

a/ Only total catch projections for overfished species are available.

Table 4-5. Estimated total mortality (mt) of major West Coast groundfish species from commercial, tribal, and recreational fishing during 2003.

	LANDINGS AND MORTALITY			TARGETS	
		PRELIMINARY			
Species	Estimated Total Catch	Estimated Commercial Fishery Discard Mortality b/	Actual Landings c/	Total Catch ABC	Total Catch OY
Lingcod	1,355.6	70.7	1,284.9	841	651
Pacific Cod	1,323.1	73.5	1,249.6	3,200	3,200
Pacific Whiting d/	142,913.8	1,422.7	141,491.1	188,000	148,200
Sablefish (north)	6,386.6	1,126.1	5,260.5	8,209	6,500
Sablefish (south)	204.0		204.0	441	294
Dover sole	8,342.2	956.6	7,385.7	8,510	7,440
English sole	1,241.4	339.0	902.4	3,100	
Petrale sole	2,160.6	144.4	2,016.2	2,762	
Arrowtooth flounder	3,243.5	904.8	2,338.7	5,800	
Other flatfish	2,093.5	490.7	1,602.8	7,700	
Pacific ocean Perch	160.1	21.9	138.2	689	377
Shortbelly	9.3	2.3	7.0	13,900	13,900
Widow	57.9	16.1	41.8	3,871	832
Canary	48.5	14.2	34.3	272	44
Chilipepper	49.5	15.4	34.1	2,700	2,000
Bocaccio	29.1	8.5	20.6	198	20
Splitnose	118.8	9.3	109.5	615	461
Yellowtail	504.5	22.1	482.4	3,146	3,146
Shortspine Thornyheads e/	1,220.2	387.8	832.4	1,004	955
Longspine Thds. North e/	1,834.8	323.9	1,510.9	2,461	2,461
Longspine Thds. South	0.0			390	195
Cowcod, Monterey	0.4	0.2	0.1	19	2
Cowcod, Conception	0.0		0.0	5	2
Yelloweye	8.1	1.5	6.6	52	22
Darkblotched	139.9	51.8	88.1	205	172
Black Rockfish (north)				615	
Black Rockfish (south)				500	
Black Rockfish Total	1,150.1		1,150.1	1,115	

a/ Preliminary estimates of total catch mortality based on species discard assumptions used when the OYs were set. These assumptions are currently being revised using data from the West Coast Groundfish Observer Program.

b/ Preliminary estimated discard mortality in the commercial fishery. Preliminary trawl discard calculated by applying discard mortality rates from combined 2001-03 West Coast Groundfish Observer data to 2002 trawl logbook data, by area and depth strata. Discard totals estimated for tows recorded in logbooks is expanded using state-specific ratios of fish ticket landings to retained logbook catch. Because tows conducted under EFPs could not currently be completely removed from logbooks and fish tickets, applying fleetwide discard rates to these tows may overstate discard for some shelf species.
In an effort to minimize this problem, rockfish discard from target tonnage caught within the RCA off Oregon was estimated using bycatch rates from that EFP. Since the Washington EFP included full retention of shelf rockfish, no at-sea discard of these species was estimated for tows occurring within the RCA off Washington, or on tows that exceeded the 2-month allowance of arrowtooth flounder outside the EFP. This column also includes at-sea discards of rebuilding species. Preliminary fixed-gear discard in the directed sablefish fisheries is calculated by applying discard mortality rates from combined 2001-03 West Coast Groundfish Observer data to northern sablefish landings data. No logbooks are available for fixed-gear vessels. Because of limited geographic coverage of available data, fixed-gear discard amounts for species off central California are not well estimated at this time.

c/ Includes shoreside commercial and tribal landings from PacFIN, observed total catch including estimated discards in the at-sea whiting fishery, and RecFIN recreational catch plus observed discard mortality (A+B1).

d/ Discards of whiting are estimated from observer data and counted towards the OY inseason.

e/ Includes "unspecified thornyheads" allocated based on ratios estimated from California landings and At Sea north/south ABCs.

Table 10.--Estimated total mortality (mt) of major west coast groundfish species from commercial, tribal, and recreational fishing during 2004.

	2004 metric tons											Management reference points	
	Shore-side commercial fisheries				At-sea landed and discard	Shore-side WA Tribal	State estimates of total recreational fishing mortality			Remaining GMT Scorecard [2] Values	Estimated total fishing mortality	Optimum Yield (total catch)	Allowable Biological Catch
	Total landed catch	Estimated trawl discard	Estimated non-trawl discard [1]	Estimated Total mortality			WA	OR	CA				
Target species													
Sablefish [3]		642	446										
mortality	5,079	321	89	5,489	29	712	0	5			6,235	7,510	8,185
Shortspine [4]	582	174		756	5	6	0	0			767	983	1,030
Longspine [3]	658	137		795	0		0	0			795	2,443	2,461
Dover	6,777	355		7,132	0	81	0	0			7,213	7,440	8,510
Petrale	1,961	76		2,037	0	82	0	0			2,119	2,762	2,762
English	956	193		1,149	0	80					1,229	na	3,100
Arrowtooth	2,328	3,255		5,583	3	82					5,668	na	5,800
Otr. Flatfish	1,371	497		1,868	2	19					1,889	na	7,700
Slope rockfish	1,073	634		1,707	24	23					1,754	na	na
Yellowtail rockfish [5]	224	80		304	48	352	24	12			739	4,320	4,320
Chilipepper [6]	43	102		145	2		0	0	6		153	2,000	2,700
Pacific hake	96,365	2,666		99,031	120,736	6,848					226,615	250,000	514,441
Rebuilding species (as of 2004)													
Lingcod		161.9											
mortality	148.0	80.9	4.5	233.4	1.4	25.0	64.2	107.2	130.0	27.1	588.3	735.0	1,385
Canary	6.0	8.5	3.5	18.0	5.2	3.0	1.7	3.9	9.0	7.3	48.1	47.3	256
Widow	16.0	4.8	0.1	20.9	21.1	21.0	0.0	0.7	15.0	40.6	119.3	284.0	3,460
Yelloweye	1.7	0.4	3.7	5.7	0.0	1.0	3.7	2.4	0.6	2.3	15.7	22.0	53
Bocaccio [6]	11.9	8.7	0.0	20.6	0.0		0.0	0.0	71.0	13.3	104.9	250.0	400
Cowcod [6]	0.0	0.8	0.0	0.9	0.0		0.0	0.0	1.0	0.5	2.4	4.8	24
POP [5]	116.6	23.4	0.0	140.1	1.0	3.0	0.0			7.6	151.7	444.0	980
Darkblotched	181.0	37.1	0.5	218.6	7.4		0.0			4.9	230.9	240.0	240

[1] Non-trawl discard includes estimates for the fixed-gear nearshore and sablefish fisheries. Sablefish fishery estimates are based on observations of the primary limited-entry, fixed-gear season. Since few observations were made in this fishery south of Ft. Bragg, CA, discard estimates for southern species, such as bocaccio and cowcod should not be viewed as complete.

[2] The Pacific Council's Groundfish Management Team produces a Bycatch Scorecard whose purpose is to account for all sources of expected mortality for species that are managed under rebuilding plans.

[3] Area north of 36° N. Lat. [4] Area north of 34°27' N. Lat. [5] Area north of 40°10' N. Lat. [6] Area south of 40°10' N. Lat.

Table 15.--Estimated total mortality (mt) of major west coast groundfish species during 2005, by sector.

	Shoreside commercial fisheries				All at-sea hake fisheries	Shore-side WA Tribal	Total recreational fishing mortality			Research	Remaining GMT Scorecard [3] Values	Estimated total fishing mortality
	Estimated non-hake trawl [1]	Estimated hake trawl	Estimated non-trawl [2]	Total shoreside mortality			CA	OR	WA			
Target species												
Sablefish	2,553	22	3,242	5,817	15	700	0	1	0	10		6,543
Shortspine thornyhead	627	0	147	774	7	11	0	0	0	4		796
Longspine thornyhead	723	0	17	740	0	0	0	0	0	10		750
Dover sole	7,327	0	6	7,333	0	145	0	0	0	28		7,507
Petrale sole	2,732	0	0	2,733	0	30	0	0	0	4		2,766
English sole	1,151	0	0	1,151	0	66	0	0	0	4		1,222
Arrowtooth flounder	3,450	1	87	3,539	4	158	0	0	0	5		3,706
Other Flatfish	1,872	0	2	1,874	3	47	25	0	2	13		1,965
Blackgill rockfish [4]	53	0	36	89	0	0	0	0	0	0		90
Splitnose rockfish [4]	230	0	1	231	0	0	0	0	0	7		237
Other slope rockfish	171	4	87	262	51	28	0	0	0	4		345
Yellowtail rockfish [5]	56	173	10	239	112	539	9	13	20	3		935
Chilipepper rockfish [6]	76	0	3	79	0	0	4	0	0	14		97
Other shelf rockfish	98	27	52	176	6	10	281	6	1	19		501
Black rockfish	1	0	174	175	0	0	180	311	271	0		937
Other nearshore rockfish	1	0	99	100	0	0	441	41	7	0		590
Cabezon	0	0	62	62	0	0	47	17	7	0		133
Kelp greenling	0	0	23	23	0	0	5	4	2	0		35
Pacific hake/whiting	826	97,574	0	98,400	151,003	11,767	0	0	0	42		261,212
Pacific cod	726	1	5	732	0	124	0	0	8	0		864
Spiny dogfish	1,194	96	383	1,672	355	6	3	0	0	9		2,044
Longnose+big+Unsp. skate	1,745	1	141	1,887	1	23	0	0	0	8		1,920
Other groundfish	1,633	188	160	1,981	417	20	0	0	0	8		2,425
Dungeness crab	254	0	1	255	0							255
Tanner crab	252	0	9	261	0							261
Rebuilding species (as of 2005)												
Lingcod	266.3	5.9	91.2	363.4	3.4	29.9	299.3	131.7	58.6	4.0	0.0	890.4
Canary rockfish	26.0	2.2	1.9	30.1	1.4	4.3	2.0	4.9	1.9	2.3	1.8	48.7
Widow rockfish	6.3	76.8	2.1	85.2	80.0	28.6	1.6	1.6		1.6	0.4	198.9
Yelloweye rockfish	0.8	0.0	2.9	3.8	0.0	0.8	0.9	4.1	5.2	0.6	0.3	15.7
Bocaccio [6]	29.3	0.0	4.5	33.8	0.0	0.0	38.1	0.0	0.1	1.7	1.3	75.1
Cowcod [6]	1.4	0.0	0.0	1.5	0.0	0.0	0.4	0.0	0.0	0.1	0.0	2.0
Pacific ocean perch [7]	67.7	0.5	1.0	69.2	1.7	3.5	0.0	0.0	0.0	1.8	0.0	76.2
Darkblotched rockfish	100.4	5.5	4.8	110.6	11.1	0.1	0.0	0.0	0.0	2.1	0.0	123.9

[1] Includes minor landings by trawlers not targeting groundfish

[2] Includes minor landings made with troll gear

[3] The Pacific Fishery Management Council's Groundfish Management Team Bycatch Scorecard (Table 17) contains estimates of mortality for species that are managed under rebuilding plans.

[4] Amounts in this row are for the area south of 40°10' N. Lat. Northern catch is included in the Other Slope Rockfish category.

[5] Amounts in this row are for the area north of 40°10' N. Lat. Southern catch is included in the Other Shelf Rockfish category.

[6] Amounts in this row are for the area south of 40°10' N. Lat. Northern catch is included in the Other Shelf Rockfish category.

[7] Amounts in this row are for the area north of 40°10' N. Lat.

2007 Projected mortality impacts (mt) of overfished groundfish species under current regulations. Updated with March 2007 inseason adjustments. a/

3/12/07

Fishery	Bocaccio b/	Canary	Cowcod	Dkbl	POP	Widow	Yelloweye
Limited Entry Trawl- Non-whiting	26.1	8.1	1.5	247.4	89.8	1.6	0.4
Limited Entry Trawl- Whiting							
At-sea whiting motherships		4.7		25.0	1.0	220.0	0.0
At-sea whiting cat-proc					2.9		0.0
Shoreside whiting					1.8		0.0
Tribal whiting		0.7		0.0	0.6	6.1	0.0
Tribal							
Midwater Trawl		1.8		0.0	0.0	40.0	0.0
Bottom Trawl		0.8		0.0	3.7	0.0	0.0
Troll		0.5		0.0	0.0		0.0
Fixed gear		0.3		0.0	0.0	0.0	2.3
Limited Entry Fixed Gear		1.1		1.3	0.4		2.9
Sablefish	13.4		0.0			0.0	
Non-Sablefish			0.1			0.5	
Open Access: Directed Groundfish		1.0					
Sablefish DTL	0.0		0.1	0.2	0.1	0.0	0.5
Nearshore (North of 40°10' N. lat.)	0.0	1.7		0.0	0.0	0.1	2.0
Nearshore (South of 40°10' N. lat.)	0.0			0.0	0.0		
Other	10.6			0.0	0.0	0.0	0.1
Open Access: Incidental Groundfish							
CA Halibut	0.1	0.0		0.0	0.0		
CA Gillnet c/	0.5			0.0	0.0	0.0	
CA Sheephead c/				0.0	0.0	0.0	0.0
CPS- wetfish c/	0.3						
CPS- squid d/							
Dungeness crab c/	0.0		0.0	0.0	0.0		
HMS b/		0.0	0.0	0.0			
Pacific Halibut c/	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Pink shrimp	0.1	0.1	0.0	0.0	0.0	0.1	0.1
Ridgeback prawn	0.1	0.0	0.0	0.0	0.0	0.0	0.0
Salmon troll	0.2	0.8	0.0	0.0	0.0	0.3	0.2
Sea Cucumber	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Spot Prawn (trap)							
Recreational Groundfish e/							
WA		5.7					6.2
OR						1.4	
CA	98.0	8.3	0.4			8.0	1.7
Research: Includes NMFS trawl shelf-slope surveys, the IPHC halibut survey, and expected impacts from SRPs and LOAs. f/							
	2.0	7.5	0.1	3.8	3.6	0.9	2.0
TOTAL	151.4	43.1	2.2	277.8	103.9	279.0	18.5
2007 OY	218	44.0	4.0	290	150	368	23
Difference	66.6	0.9	1.8	12.3	46.1	89.1	4.5
Percent of OY	69.4%	98.0%	55.0%	95.8%	69.3%	75.8%	80.3%
Key		= either not applicable; trace amount (<0.01 mt); or not reported in available					

a/ All numbers reflect projected annual total catches except that the non-tribal "Limited Entry Trawl- Whiting" numbers are the total bycatch caps for canary, darkblotched, and widow rockfish.

b/ South of 40°10' N. lat.

c/ Mortality estimates are not hard numbers; based on the GMT's best professional judgment.

d/ Bycatch amounts by species unavailable, but bocaccio occurred in 0.1% of all port samples and other rockfish in another 0.1% of all port samples (and squid fisheries usually land their whole catch).

e/ Values in scorecard represent projected impacts. However, harvest guidelines for 2007 are as follows: canary in WA and OR combined = 8.2 mt and in CA = 9.0 mt; yelloweye in WA and OR combined = 6.8 mt and in CA = 2.1 mt.

f/ Research projections only updated for canary rockfish in November 2006. The other species' updates will be updated in April 2007.

Agenda Item E.8.b
GAC Report
June 2007

DRAFT SUMMARY MINUTES

Groundfish Allocation Committee

Pacific Fishery Management Council
Hilton-Vancouver Hotel
Hemlock-Oak Room
301 W. 6th St.
Vancouver, WA 98660
(360) 993-4500
May 15-17, 2007

Members Present:
Mr. Donald Hansen, Dana Wharf Sport Fishing, Pacific Fishery Management Council Chairman
Mr. Phil Anderson, Washington Department of Fish and Wildlife
Mr. Curt Melcher, Oregon Department of Fish and Wildlife
Ms. Marija Vojkovich, California Department of Fish and Game
Mr. Frank Lockhart, National Marine Fisheries Service Northwest Regional Office
Dr. Dave Hanson, Pacific States Marine Fisheries Commission

Advisors Present:
Ms. Mariam McCall, National Oceanic and Atmospheric Administration General Counsel
Mr. Bob Alverson, Limited Entry Fixed Gear Representative
Mr. Pete Leipzig, Limited Entry Non-Whiting Trawl Representative
Mr. Dan Waldeck, Limited Entry Whiting Trawl Representative
Mr. Tom Ghio, Open Access Representative
Ms. Heather Mann, Processor Representative
Mr. Bob Osborn, Recreational Representative
Dr. Steve Barrager, Conservation Representative

Others Present:
Mr. Jim Seger, Pacific Fishery Management Council Staff
Mr. John DeVore, Pacific Fishery Management Council Staff
Mr. Merrick Burden, NMFS Northwest Region, GMT member
Mr. Shems Jud, Environmental Defense
Ms. Dorothy Lowman, Environmental Defense
Ms. Laura Pagano, Natural Resources Defense Council
Mr. William Daspit
Mr. Mike Okoniewski, Pacific Seafood
Mr. Rod Moore, West Coast Seafood Processors Association, Council member
Mr. Marion Larkin, Washington trawler, GAP member
Mr. Joanna Grebel, California Department of Fish and Game, GMT member
Mr. Peter Huhtula, Pacific Marine Conservation Council

Mr. Michael Taylor, Cascade Economics LLC, PFMC Consultant
Mr. Dayna Matthews, NOAA Office of Law Enforcement, Northwest Division
Mr. Kent Craford, West Coast Seafood Processors' Association
Mr. David Jincks, Midwater Trawlers Cooperative
Mr. Steve Bodnar, Coos Bay Trawlers Association
Ms. Michele Culver, Washington Department of Fish and Wildlife
Mr. Brian Culver, Washington Department of Fish and Wildlife, GMT member
Ms. Gway Kirchner, Oregon Department of Fish and Wildlife
Mr. Mark Saelens, Oregon Department of Fish and Wildlife, GMT member
Dr. Ed Waters, Pacific Fishery Management Council Consultant
Ms. Laura Bozzi, Pacific Fishery Management Council Staff
Mr. Craig Urness, Pacific Seafood Group
Mr. Dale Myer, Arctic Storm Inc., Council member
Mr. Bruce Buckmaster, Ilwaco Fish Company
Mr. Joe Bersch, Supreme Alaska Seafoods
Mr. Steve Joner, Makah Tribe
Mr. Mark Cedergreen, Council member
Dr. Kit Dahl, Pacific Fishery Management Council Staff
Ms. Lucia Morici, member of the public

The Groundfish Allocation Committee (GAC) met May 15-17 to address trawl rationalization and intersector allocation issues. The GAC's next meeting has been tentatively set for September 25-27, 2007. The duration of the meeting will depend on the agenda.

The following are the GAC recommendations to the Council on these two issues.

Trawl Rationalization (Amendment 20)

Individual Fishing Quota (IFQ) Alternatives

IFQ for Bycatch in the Whiting Fishery (In Section A-1.1 and A-1.5)
The GAC discussed the TIQC recommendation of an option in which, for whiting sectors, there would be IFQ for whiting but not for other species (bycatch pools for other species). This recommended change to the IFQ alternative reflects concern that given the small amounts of bycatch allocated to the whiting fisheries, once this is divided between the whiting sectors and then allocated at the permit level, this amount might not be enough to cover each permit's bycatch. It was noted that most of the whiting fleet now operates under 100 percent monitoring and that the fleet has maintained its bycatch of overfished species below the bycatch caps. The whiting industry has proposed using bycatch caps in the IFQ alternative as a way to continue with that success. On the other hand, it was noted during discussion that voluntary pooling of bycatch quota could occur under a program with IFQ for all species, and that such voluntary pooling could address some of the concerns that prompted the TIQC's recommendation.

> *The GAC recommends consideration of an IFQ alternative under which, for whiting sectors, there would be IFQ for whiting but not for other species. Under this option, the*

bycatch allocation would be pooled. However, the GAC asked that industry present additional reasoning for the alternative.

Area Management (In Section A-1.2)

The GAC recommended a process for the Council to follow in considering area management issues, taking into account the GMT report presented on the topic. The GAC discussed whether the intention of area management provisions should be to address potential biological impacts or potential social impacts. Biological impacts could likely be addressed through changes made during the biennial specifications process (such as dividing a species' OY into two or more OYs to represent separate populations). Socio-economic impacts likely could not be addressed through this process and could involve a more extensive public process.

The GMT report notes that the Council currently uses latitudinal and depth-based spatial management measures, as well as gear restrictions, to achieve area management objectives. Based on the GMT recommendation that the TIQ program incorporate these currently used area management tools, the GAC agreed to the following recommendation:

State in the EIS that existing area management tools will be used, including latitudinal areas needed to management for OY/ABCs.

Area management may require that existing areas be subdivided and/or existing boundaries be moved. Moving area lines would be achieved by subdivision and recombination. The IFQ alternative includes a method to be followed for subdivision of QS by area after the initial allocation. The GAC agreed with the staff recommendation that a method for recombination should be included as part of the current alternative:

Bring back for consideration an option that would establish in advance the mechanism for creating or shifting the boundary of area specific quota shares.

Initial Allocation of Quota Shares (A-2.1.3)

Quantitative Analysis

The GAC reviewed the TIQC's recommendations with respect to initial allocation of QS and the supporting quantitative analysis (see Agenda Item E.3.a, Attachment 1).

Like the TIQC, the GAC noted when reviewing the analysis that there were only a few permits not meeting the recent participation requirement and that they had very small amounts of associated catch history. Because of this, elimination of a recent participation requirement will make little difference in the allocation formula.

The GAC concurs with the TIQC recommendations that (1) recent participation requirements for permits (including those for catcher processors) not be included as part of the program, and (2) the recent participation requirement for motherships be 1,000 mt processed in each of any two years from 1998 – 2004.

The current allocation option for allocating QS to catcher vessel permits would allocate equally, among all remaining permits, the portion of the QS pool associated with buyback permits. The remainder would be allocated to each permit based on that permit's landings history. The GAC addressed the TIQC recommendation that an option be added in which there would not be equal sharing of the quota share pool associated with buyback permits (i.e. 100% of allocation based on a permit's catch history). The GAC was reminded of the original rationale for equal sharing, which was to recognize a participant's payment on the loan. At the same time it was noted that loan repayment is a 5 percent tax on landings that will be paid by whoever makes those landings, and not a flat fee. The GAC recommends:

The current QS allocation option should be eliminated (the option that allocates, in part, based on equal sharing) and be replaced by an option that would allocate all QS, including the buyback pool QS, based 100% on landings history.

The GAC concurred with the TIQC report recommendation that catcher-process QS allocation Option 1 ("Schedule developed by unanimous consent of catch processors") be eliminated.

Allocation of Overfished Species Based on Bycatch Rates for a Proxy

The Council adopted a proxy species approach for the non-whiting sector in March 2007, but difficulties were encountered in aligning the available data with this approach. This earlier version would have relied on 2003-2006 permit specific logbook information and 2003-2006 fleet bycatch rates from the observer program. The TIQC has recommended a new proxy species approach which does not rely on permit specific logbook information and ties the overfished species allocation to the permit's target species QS rather than either 1994-2003 landings history or 2003-2006 catch history.

For shoreside non-whiting, the GAC concurred with the TIQC recommendation for an approach that relied on fleet average depth distribution of target catches and fleet average bycatch rates applied to a person's QS allocation. The fleet averages would be stratified and applied by latitudinal area but the resulting QS allocation would not be constrained latitudinally, unless the OY is subdivided by area.

The GAC requested that the SSC and the GMT review this approach.

Reallocation once a Species is Rebuilt or Declared Overfished

The GAC discussed whether to add process options to the IFQ alternative to address future scenarios in which an overfished species becomes rebuilt or a healthy species is declared overfished. The GAC expressed interest in adding these, and it was explained that such options would not drive the analysis that will be conducted over the summer, and so consideration could be postponed until the fall. Therefore, over the summer staff will develop options for reallocation of QS under these scenarios and bring these options back to the GAC. Guidance by the GAC directs that such options would reallocate QS while maintaining status quo sector allocations (i.e. equivalent to those during the species' rebuilding period), until such time that the Council took specific action to reallocate the OY in a different manner.

Eligible to Own (A-2.2.3.a)

At its March 2007 meeting, the Council directed that provisions on who is eligible to own QS be drafted based on language used in the North Pacific. An initial draft of this language was provided for GAC review (see Agenda Item E.3.a, Attachment 1). The GAC reviewed the language and did not have any comments at this time. It is the GAC's understanding that the language will continue to be refined, and will meet the intent of allowing ownership of QS by anyone eligible to own a US documented fishing vessel and by entities grandfathered under the American Fisheries Act. This language will be presented when the Council reviews proposed regulations for implementing an IFQ program.

With respect to new MSA language that limits who is eligible to own QS, some concern was expressed that the MSA might prevent direct community ownership of QS. This interpretation will be investigated.

Accumulation Limits (A-2.2.3.e)

Control Rule

At its March 2007 meeting, the Council directed that provisions defining control for the purpose of assessing accumulation limits be drafted based on language used in the North Pacific. That language was provided and reviewed by the GAC (see Agenda Item E.3.a, Attachment 1). While GAC members had some concern about how the provision might be interpreted and applied, the GAC did not have any comments about the specific proposed language.

Accumulation Limit Percentages

The GAC heard from representatives of the shoreside whiting and mothership whiting fishery that there was some desire to adjust the accumulation limits originally recommended by the TIQC. The GAC asked that each representative consult with members of their sector and bring forward their proposed changes.

The shoreside whiting representative will consult with other sector members regarding whether to request higher accumulation limits. The mothership whiting representative will consult with other sector members regarding whether different accumulation limits might be appropriate since this Council is not considering an "affiliation rule."[1]

Split Loads and Monitoring Program (A-2.3.1)

The TIQC had recommended that with 100% shoreside monitoring there should be an opportunity to split an off-load between different locations. The GAC felt this was an issue separate from the IFQ program and should be considered under a separate process on shoreside monitoring issues.

[1] The mothership accumulation limit option assumes an affiliation rule in which all QS owned by an entity would be counted against any person who owns at least 50% of that entity. This Council is considering an "individual and collective rule" under which the QS counted as under an individual's ownership would be those owned by that individual plus a portion of those owned by any entity in which that individual has an ownership. The portion would be determined by the individual's ownership share in that entity.

The GAC did not concur with the TIQC recommendation for an option to allow an off-load to be split between different locations.

The TIQC also had recommended adding an option to the monitoring program requiring electronic logbooks.

The GAC did not concur and recommends that electronic logbooks be dealt with later in a separate process.

Processor Compensation under IFQs (A-2.4)

The GAC considered the draft rationale for and against the initial allocation of quota shares to processors. During the discussion it was noted that while analysis may provide some additional information pertaining to the effects on the sector, it is not likely to provide definitive guidance on whether more or less of the allocation should go to processors or permits. GAC members were interested in receiving analysis that investigated harm and equity issues with respect to initial allocation. Extensive analysis on this issue will not likely be available until completion of the draft EIS. Some participants also expressed displeasure with the paper's focus on the rationale for processor allocations. They stated that it should have been broadened to include the rationale for allocations to vessel owners, permits owners, or other potential recipients. Staff explained that the rationale for considering (or not considering) an allocation to these different groups would be presented in the EIS; this processor-focused paper was meant to assist in the GAC and Council discussions on alternative compensation mechanisms and analytical approaches.

The GAC considered some options that would benefit processors. Some advisors on the GAC expressed the perspective that framing the issue from this perspective reflects a bias against processors.

The GAC recommend adding the following options as provisions that could be incorporated into the program to benefit processors, in addition to the existing options of allocating QS for fishing to processors.

1. *Issue processors QS that expire after a certain period of time.*
2. *Issue processors QS but restrict the processor's initial allocation to at or below the accumulation limit (i.e. do not apply the grandfather clause)*
3. *Use funds from a fee to provide financial compensation to processors for demonstrated harm (for example a fee on transfers).*
4. *Use the Adaptive Management QP to compensate processors for demonstrated harm by: auctioning QP to generate funds to provide financial compensation, or providing QP to be directed in a fashion that increases benefits for affected processors.*

Adaptive Management (A-3)

The TIQC had relegated development of a community stability program to members advocating for that program. At its March 2007 meeting, the Council eliminated that option from the package. However, the TIQC advocates developed the option into an adaptive management proposal and requested reconsideration. Pursuant to that, a presentation on an "adaptive management incentive program." was provided by Stu Nelson (for Environmental Defense and

Natural Resources Defense Council). The GAC decided to recommend incorporation of an adaptive management provision that is based on, but not the same as, that presented by Mr. Nelson. The proposed provision would be:

> *Under this provision, in each of the first 10 years of the program, up to 10% of the trawl allocation will be distributed as quota pounds (QP) to create incentives or to compensate in response to unforeseen outcomes from implementing the IFQ program. Examples of unforeseen outcomes include, but are not limited to, unexpected geographic shifts in the distribution of catch or landings, unexpected effects on certain segments of the industry (e.g. processors), or an unexpected barrier to new entry into the fishery. This provision would apply to the overall trawl sector (whiting and non-whiting).*
>
> *When the Council determines that an adjustment is needed, it will establish criteria for the distribution of up to 10% of the QP in a manner that will encourage those receiving the QP to undertake the desired activities or otherwise compensate for unexpected effects.*
>
> *Note: This approach does not change the option for splits of quota share (QS) that will go to eligible groups.*

The GAC agreed that an adaptive management provision will assist the Council in adjusting for unforeseen outcomes from the implementation of an IFQ program or in otherwise furthering management. For example, the provision could address issues for communities that are not now explicitly taken into account in the process. The GAC also recognized that options for community allocations or special provisions for new entrants have been removed from the IFQ program. Some GAC members and advisors raised concerns about an adaptive management provision, particularly related to the added costs of this program on trawl fishermen: depending on how it was implemented this option could subtract 10 percent of the quota pounds issued to a quota holder, in addition to having to pay a 5 percent tax from the buyback and likely having to pay some program administrative costs. There was concern that the industry may not be healthy enough economically to support this added cost.

Halibut Individual Bycatch Quota (IBQ) (A-4)

The GAC agreed with the need to cap Pacific halibut catch in a rationalized trawl fishery. It was noted that the British Columbia trawl fishery uses IBQs in their IFQ program and that this has resulted in reduced halibut impacts. In addition to IBQ, the GAC considered use of pooled caps by area, so that if the cap were attained the area would close.

> *The GAC recommends that IBQ for halibut be considered. Halibut IBQ may be allocated based on area, but the IBQ would not be constrained latitudinally. Initial allocation would be based on the application of a bycatch rate to target species QS.*

Discussion also noted the need for further exploration of related issues, including: whether the trawl allocation of halibut would be a set amount from year to year or whether this would be a proportion of the Area 2A exploitable biomass; and whether biological sampling of halibut would need to be conducted onboard.

Co-op Alternative (B)

The GAC recommends that the Council move forward with the co-op alternative, including the co-op program for each whiting sector and those provisions at the start of the co-op alternative that pertain to all whiting sectors. The GAC concurs with the TIQC's recommendations on co-ops, with one exception: the GAC does not agree with the TIQC's recommendation that there be a 10% reserve of bycatch species held back for the benefit of those who demonstrate low bycatch rates. The GAC recommendation also includes clarifications to be provided by industry.

Specifically, with respect to the mothership sector co-op proposal, the GAC agreed to move this forward with the expected revised language. The rationale for not requiring observers/compliance monitors on catcher vessels in the MS sector is that there are no opportunities to discard since fish are not brought aboard (given that the codends are delivered to the motherships). With respect to the catcher-processor sector proposal, the GAC's recommendation covers further refinement that will specify annual registration and reporting requirements. The GAC also reviewed the new shoreside co-op proposal and agreed to move this forward with the needed clarifications.

For the overall management of the whiting fishery under a co-op program, the GAC agreed to recommend inclusion of the bycatch monitoring options and specifications, as well as the sector allocation options (except for the 10% reserve option), as recommended by the TIQC.

The GAC emphasizes that **refinement of the co-op alternatives should be completed at the June Council meeting.** Additionally, the GAC requests a formal and complete legal review of the co-op alternatives.

Intersector Allocation (Amendment 21)

Process for Deciding Intersector Allocations

The GAC discussed how to structure the intersector allocation process in order to implement the program by January 2009 (to align with the start of the 2009-2010 management biennium and to support implementation of the trawl rationalization program). Staff indicated that the more contentious and complicated the allocations, the less likely that the January 2009 date would be achieved. Allocation decisions that may be particularly difficult are those for some overfished species and for species that are important to both commercial and recreational sectors. In particular, canary rockfish, cowcod, bocaccio, and yelloweye rockfish were flagged as species whose allocation could cause delay in the process. The GAC considered these concerns about potential delays. Some proposed that the difficulties associated with some of allocations were more related to workload and analysis, rather than the potential that the process would be stalled by the Council decision-making. In addition, the GAC discussed the overlap between the intersector allocation process and the biennial specifications process. Addressing workload concerns for NMFS' review and implementation of these programs, it was noted that the simpler the decisions made, the better able the Agency would be in completing its legal review and analysis in time to meet the set deadlines.

Given this discussion, the GAC considered the most near-term need for an allocation, which is to support the trawl rationalization program under development. Focusing on the trawl allocation first could allow the Council to exclude some of the controversy associated with other sectors until a later point, so that the January 2009 deadline could be met. Therefore, the GAC recommends that:

> *The process should start with deciding a trawl allocation of groundfish species and complexes.*

The GAC intends to recommend at a later point a list of species to be included in the trawl allocation. The Council had at one point during the trawl rationalization process made decisions regarding which species would be classified as "trawl dominant." However, GAC members supported compiling a more comprehensive list that would include any species that would be caught by the trawl fishery, and not only the trawl dominant species. It was further noted that a more expansive species list would assure industry that the allocations are set and so give them greater comfort in supporting the trawl rationalization program.

Decision Process for Allocating Among Trawl Sectors

The GAC considered whether the allocation among trawl sectors should be handled under the trawl rationalization EIS or the intersector allocation EIS. Staff recommended that it be included as part of the intersector allocation EIS, explaining a perspective that this would result in more efficient, less complex analytical documents. The GAC concurred and recommended that:

> *Allocation among trawl sectors would be decided at the same time as the overall trawl allocation.*

Intersector Action Alternatives
Looking at the data provided, the GAC remarked about the dramatic differences between the alternatives using total catch (i.e., landings + discards) and the alternatives using landed catch (respectively, Alternatives 1 and 5; and Alternatives 2, 3, 6 and 7). The landed catch alternatives, however, still contain discards in the recreational fishery (A + B1, or landed catch plus discard mortality). To improve the consistency across sectors, the GAC requested:

> *Remove the discard mortality component from the recreational catch data informing alternatives 2, 3, 6, and 7 (the alternatives using landings histories as an analytical basis);*

The GAC was concerned about the gaps in the data to construct Alternatives 1 and 5. Though the decision made by the Council is based on an amalgam of many factors in addition to catch history, having strong supporting information is important for making a defensible decision. Therefore, the GAC tasked staff to:

> *Request 2003-05 discard mortality estimates from the NWFSC to fill the data gaps in the total catch alternatives (Alternatives 1 and 5).*

The GAC then considered Alternatives 4 and 8, which use 2007-08 catch projections as an analytical basis. These were intended to use projections documented in the 2007-08 Harvest Specifications and Management Measures EIS. However, the available projections are primarily for overfished species, and some for primary target species in the trawl fishery and recreational fishery. New models would have to be developed to make similar projections for other sectors. The GAC considered using Alternative 4 for overfished species, and then using another alternative for the other species. Some considered this to create a mismatch in the allocation. The GAC deliberated over whether there was a value in analyzing Alternatives 4 and 8. These alternatives demonstrate the effect of regulations on constraining access to target species, however under a rationalized system there will be new regulations with a different suite of constraints. The GAC concluded that these alternatives would not be helpful to Council decision-making, though having current data on the projected catch of overfished species would be useful for comparison against the alternatives. Therefore,

> *Remove alternatives 4 and 8 (the alternatives using 2007-08 catch projections as an analytical basis), but provide the most recent GMT scorecard of projected 2007 overfished species' catch in November when the Council is slated to decide a preferred alternative.*

Catch Overage Risk Management
Significant uncertainty in current catch monitoring systems; the need to protect fishing sectors from premature closures due to catch overages in other sectors; and consideration of a carryover provision in the trawl rationalization program suggest the need to consider novel mechanisms to manage the risk of catch overages. Such mechanisms are proposed in an issue paper developed by Council staff ("Managing yields in a groundfish management regime of IFQs, intersector allocations, and stringent rebuilding requirements"), which also was presented to the Council in April. The GAC directed staff to incorporate analysis of these new mechanisms – multi-year

OYs and carryover provisions, sideboards, buffers, and bycatch caps – into the intersector allocation EIS.

Council/GAC/TIQC Decision/Meeting Schedule

The GAC will next meet to address the trawl rationalization program and the intersector allocation program **September 25-27, 2007.**

Agenda Item E.8.d
Supplemental GAP Report
June 2007

GROUNDFISH ADVISORY SUBPANEL REPORT ON AMENDMENT 21: INTERSECTOR ALLOCATION

The Groundfish Advisory Subpanel (GAP) was briefed by Mr. John DeVore about the current intersector allocation alternatives and the process going forward. The GAP finds that the alternatives recommended by the Groundfish Allocation Committee (GAC) provide a reasonable range of alternatives and should be adopted for analysis.

The GAP focused on the recommendations of the GAC in their summary minutes (Agenda Item E.8.b, GAC Report), specifically the section of the document starting on page 9. Generally, the GAP agrees with the italicized recommendations in the GAC summary minutes, as well as the GAC direction to Council staff about catch overage risk management, that is, the final sentence on page 10 of the summary minutes. Specific to the second italicized GAC recommendation (that is, allocation among trawl sectors), the GAP assumes the analysis will provide information about non-whiting trawl, shoreside whiting trawl, mothership whiting trawl, and catcher-processor whiting trawl. The number of trawl sectors will ultimately be determined through the Trawl Rationalization process, which currently has alternatives for three or four trawl sectors.

The GAP also notes that allocation of overfished species, once they are rebuilt, is an important issue that warrants Council consideration. Most notably, several species (widow rockfish, darkblotched rockfish, and bocaccio) may be rebuilt before implementation of the Trawl Rationalization program. Therefore, the Council should prioritize consideration of this issue as part of the Trawl Rationalization process.

Finally, relative to Agenda Item E.8.a, Attachment 2, page 1; the GAP recommends insertion of the phrase “recreational fisheries without long-term allocations” into the sentence in the Set-Asides row of the table on page 1.

PFMC
06/12/07

GROUNDFISH MANAGEMENT TEAM REPORT AMENDMENT 21: ON INTERSECTOR ALLOCATION

The Groundfish Management Team (GMT) discussed the deliberations of the Groundfish Allocation Committee's (GAC) May 15-17 meeting as well as their report in Agenda Item E.8.b, GAC Report and has the following comments:

Process for Deciding Intersector Allocations

The GMT agrees with the GAC recommendation to delay the allocation of those species (e.g., canary, cowcod, bocaccio, and yelloweye) that might potentially be contentious or complicated; however, the GMT notes that some allocation or set aside of these species to the trawl sector will still be necessary for prosecution of a rationalized trawl fishery. Likewise, the GMT is sympathetic to the need to balance workloads and deadlines in considering intersector allocation along with other Council priorities and supports addressing allocations to the trawl sector first. It is our understanding that allocations to other sectors could be accomplished through trailing amendments.

Decision Process for Allocating Among Trawl Sectors

The GMT concurs with the GAC and staff recommendation to allocate between trawl sectors under Amendment 21 (intersector allocation) rather than the Amendment 20 (trawl rationalization) process. The GMT notes that addressing allocations between trawl sectors as part of the rationalization process could unnecessarily burden that analysis with a considerable increase in complexity.

Intersector Allocation Action Alternatives

The GMT discussed the changes to the range of action alternatives recommended by the GAC and agrees that, with the suggested changes, this represents a reasonable range. In removing discard mortality from alternatives 2, 3, 6, and 7, the GMT notes that there are differential regulations between sectors. The analysis should examine the effect of regulations limiting or prohibiting retention for some species on the landed catch of a particular sector. Given the removal of alternatives 4 and 8, the GMT will provide the most up-to-date scorecard projections for 2008 fisheries in November 2007 to give the Council a benchmark for comparison of current overfished species impacts with the range of alternatives.

Catch Overage Risk Management

The GMT agrees that novel approaches to prevent the catch of overfished species from one sector impacting another will likely be needed for a trawl rationalization program. In fact, such mechanisms may be key to the program's success in the face of highly constraining catch limits for some species. The GMT also recommends exploring both the biological and legal (e.g., in relation to Annual Catch Limits as defined in the newly reauthorized Magnuson Act) ramifications of multi-year OYs and carryover provisions in the analysis.

PFMC
06/13/07

AMENDMENT 20: TRAWL RATIONALIZATION ALTERNATIVES (TRAWL INDIVIDUAL QUOTAS AND COOPERATIVES)

National Marine Fisheries Service (NMFS) has met the Council request for funds to support consideration of trawl rationalization and Congress has required that the Council submit a fully analyzed proposal for a rationalization program for the trawl groundfish and whiting fisheries, including the shorebased sector of the whiting fishery, by January 2009. The Council is scheduled to approve a preliminary environmental impact statement (EIS) with preferred alternatives for public review in June 2008 and to take final action to adopt an alternative for submission to Congress and recommendation to NMFS in November 2008 (Agenda Item E.2.a, Attachment 2). At this meeting, the Council is scheduled to further refine alternatives and at the November 2007 meeting is scheduled to formally adopt the EIS alternatives for intensified analysis. After the June 2007 meeting, any major changes to the alternatives will likely result in not achieving this schedule. Over the summer, in addition to further analysis of existing alternatives, NMFS will be developing a set of alternatives for tracking and monitoring individual fishing quotas (IFQs) and address issues related to program implementation costs and fee structures. At its November 2007 meeting the Council will have an opportunity to make limited adjustments in response to preliminary analysis and NMFS work on tracking and monitoring.

At its March 2007 meeting, the Council substantially simplified, revised, and reduced the total number of alternatives. However, there were a number of issues that remained outstanding, for example, area management, measures benefiting processors, and some of the co-op alternatives. Since the March meeting, analysis has been presented to the Trawl Individual Quota Committee (TIQC) and the Groundfish Allocation Committee (GAC) on some of the components of the trawl rationalization alternatives and they recommended revisions on that basis. Additionally, some provisions that were considered earlier in the process but not incorporated are being recommended for reconsideration, for example, halibut individual bycatch quotas, IFQs only for whiting in the whiting fisheries (in the whiting fishery manage groundfish bycatch species as pools), and reserving some of the trawl allocation for annual use as an adaptive management tool. These issues are listed and discussed briefly in Agenda Item E.9.a, Attachment 1.

The GAC Report (Agenda Item E.8.b, GAC Report) takes into account recommendations from the May 2-3, 2007 TIQC meeting (Agenda Item E.9.c, TIQC Report) on many of the matters listed in Agenda Item E.9.a, Attachment 1. The alternatives, as they would appear if all of the GAC recommendations are accepted by the Council, are provided in Agenda Item E.9.a, Attachment 2. The quantitative analysis of qualification and allocation rules that was reviewed by these groups is provided as Agenda Item E.9.a, Attachment 3. Additional quantitative analysis of some of the GAC's recommendations on initial allocation will be provided at the Council meeting (Agenda Item, E.9.a, Supplemental Attachment 4). In addition to the materials reviewed by both the GAC and TIQC, the GAC also received:

- a report on some of the challenges that managing overfished species with IFQs may present (Agenda Item E.9.a, Attachment 5),
- a description of how co-ops address Council goals and objectives for rationalization of the trawl fishery (Agenda Item, E.9.a, Attachment 6), and

- a report from the Groundfish Management Team (GMT) on the need for area management (Agenda Item E.9.c, GMT Report).

The TIQC will meet, Wednesday, June 13, 2007, to review the GAC Report (Agenda Item E.9.c, Supplemental TIQC Report).

Council Action:

Finalize the alternatives for preliminary analysis, with the exception of provisions pertaining to tracking, monitoring enforcement, fees, cost recovery, and other minor adjustments in response to analysis and Council direction.

Reference Materials:

1. Agenda Item E.9.a, Attachment 1: Outstanding Trawl Rationalization Issues
2. Agenda Item E.9.a, Attachment 2: Trawl Rationalization Alternatives (Rev 05/23/2007)
3. Agenda Item E.9.a, Attachment 3: Quantitative Analysis of Qualification and Allocation Rules
4. Agenda Item E.9.a, Supplemental Attachment 4: Supplemental Quantitative Analysis of Qualification and Allocation Rules
5. Agenda Item E.9.a, Attachment 5: Preliminary Analysis and Discussion of Overfished Species Management in a Trawl Rationalization Program
6. Agenda Item E.9.a, Attachment 6: A Preliminary Review of Harvest Co-op Systems and Their Relationship to the Council's Goals and Objectives
7. Agenda Item E.9.c, TIQC Report to the GAC: Trawl Individual Quota Committee Report to the Groundfish Allocation Committee, May 2007
8. Agenda Item E.9.c, Supplemental TIQC Report: Supplemental Trawl Individual Quota Committee Report on Trawl Rationalization
9. Agenda Item E.9.c, GMT Report: Groundfish Management Team Report on Area Management
10. Agenda Item E.9.d, Public Comment

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b. Recommendations of the GAC — Don Hansen
c. Reports and Comments of Advisory Bodies
d. Public Comment
e. **Council Action:** Refine Alternatives for Analysis

PFMC
05/25/07

The full record of the Pacific Fishery Management Council (Council) April 2-6, 2007 meeting is available at the Council office, and consists of the following:

1. The draft agenda.

2. The approved agenda with notations as to the time each agenda item was addressed, with summary minutes of Council proceedings and key Council documents referenced in the relevant agenda item. The summary minutes consists of a narrative (1) on particularly noteworthy elements of the gavel to gavel components of the Council meeting, including the Call to Order segment at the onset of the Council meeting, and (2) summaries of pertinent Council discussion during each Council Guidance, Discussion, or Action item in the Agenda. The summary narrative of Council Guidance, Discussion, or Action items includes detailed descriptions of rationale leading to a motion (or leading to a consensus to not make a motion) and discussion between the initial motion statement and the final vote.

3. A set of audio recordings of the actual testimony, presentations, and discussion that occurred at the meeting. Recordings are labeled so as to facilitate tape or CD-ROM review of a particular agenda item, by cross referencing with the time labeled agenda.

4. All written documents produced for consideration at the Council meeting, including (1) the pre-meeting briefing book materials, (2) all pre-meeting supplemental documents for the briefing book, (3) all supplemental documents produced or received at the Council meeting, validated as labeled by the Council Secretariat and distributed to Council Members, and (4) public comments and miscellaneous visual aids or handout materials used in presentations to Council Members during the open session.

5. A copy of the Council Decision Document, a document distributed immediately after the meeting which contains very brief descriptions of Council decisions.

6. A copy of Council News Spring 2007 • Volume 31, No. 1.

DRAFT MINUTES
Pacific Fishery Management Council
Seattle Marriott Hotel SeaTac
3201 South 176th Street, Seattle, WA 98188
Telephone 206-241-2000
April 2-6, 2007

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A. Call to Order

A.1 Opening Remarks, Introductions

Mr. Don Hansen, Chair, called the 188th meeting of the Pacific Fishery Management Council to order on Monday, April 2, 2007 at 3 pm.

A.2 Roll Call

Dr. Donald McIsaac, Council Executive Director, called the roll. The following Council Members were present:

Mr. Phil Anderson (Washington State Official)* Not present for roll call
Mr. Mark Cedergreen (Washington Obligatory)
Ms. Kathy Fosmark (California Obligatory)
Mr. Donald Hansen, Chairman (At-Large)
Mr. Frank Lockhart (National Marine Fisheries Service, Northwest Region)
Mr. Jerry Mallet (State of Idaho Official)
CDR Peter Martin (US Coast Guard, non-voting)
Mr. Curt Melcher (State of Oregon Official)
Mr. Rod Moore (At-Large)
Mr. Dale Myer (At- Large)
Mr. Dave Ortmann, Vice Chairman (Idaho Obligatory)
Mr. Tim Roth (US Fish and Wildlife Service, non voting)
Mr. David Sones (Tribal Obligatory)
Mr. Roger Thomas (At-Large)
Ms. Marija Vojkovich (State of California Official)
Mr. Frank Warrens (Oregon Obligatory)

The following Council member was absent from the first day of the meeting:

Dr. Dave Hanson, Parlimentarian (Pacific States Marine Fisheries Commission, non voting)

The following Council member was absent from the entire meeting:

Mr. David Hogan (US State Department, non voting).

A.3 Executive Director's Report

Dr. Don McIsaac made a few brief remarks on the week's agenda and noted the information reports in the Briefing Book.

A.4 Council Action: Approve Agenda

The Council approved the agenda as shown in Agenda Item A.4, Council Meeting Agenda (Motion 1).

B. Enforcement Issues

B.1 Fishery Enforcement Activity Report

B.1.a Agenda Item Overview

Mr. Jim Seger provided the agenda item overview.

B.1.b Annual U.S. Coast Guard Fishery Enforcement Report

Rear Admiral Houck provided a few comments regarding safety, drug enforcement, and homeland security responsibilities. Mr. Brian Corrigan provided a PowerPoint presentation (Agenda Item B.1.b, Supplemental USCG Report).

B.1.c Reports and Comments of Advisory Bodies

None.

B.1.d Public Comment

Public comment.

B.1.e Council Discussion

The Council thanked the Admiral and the Coast Guard for the report and for their commitment and assistance in fishery enforcement and safety.

C. Administrative Matters

C.1 Future Council Meeting Agenda Planning (04/02/07; 4:08 pm)

C.1.a Agenda Item Overview

Dr. Don McIsaac provided the agenda item overview. He reviewed Agenda Item C.1.a, Supplemental Attachment 1, Three-meeting Outlook, and Supplemental Attachment 2, Proposed June 2007 Council meeting agenda. He noted additional documents from California Department of Fish and Game (CDFG) and NMFS SW Region.

Ms. Marija Vojkovich briefed the Council on Agenda Item C.1.a, Supplemental CDFG Report, which provided background information on, and a proposed process and schedule for limiting entry into the directed open access fishery.

Mr. Mark Helvey explained the letter the Council received from Mr. Rod McInnis, (Agenda Item C.1.b, Supplemental NMFS Report). The letter is to alert the Council to the recent publication of the 2007 List of Fisheries categorizing all federal and state fisheries based upon levels of interactions with marine mammals. NMFS invites the Council and its advisors to review the 2007 list and provide any comments at the June meeting which should be considered in the development of the proposed list for 2008, using the information in the *Federal Register* notice (72 FR 14466, March 28, 2007).

C.1.b Reports and Comments of Advisory Bodies

None.

C.1.c Public Comment

Ms. Carol Bernthal, Olympic Coast National Marine Sanctuary, Port Angeles, WA: Requested time on June agenda to present the results of research cruises surveying bottom structure, especially deep sea corals.

Mr. Robert Alverson, Fishing Vessel Owners Association, Seattle, WA: Requested resolution of an ownership classification problem in the sablefish tiered permit program

Ms. Dorothy Lowman, Environmental Defense, Portland, OR: Requested 15-20 minutes during June IQ topic for Environmental Defense to present an overview of a study of catch share programs that shows their economic, social, and environmental benefits.

C.1.d Council Discussion of Future Council Meeting Agenda Topics

Pertaining to Agenda Item C.1.a, Supplemental CDFG Report, Ms. Kathy Fosmark asked to work with Ms. Vojkovich (CDFG) in identifying how different gear types might be handled.

Mr. Moore asked Dr. McIsaac why the biennial groundfish management specifications process was listed for June. Dr. McIsaac said that some stock assessments would be ready for review then and we need to begin developing agreement on the process and schedule so that everything is ready to go smoothly in November.

Mr. Frank Lockhart stated he would get an update on the timing of the Mitchell Act EIS so we would know when to schedule that review on the Council Agenda.

C.2 Magnuson-Stevens Act Reauthorization Implementation (04/03/07; 2:51 pm)

C.2.a Agenda Item Overview

Mr. Mike Burner provided the agenda item overview.

C.2.b NMFS Comments

Dr. Rick Methot provided a PowerPoint presentation (available on the Council's website at: http://www.pcouncil.org/bb/2007/0407/C2b_NMFS_sup.pdf).

Dr. McIsaac noted Ms. McPhearson from NMFS was available to answer any NEPA-related questions.

C.2.c Reports and Comments of Advisory Bodies

Dr. Steve Ralston provided Agenda Item C.2.c, Supplemental SSC Report. Ms. Kelly Ames provided Agenda Item C.2.c, Supplemental GMT Report. Mr. Tom Ghio Provided Agenda Item C.2.c, Supplemental GAP Report. Mr. Stuart Ellis provided Agenda Item C.2.c, Supplemental HC Report. Mr. Moore provided Agenda Item C.2.c, Supplemental LC Report.

C.2.d Public Comment (04/03/07; 4:16 pm)

Mr. Ben Enticknap, Oceana, Portland, OR

Ms. Meghan Jeans, The Nature Conservancy, San Francisco, CA
Ms. Julie Sherman, Marine Fish Conservation Network, San Francisco, CA
Ms. Erin Anderson, National Environmental Trust, Portland, OR
Ms. Jennifer Bloeser, PMCC, Port Townsend, WA
Mr. Bill LaBorde, WashPIRG, Environment WA, Seattle, WA
Mr. Doug Fricke, Washington Trollers Association, Hoquiam, WA

C.2.e Council Action: Direct Planning and Action on New Requirements as Needed for Timely Implementation (04/03/07; 5:06 pm)

Ms. Vojkovich reviewed the proposed process, the short timeline, the complexity of the issues we are being asked to comment on, and the fact that several of our advisory bodies have not had a chance to draft comments. She suggested a longer comment period. She voiced concerns with all of the new workload requirements associated with new provisions and agreed with the LC comments regarding documenting the types of catch limits and accountability measures the Council has in its existing FMPs, She stated that she hopes that NMFS doesn't see this as a black and white issue, but more of what is more reasonable and appropriate.

Mr. Sones stated that he hears a lot of arguments that the tribes had 20 years ago being made today. He said that the science isn't perfect and that we don't have all the answers. This, in turn, leads us to be conservative to utilize buffers for fisheries, and take precautionary approaches in everything we do. He noted that the Council has made difficult decisions and taken some extreme actions to prevent overfishing and should not be lumped with other Council's as this issue is addressed at the national level. There are likely areas in which the Council can identify improvements, but many aspects of the new provisions are already in place on the West Coast.

Mr. Melcher asked Ms. Vojkovich if she was asking NMFS for an extension of the timeline on this to provide more comments at a later date. Ms. Vojkovich reiterated her concern that not all of the advisoy bodies have met recently and did not have the chance to comment and there are still very real concerns about how these provisions will ultimately be implemented.

Mr. Melcher asked NMFS if extending the public comment period is feasible. Dr. Methot said the timeline is driven by the MSA and is relatively inflexible. Ms. Vojkovich clarified that she wanted to know if the proposed timeline is based on the assumption that there are not any catch limits that currently meet the new requirements and that a lot of time will be needed between now and the deadline to be established. Dr. Methot said that is not the case, but this Council will need to review its current FMPs. He continued that many of the provisions in the Council's FMPs will likely meet the requirements and new guidelines. The amount of work to be done and the degree to which FMPs will need amending will vary from one Council to another.

Ms. Culver clarified that the new National Standard 1 Guidelines and final rule will be published in November of 2007. This will then give the Councils 18 months to review different alternatives and amend FMPs to comply with the NMFS guidance.

Ms. Vojkovich stated this is a complex issue and requested some clarification on just what NMFS is interpreting, what exactly is the Council going to have to address? As an example, Ms. Vojkovich asked if the guidance will require the Council to establish sector-by-sector catch levels for all Council managed fisheries. Dr. Methot could not at this time say exactly how specific the guidelines will be. NMFS would like the Council to provide NMFS with examples of how annual catch limits work in the Council process and provide comments on how the guidelines should be drafted and evaluated. NMFS will not be able to design specific guidance for each fishery in the country.

Mr. Cedergreen ask if funds had been appropriated for the work of implementing theses new provisions. Mr. Lockhart said when the MSRA was approved by Congress, the administration recognized there was going to be a need for additional funding. However, the funding has come late in the process and NMFS will be working with Congress to identify new funds as the Councils and NMFS work through this process in the next few years.

Ms. Cooney said it would help the process if the Council made a strong case that what they are already doing meets the new provisions. She added it would be useful to identify areas of additional work and those issues that cause problems as well.

Mr. Moore suggested that Council advisory bodies that have not been able to meet or have been engaged in other time sensitive matters at this meeting be given the opportunity to provide input in time for the public comment period. Mr. Moore noted that the Council has also participated in previous reviews of National Standard 1 Guidelines and feels many of those recommendations are still relevant and he urged NMFS to revisit those recommendations when drafting the DEIS and proposed rule.

Dr. McIsaac felt it was important for the Council to provide comments at this time and noted that the proposed schedule shows FMPs being amended in 2008. He cautioned that in 2008, the Council will be adopting harvest specification and management measures for the next groundfish cycle. This will involve a significant amount of work and the development of an EIS. If the Council will need to consider amendments to some or all of its FMPs to comply with the new MSA during this same time, it will create a significant workload situation. As an example, to develop annual catch limits (ACLs) for salmon fisheries is potentially fraught with many difficulties. This Council's record on preventing overfishing and addressing overfished stocks has been very good over its history. It would be best if the Council can make a good case for not amending its FMPs when one considers the other work items the Council is scheduled to address between now and 2010.

Mr. Moore moved (Motion 2) that the Council convey to NMFS under the scoping process, the recommendations contained in the SSC Report, GMT Report, GAP Report, and LC Report as a means of identifying issues to be included in the scoping process and potential solutions for the question of how to develop annual catch limits and accountability issues. Mr. Warrens seconded the motion.

Mr. Moore reiterated that we are in an early phase of developing guidance and he believes there is substantial background in the reports contained in the motion to establish what the Council has already accomplished. He added that, when coupled with the Council's earlier comments on National Standard 1 Guideline, this package should provide NMFS with a strong case that extensive amendment of our FMPs is unnecessary.

Dr. Hanson noted that some of the Council advisory bodies may draft statements by the public comment period and asked if the motion would include those statements as well. Mr. Moore and the Mr. Warrens accepted this notion as a friendly amendment as it was their original intent.

Ms. Culver asked about including comments on the international fishery management component of setting catch limits and she suggested it might be better to have the HMS advisory bodies take a look at this later this week and come back with their recommendations.

Mr. Burner clarified with the maker and second that the motion did not include the HC statement.

Mr. Melcher confirmed that these reports would be accompanied by a letter and he stressed the importance of emphasizing the difficult issue of applying annual catch limits to our current salmon management regime.

Ms. Vojkovich noted that the CPS FMP contains species that are monitored by the Council, but managed by the State. She added that there are some nearshore groundfish fisheries that are also co-managed and the application of ACLs and accountability measures (AMs) in this situation will need clarification.

Ms. Culver and Mr. Burner noted that between the CPS and HMS FMPs there are several monitored species in a variety of domestic and international management approaches that may or may not work well with this new mechanism. Mr. Moore suggested that if none of the advisory panels addresses this issue, the Council letter should.

Motion 2 passed.

C.3 Approval of Council Meeting Minutes (04/04/07; 8:07 am)

C.3.a Council Member Review and Comments

None.

C.3.b Council Action: Approve Council Meeting Minutes

Mr. Dale Myer moved and Mr. Melcher seconded a motion (Motion 3) to adopt the minutes as shown in Agenda item C.3, Draft September 2006 Council Meeting Minutes. Motion 3 passed.

C.4 Appointment to Advisory Bodies, Standing Committees, and Other Forums, and Changes to Council Operating Procedures (COP) as Needed (04/04/07; 8:08 am)

C.4.a Agenda Item Overview

Dr. John Coon provided the agenda item overview.

C.4.b Reports and Comments of Advisory Bodies

None.

C.4.c Public Comment

None.

C.4.d Council Action: Consider Changes to COP and Appoint New Advisory Body Members as Needed

Ms. Vojkovich moved and Mr. Thomas seconded a motion (Motion 4) to appoint Ms. Joanna Grebel to replace Ms. Susan Ashcraft on the Groundfish Management Team. Motion 4 passed.

Ms. Vojkovich moved and Mr. Lockhart seconded a motion (Motion 5) to establish a Council Coordination Committee (as requested by NOAA Fisheries) consisting of the chairs, vice chairs, and executive directors of each of the eight regional fishery management councils, other council members, and staff. The chairs, vice chairs, and executive directors shall be voting members. The six NOAA Fisheries Regional Administrators or their designees, other council members, and staff shall be non-voting members. The Council Coordinating Committee shall meet from time to time as appropriate to discuss issues of relevance to all councils. The Council Coordinating Committee may establish such subcommittees as it deems appropriate. Motion 5 passed.

In response to the notification calling for advisory appointments to the Pacific Whiting Commission, Mr. Moore spoke against the Council providing anything more than general guidance. He noted that the Council does not get involved in appointing people to international treaty advisory bodies (e.g., the IATTC, PSC, etc). He believes it is not appropriate for the Council to provide names for international bodies.

Ms. Culver agreed with Mr. Moore. She asked if Mr. Lockhart had in mind how often that group would meet, a sense of travel, and budget? Mr. Lockhart stated that for the advisory panel, we are envisioning three meetings over the next 10 months (the initial meeting, actual season determination meeting, and an OY discussion meeting). He said they will soon be putting out an FR seeking nominations to the advisory positions. Ms. Culver requested that the announcement be made available to Council advisory bodies, in particular the GMT, and the Council members.

Ms. Vojkovich said it would be worthwhile when the announcement went out that we would ask for a broad range of participants (each fishery sector as well as from small business, large business, and each of the three states).

Mr. Warrens moved and Mr. Moore seconded a motion (Motion 6) that the Council staff and the Chairman work together to produce a draft Council Operating Procedure (COP) for the Essential Fish Habitat Oversight Committee (EFHOC) and have that draft available for Council and Council advisory body review at the June meeting.

Mr. Warrens expressed his concern that with EFH proposals and potential amendments coming before the Council every meeting, we need to deal with them on a timely an efficient basis, limiting the EFHOC review to maybe not more than once a year or every other year. The committee could be comprised of a core group with fishing representatives aligned with the areas of concern for EFH added as appropriate.

Ms. Culver, referring to Attachment 1 and with regard to the motion being made, noted there seems to be quite a bit of ambiguity as to the makeup of the EFHOC. It is not clear if it would be members from advisory panels only, include Council members, or if we would have the ability to designate seats and/or rotate them.

Mr. Warrens said Ms. Culver brings up some legitimate concerns that could be put into the draft COP and certainly all of those considerations could be put on the table.

Mr. Lockhart said he was concerned about the scientific basis for reviewing and making any changes to EFH and that input would be needed from the SSC and HC.

Dr. Coon said the draft would go before the Council in June and we would get comments from our advisory bodies at that time.

Motion 6 passed.

C.5 Ecosystem Fishery Management Plan (04/04/07; 8:25 am)

C.5.a Agenda Item Overview

Mr. Mike Burner provided the agenda item overview.

C.5.b Agency and Tribal Comments

None.

C.5.c Reports and Comments of Advisory Bodies

Dr. Bob Conrad provided Agenda Item C.5.c, Supplemental SSC Report. Mr. Burner read Agenda Item C.5.b, Supplemental HC Report. Ms. Kelly Ames and Dr. John Fields provided Agenda Item C.5.c, Supplemental GMT Report. Mr. Jim Martin provided Agenda Item C.5.c, Supplemental GAP Report.

C.5.d Public Comment

Mr. Ben Enticknap, Oceana, Portland, Oregon
Mr. Santi Roberts, Oceana, Portland, Oregon

C.5.e Council Guidance and Direction on Future Planning

Mr. Moore said the Council is grappling with the need for better science to form the basis of more informed Council actions. He felt that incorporating ecosystem principals into Council fishery management activities could be an effective way to bring more scientific information into the process. Mr. Moore noted the Council is also dealing with issues such as costs and available budget, staff resources, and time. The Council has several existing FMPs that provide clear and specific direction to incorporate ecosystem principles, but the Council would benefit from the development of a clear process for how broader ecosystem considerations are incorporated into the management of our marine environment while best meeting the needs of communities.

Mr. Moore moved (Motion 7) that the Council appoint a Plan Development Team (PDT) for an Ecosystem FMP to be chaired by an SSC representative and consisting of one member each from the STT, SAS, GMT, GAP, HMSMT, HMSAS, CPSMT, CPSAS, HC, and EC and that the team be charged with developing the purpose and need, potential goals, and objectives of an Ecosystem FMP. The PDT is to provide the Council a report on the matter at a future undetermined date. Ms. Vojkovich seconded the motion.

Mr. Warrens stated he intends to vote in favor of the motion, but spoke to the importance of the independency of the SSC. Mr. Warrens asked for a friendly amendment to remove the SSC representative to ensure their independent review of the plan. Mr. Moore asked for clarification and pointed out that individual SSC members are serving on stock assessment review panels which are chaired by an SSC member. The results are then brought forward to the entire SSC for review. The individual who chairs the stock assessment review panel does not participate in the review of his or her own work. There is already independency.

Mr. Warrens clarified with Mr. Moore that the intent was to have only one SSC member as chair of the PDT. Mr. Moore added that all work products developed by the PDT will undergo review by the full SSC and other advisory bodies before final review by the Council. Mr. Warrens said that so long as the SSC representative on the PDT was able to recuse themselves from the full SSC review he is in support of the motion. Mr. Warrens withdrew his friendly amendment.

Chairman Hansen asked Mr. Moore about the PDTs proposed schedule and timeline and raised concerns about the heavy existing workload. Mr. Moore said we have an interest evidenced by statements and testimony from our advisory panels, technical teams, SSC, and public recommending we move forward with this action. Each of these entities will be meeting during the course of this coming year; most tend

to meet at a Council meeting. The individual members may have to schedule an extra day to have their first meeting followed by phone and email communication as necessary. Any way we proceed with an EFMP there will be workload and budget implications and this motion is intended as a logical way to take the first step.

Mr. Jerry Mallet reiterated that this work is currently not budgeted and he asked if NMFS intends to pay for the work. Mr. Helvey said the short answer is no; but he noted under Magnuson-Act, Section 406 calls for research into the application of ecosystem approaches to management and includes provisions for grants from the SOC for ecosystem management plans. He continued that at least part of the reason the Council is addressing this issue is in reaction to the activities of the National Marine Sanctuary Program (NMSP) and perhaps an Ecosystem FMP would help the Council work with them in fulfilling mutual objectives. NMFS is exploring a partnership with the NMSP as a means to identify new funding sources including the SOC grants. As a friendly amendment to the motion, Mr. Helvey suggested that an NOS individual be a part of the PDT to start fostering a working relationship.

Dr. McIsaac, with regard to the financial aspects of the FMP development, stated the Council has received assured status quo funding for 2007. The fiscal impact of the motion on the table is less than the more classic approach of developing a permanent PDT of largely new representatives. The workload concerns are accurate and the individuals nominated for the PDT will need to consider and speak to their own workload issues when deciding to participate. Establishing a PDT from people who are not already in the Council arena may result in a team that is more productive as they do not have other Council workload issues to juggle, but that is the more expensive model. Dr. McIsaac recommended considering the Council staff workload associated with staffing the new committee as well.

Mr. Moore stated that in regard to someone from NOS being part of the PDT, he would note that the HC has someone from the NMSP and perhaps that person could be named from the HC as an initial step.

Mr. Warrens recommended the PDT include NMFS legal counsel and included this piece as a friendly amendment. Chairman Hansen suggested that legal counsel act as advisor to the PDT rather than a member. Ms. Cooney agreed and stated the NMFS General Council staff generally act as advisors and attend the meetings if time and resources allow. Mr. Warrens said if it is understood that legal counsel would provide input, then he withdraws his friendly amendment.

Mr. Lockhart commented that he is supportive of the motion, but then wanted to discuss items he felt were important in this process to consider. Regarding Mr. Moore's statement of the need for new information, Mr. Lockhart agreed and noted the requests from the advisory panel statements that asked for a more formal implementation process. He also noted the SSC called for more information on existing harvest control rules and suggested a summary of these needs could benefit the development of the Ecosystem FMP. Mr. Lockhart noted the social and economic impacts of this FMP have not been discussed and recalled the valuable exercise of community considerations under Amendment 16-4 to the groundfish FMP. The impact of our decisions on fishing communities is important and he wanted to make sure the PDT recognizes this fact as they are reviewing the potential goals and objectives. In developing the purpose and need, goals and objectives, he said it is going to be an iterative process between the PDT and the Council. He felt a presentation on the available science and resourses for ecosystem-based management would be very helpful. Mr. Lockhart offered the assistance of both West Coast NMFS Science Centers in organizing a workshop to take a look at the state of the science and the SSC recommendation regarding control rules. He suggested this could happen at a Council meeting, possibly an evening session.

Dr. McIsaac said he thinks to some extent defining what the NMFS Science Centers are going to do would be useful. The discussion is general at this time and focused on foundational approaches and suggested more clarity would be needed.

Mr. Ortmann envisioned a short document that is focused on the limited tasks in the motion and did nto thing the assignment should evolve into a large work product. Mr. Moore agreed and felt a consise document or report would be good first step. Mr. Moore stated he did not have a timeframe in mind because that depends on the schedule of the participants and available budgets.

Mr. Lockhart recommended that NMFS would commit to getting the two science centers together on the SSC recommendation to look at existing control rules and summarize the extent to which the existing management practices could be inadequate for an ecosystem-based management mechanism. He suggested the report could be available at the June meeting. Regarding the GMT recommendation for a series of presentations, again he recommended the two science centers take the lead and work with the Council ED and Chairman on scheduling.

Mr. Melcher said he thinks this is a good idea and is supportive of the motion, but he expressed some concern with the Council's huge workload and the many initiatives the Council is working on. He agrees with Mr. Ortmann and sees the first step as being achievable without a huge amount of work.

Ms. Culver supports the motion made by Mr. Moore and suggested that for the June meeting, not as a separate agenda item, but under the 3-meeting outlook that Council staff prepare a proposed timeline for the process; one with minimal budget impacts. Further, she recommended Council staff work with NMFS relative to scheduling the recommended presentations to the Council and to the PDT prior to developing the goals and objectives, and the purpose and need statement.

Mr. Helvey clarified that although he and Mr. Lockhart were participating in the discussion, there is only one NMFS vote by Mr. Lockhart.

Chairman Hansen asked for a vote on Motion 7. Motion 7 passed.

Regarding this resolution, Dr. McIsaac clarified that the Council staff will only act on this motion if it doesn't displace any current 2007 work items with regard to workload and funding. Mr. Helvey reiterated that NFMS has had preliminary discussions with the NMSP and will continue those discussions to determine if there are any additional funds available.

Mr. Moore said his intent of the motion was to fit this action into the normal Council budget prioritization process.

It was understood NMFS science centers would still volunteer to make the presentations and provide the information as suggested by the GMT and SSC.

C.6 Legislative Matters (04/05/07; 3:04 pm)

C.6.a Agenda Item Overview

Mr. Burner provided the agenda item overview.

C.6.b Legislative Committee Report

Mr. Burner read Agenda Item C.6.b, Supplemental LC Report. Dr. Hanson noted that regarding the aquaculture issue, the State of Alaska has shared its position on the matter and had requested the other Pacific states consider forming a five state coalition. Mr. Williams said there is some utility to getting such discussions started and asked if the Council Coordinating Committee (CCC) would be discussing the matter in May.

Chairman Hansen said that would likely be a discussion topic for the CCC.

Ms. Vojkovich asked if there were any indications on how quickly Congress may take up this matter. Mr. Moore stated he was not aware of any introduced bill at this time and asked Dr. Hanson if the NPFMC has a legislative committee and, if so, he asked if they discussed the issue or the position of the State of Alaska. Dr. Hanson said the NPFMC does not have a legislative committee and this issue was not on their agenda.

C.6.c Reports and Comments of Advisory Bodies

None.

C.6.d Public Comment

Public comment.

C.6.e Council Discussion

See above discussion during LC Report. Mr. Warrens moved and Mr. Melcher seconded a motion (Motion 12) to adopt the Legislative Committee Report as shown in Agenda Item C.6.b, Supplemental LC Report. Motion 12 passed.

C.7 Council Three-Meeting Outlook, June 2007 Council Meeting Agenda, and Workload Priorities (04/06/07; 4:37 pm)

C.7.a Agenda Item Overview

Dr. Don McIsaac provided the agenda item overview. He noted on the workload sheet (Supplemental Attachment 3) that the shaded items are those for which someone other than Council staff has the lead: NMFS NWR has the lead on the whiting monitoring program; ODFW the lead on Amendment 15 (AFA); and CDFG the lead on open access limitation. The Council staff has the lead on intersector allocation (mistakenly shaded).

C.7.b Reports and Comments of Advisory Bodies

Dr. John Coon read Agenda Item C.7.b, Supplemental GAP Report.

C.7.c Public Comment

Mr. Bob Alverson, Fishing Vessel Owners Association, Seattle, WA—vessel and permit ownership issue.

C.7.d Council Guidance on Three Meeting Outlook, June 2007 Council Agenda, Council Staff Workload, and Priorities for Advisory Body Consideration

Council members worked with the Executive Director and Council staff to develop the June 2007 Council agenda, staff workload and priorities for advisory body consideration.

Following up on Mr. Alverson's request for a change to the ownership and permit regulations in the sablefish fishery, Ms. Culver asked Mr. Lockhart if NMFS had reviewed the request to clarify the issue and consistency with how it is handled in the Alaska fishery; and to determine the simplest way of dealing with it here. Mr. Lockhart said he would be conferring with his staff on this.

Dr. McIsaac recalled an additional agenda item on potential revisions in the observer data delivery process that was contemplated for June, but due to its complexity will be delayed to September. The NWFSC will provide a description of the proposed program and changes for review by the advisors at the June Council meeting with comments provided on the Council floor in September.

Mr. Lockhart asked about Agenda Item B.4, Draft COP for EFHOC, and suggested the Council could task the SSC and the HC to develop criteria for reviewing EFH proposals.

Ms. Culver suggested staff and advisors use COP 19 as a guide to developing criteria for the EFHOC COP. She also requested that the Olympic Coast National Marine Sanctuary be added to the June Council agenda as they have already made an announcement of that fact based on our March Three-Meeting Planner, and have prepared an informational presentation on the results of their research cruises. Dr. McIsaac suggested, if the Council wants that change the presentation be scheduled for Wednesday evening as the earlier days of the week are already so full it might entail extending the agenda to Saturday. Ms. Culver stated she did not favor it being an evening session, her first choice would be to limit them to 30 minutes and put them on the Monday agenda. Dr. McIsaac said limiting agenda items and presentations to 30 minutes is very difficult, especially where there might be a lot interest generated for the advisors and public. Ms. Culver noted that Wednesday evening would limit it to just an informational presentation.

Mr. Moore suggested the GAP look at the EFH criteria issues, and not just the HC. Dr. Coon said that was the purpose of bringing this out as a draft. He thinks what Mr. Lockhart is looking for is something more specific, everybody has the chance to provide comments.

Mr. Melcher stated he wanted to make some comments with regard to Amendment 15 (AFA) and had some questions for Ms. Vojkavich on the open access (OA) issue. He asked for confirmation from Ms. Vojkovich that there would be some alternatives provided in June for OA? Ms. Vojkovich indicated that there would not be alternatives, just an overview of what the open access fishery has looked like in the past and speculating on where we may want to go with this fishery in the future prior to developing actual alternatives. They are not coming with criteria to cut this fishery.

Mr. Melcher noted that some alternatives have been identified during this week for Amendment 15 as well as some planning for workload and ideas for pieces of the analysis. As they have previously expressed, ODFW has a lot of interest in the successful completion of this amendment. ODFW will have staff assigned to work on this analysis and the draft EA. While ODFW staff has a high degree of familiarity with shoreside whiting issues, they are not as familiar with the at-sea sector. He welcomes the commitments from both Messrs. Anderson and Lockhart to assist too. With that in mind and after conferring with Mr. Lockhart, he intends to follow up the Council meeting with a conference call with Mr. Lockhart and Council staff to line out assignments. The ODFW contact person for Amendment 15 will be Ms. Gway Kirchner. Mr. Lockhart said the contact person for NMFS is Ms. Becky Renko.

D. Open Public Comment

D.1 Comments on Non-Agenda Items (04/02/07; 4:53 pm)

Vice Chairman Dave Ortmann chaired this agenda item.

D.1.a Public Comment

Mr. Bob Bohlman, Olympic Coast National Marine Sanctuary Advisory Council (OCNMA), Port Angeles, Washington. He briefed the Council on the makeup of the advisory council. Mr. Bohlman asked for the Council's assistance as the OCNMS anticipates starting their own management plan in the upcoming year (Ms. Bernthal noted fall of 2007). (See the Council's website for the OCNMA comments: http://www.pcouncil.org/bb/2007/0407/D1a_PC_sup.pdf).

Mr. Steve Bodnar, Coos Bay Trawlers Association, Coos Bay, Oregon. Mr. Bodnar spoke about the emergency rule for whiting that was passed at the March meeting. He said it has disrupted one of his member's harvest plans that he has been pursuing for a couple of years. Mr. Bodnar spoke to his letter provided under Agenda Item E.3.d, Supplemental Public Comment. He was asking for a modification of the existing emergency rule.

Mr. Joel Kawahara, troller, Seattle, Washington. Mr. Kawahara talked about the Columbia River Power Project Act (hydro-development). He spoke about the NMFS biological opinion. Mr. Kawahara noted the next few speakers will be talking about "Revenue Stream" a report that examines the economics of salmon vs. the economics of the four lower Snake River dams.

Mr. Rob Musanas, American Rivers Assocation, and Mr. Stuart Ellis, Columbia River Intertribal Fish Commission provided the following handout "Revenue Stream, An Economic Analysis of the Costs and Benefits of Removing the Four Dams on the Lower Snake River". (See starting on page 4, http://www.pcouncil.org/bb/2007/0407/D1a_PC_sup.pdf).

Mr. William Daspit, representing himself, Seattle, Washington. Spoke about an alternative groundfish management plan to the existing limited entry system and allocation system.

Mr. Mike Pettis, Newport, Oregon. He asked the Council to relax the fixed gear sablefish base vessel permit length requirements (See page 28, http://www.pcouncil.org/bb/2007/0407/D1a_PC_sup.pdf).

D.1.b Council Discussion of Comments as Appropriate

None.

E. Groundfish Management

E.1 National Marine Fisheries Service (NMFS) Report (04/03/07; 8:07 AM)

E.1.a Regulatory Activities

Mr. Frank Lockhart provided an update on the whiting emergency rule. NMFS is in the process of reviewing the record of decision from the Council and the submitted public comments. They expect to be able to make an announcement on the decision by May 15th, as requested by the Council.

Mr. Lockhart then explained that he and Dr. Elizabeth Clarke have been working together to implement the whiting treaty portion of the reauthorized Magnuson Stevens Act. They realized that the advisory panel needs to be established quickly, as the panel has to meet and make recommendations on the composition of other panels before those groups can meet. So, NMFS will publish a solicitation for advisory panel nominations in the Federal Register, and likely fill the positions prior to the June Council meeting. All the other panels can be filled after the June Council meeting. He urged the Council to recognize the timing of this and to consider providing input on the advisory panel's membership. Later, Ms. Cooney read in the treaty the listing of what sectors should be represented on the advisory panel. Dr. McIsaac asked if the Council's nominations for the advisory panel could be discussed Friday under Agenda Item C.4 (Council Appointments), so that there would be time for the Council and its advisory bodies to consider the issue.

The third item Mr. Lockhart brought to the Council's attention is that some fishermen may be contemplating participation in the shoreside whiting fishery without being part of the EFP. They would instead sort at-sea. Mr. Lockhart explained that these vessels would not carry cameras, and so NMFS' concern is that there could be a significant portion of the fishery that will be unmonitored (though within the West Coast Groundfish Observer Program pool). Given that this fishery has been primarily managed through bycatch limits, this decrease in monitoring is of concern. NMFS is exploring options and may have to act before the June 15th shoreside fishery opening date. Mr. Moore asked how NMFS could take action to address this issue, given that it has not already been analyzed through NEPA. Mr. Lockhart said they could take action through an emergency rule, if the problem is serious enough that it threatens NMFS' ability to manage the fishery. Ms. Vojkovich asked how NMFS would determine that shoreside whiting vessels are sorting at-sea and that the issue justifies an emergency rule. Mr. Lockhart responded that there is no formal mechanism and that it would ultimately be a judgment call; a first indication would be if significantly fewer vessels signed up for the EFP, after which he might direct his staff to make inquiries to industry members.

E.1.b Science Center Activities, Including 2006 Workshop Reports

Drs. Elizabeth Clarke and Jim Hastie provided a brief report on science center activities. Dr. Clarke said that they are moving ahead with the survey, though the budget is not yet set. Off-year workshop reports were provided in the briefing book as informational materials. These workshops were organized to provide guidance to stock assessment authors on issues of data modeling; the bottom trawl survey data; and the pre-recruit survey data. Dr. Clarke said that NWFSC and other agencies are continuing with pre-assessment workshops, which give constituents a more formal process through which to have discussions with the stock assessment authors. She provided information from the SWFSC that catch series data found in a vault at CDFG has now been coded and is available as an electronic data source from Dr. Alec McCall.

Lastly, Dr. Clarke explained that at the last Council meeting there was a suggestion to reconsider the timing of the WCGOP reports. She stated that the NWFSC had a proposed new schedule for the Council's consideration. More discussion on the issue should continue at the June meeting. Dr. Clarke then provided a PowerPoint presentation (Agenda Item E.1.b, Supplemental NWFSC PowerPoint) that outlined the current schedule and the proposed new schedule. Dr. Hastie explained that the proposed schedule would divide the reporting periods into six month halves, which would allow the WCGOP to develop data reports and update the bycatch model prior to the June meeting. This would allow information from the prior summer to be available in June for consideration in inseason adjustments. However, this report would not be a full mortality report; the total mortality report is proposed to be available November 1. Dr. Hastie continued that the Council should seriously consider how this would affect the biennial specifications process. The new bycatch information would come into the process in

June, at the same time that the Council is to take final decision on the specifications (for which there was already analysis that did not use that new data). Dr. Clarke also explained that with the current data system (fish tickets, logbooks, etc.), this proposed timeline assumes analysts working at full speed and that there would be a small reduction in the amount of data in the report.

Dr. McIsaac asked if the NWFSC could provide an item for the June briefing book that outlines the proposed schedule and includes an analysis of the tradeoffs between the two schedules. Dr. Clarke said yes. Dr. Hastie said that this could be considered in June and September, given that implementation would not need to occur until the end of the year. The Council confirmed that this issue should be on the agenda for the next meetings.

E.1.c Reports and Comments of Advisory Bodies

Dr. Steve Ralston provided Agenda Item E.1.c, Supplemental SSC Report.

Mr. Moore asked about what kind of changes could be expected in the widow rockfish stock assessment, given that it is an update. Dr. Ralston responded that new age composition and catch data will be incorporated, but that trend indices will not be new. Dr. McIsaac asked further questions about the widow rockfish and English sole update assessments. Dr. Ralson explained that the pre-recruit survey data would also be updated in the widow rockfish assessment. The plan for that data source, given the conclusions from the pre-recruit survey workshop, is to update the full time series for the core area but also to do a sensitivity analysis that uses the restricted time period. Also, two more years of data may better confirm the strength of the 1999 year class. He concluded that there are reasons to think that one's view of widow rockfish rebuilding could be influenced by the update.

E.1.d Public Comment

None.

E.1.e Council Discussion

With Council concurrence, Dr. McIsaac asked Ms. Laura Bozzi to coordinate distribution of the workshop reports to STAR Panel participants and stock assessment authors, as recommended in the SSC Report.

The Council briefly returned to discussion on recommendations for the whiting advisory panel recommendations. Dr. McIsaac suggested that Council staff provide a document for the Council and advisory bodies to consider under Agenda Item C.4 (Appointments). Mr. Moore cautioned that much of the constituency interested in the whiting treaty implementation is not present because they were not aware that the Council would consider making these recommendations. He continued that he was unsure if it would be appropriate for the Council to make recommendations on a non-Council committee without prior notification to the public. Responding to Dr. McIsaac, Mr. Lockhart confirmed that the Council would not have an opportunity to provide recommendations if they did not do so during this Council week. Chairman Hansen concluded the discussion by stating that the Council would revisit the issue under Agenda Item C.4.

E.2 Consideration of Inseason Adjustments (04/04/07; 1:40 pm)

E.2.a Agenda Item Overview

Mr. John DeVore provided the agenda item overview.

E.2.b. Report of the Groundfish Management Team (GMT)

Ms. Kelly Ames and Mr. Merrick Burden provided Agenda Item E.2.b, Supplemental GMT Report 2.

Mr. Moore referred to the trawl chilipepper issue and asked why there is a concern with trawlers targeting chilipepper rockfish. He asked, isn't the concern associated bycatch? Mr. Burden said Mr. Moore's characterization is correct and the concern is the bocaccio bycatch. Mr. Moore asked if the West Coast Groundfish Observer Program (WCGOP) data indicated there was not a significant bycatch of bocaccio in trawl efforts targeting chilipepper, then it would not be a concern and Mr. Burden said yes.

Mr. Anderson said he appreciated the analysis of the trawl RCA boundary in the area between the Columbia River and Leadbetter Pt. He asked if the point of the analysis was that most of the recent year effort in that area occurred shoreward of 60 fm anyway and Mr. Burden said that was correct. He asked if there was crab bycatch noted in the WCGOP data and Mr. Burden said that data was available, but would have to be analyzed and reported.

E.2.c Agency and Tribal Comments

None.

E.2.d Reports and Comments of Advisory Bodies

Mr. Tom Ghio provided Agenda Item E.2.d, Supplemental GAP Report.

E.2.e Public Comment

Mr. Tom Ghio, Ghio Fish Company, Santa Cruz, CA

E.2.f Council Action: Adopt Preliminary or Final Recommendations for Adjustments to 2007 Groundfish Fisheries

Mr. Moore asked Mr. Anderson if he was planning to write a request to the NWFSC for WCGOP data on trawl-caught crab in the Columbia River to Leadbetter Pt. area. Would there be consideration to add the lingcod and chilipepper data request as well? Mr. Anderson said he was not sure how this would occur. Mr. Lockhart volunteered to request these analyses. Mr. Moore asked if the request would be extended to lingcod and chilipepper as well and Mr. Lockhart said yes.

Chairman Hansen asked Mr. DeVore if Agenda Item E.4 would be needed on Thursday given that there were no inseason adjustments recommended and Mr. DeVore said no, Agenda Item E.4 could be cancelled.

E.3 Amendment 15: American Fisheries Act

E.3.a Agenda Item Overview (04/05/07; 8:17 am)

Mr. Mike Burner provided the agenda item overview.

E.3.b ODFW Report

Mr. Curt Melcher provided Agenda Item E.3.b, Supplemental ODFW Report.

E.3.c Reports and Comments of Advisory Bodies

Mr. Anderson provided Agenda Item E.3.c, Supplemental WDFW Report. He noted that he agreed with Mr. Melcher's comments under the ODFW report. Washington wanted to make sure they had an understanding about the timeline as it relates to 2008 and 2009 and had some questions regarding the ability to extend an emergency rule past 2008. Mr. Anderson said Washington feels that moving forward with the amendment is an interim step and would recommend keeping the action as simple as possible given the short time available to complete the action. Regarding the alternatives, Washington recommends that at a minimum, an alternative that replicates the Council's emergency rule recommendation be added.

Mr. Lockhart commented that under this action and amendment, NMFS would be interested in a clear understanding of how those proposals would address the provisions of the AFA to do no harm and to protect West Coast fisheries.

Ms. Heather Munro provided Agenda Item E.3.c, Supplemental GAP Report. Mr. Moore asked Ms. Munro about the GAP recommendation of the starting date of 1994 for the qualifying years in the alternatives. She said the GAP was concerned that Option 2 in the ODFW report is open-ended in terms of the beginning of the qualifying period and recommends 1994 as that date is consistent with the start of limited entry. Mr. Moore said it was presumed then that there were AFA qualified vessels that made landings prior to 1994.

Mr. Melcher asked Ms. Munro if the GAP had a chance to review the additional option recommended by WDFW. She said they did not receive a copy of the WDFW Report.

Dr. McIsaac asked if the GAP discussed the issue of the intent of the AFA.

Ms. Munro said due to the way the pollock fishery in Alaska was rationalized, the fishery schedule now provides more flexibility easily accommodating their new participation in the Pacific whiting fishery. However, as a group, they did not discuss this issue in detail at this meeting as that was the subject of discussions in September 2006 and March 2007.

E.3.d Public Comment

Mr. Mike Okoniewski, Pacific Seafoods, Woodland, WA
Mr. Joe Bersch, Supreme Alaska Seafoods, Seattle, WA
Mr. Craig Cochran, F/V Bay Islander, Newport, OR
Mr. Steve Bodnar, Coos Bay Trawlers Association, Coos Bay, OR
Mr. Chris Garbrick, F/V Mark I, Seattle, WA
Mr. David Jincks, Midwater Trawlers Cooperative, Newport, OR
Mr. Richard Caroll, Ocean Gold Seafoods, Westport, WA
Mr. Steve Hughes, F/V Pacific Challenger, Seattle, WA
Mr. Bert Parker, F/V Pacific Challenger, Seattle, WA
Mr. Brent Paine, United Catcher Boats, Seattle, WA
Mr. Gary Wintersteen, commercial fisherman, Warrenton, OR
Mr. Brent Healand, trawler, Newport, OR
Ms. Donna Parker, Arctic Storm Management Group, Seattle, WA

E.3.e Council Action: Consider Preliminary Alternatives for Analysis

Mr. Moore moved and Mr. Melcher seconded a motion (Motion 10) to adopt a preliminary range of alternatives for Amendment 15 to the Pacific Groundfish FMP as follows:

Alternative 1: Status quo.

Alternative 2: Prohibit participation in the shoreside, catcher/processor, and mothership sectors of the Pacific whiting fishery by AFA-qualified vessels that do not have a significant historic participation record in those sectors between January 1, 1994 and January 1, 2006.

Alternative 3: Prohibit participation in the shoreside, catcher/processor, and mothership sectors of the Pacific whiting fishery by AFA-qualified vessels that do not have a significant historic participation record in those sectors between January 1, 1994 and January 1, 2007.

For both Alternative 2 and Alternative 3, "significant historic participation" is defined in two alternative ways for analysis.

For catcher/processors, significant historic participation is defined as:

a. having caught and processed at least 1,000 metric tons (mt) of whiting in any one qualifying year; or
b. having caught and processed at least 1,000 mt of whiting in any one qualifying year subsequent to December 31, 1996 (the addition of the "b" alternative in this part of the motion was added by voice vote, see below).

For motherships, significant historic participation is defined as:

a. having received at least 1,000 mt of whiting in any one qualifying year; or
b. having received at least 1,000 mt of whiting in any one qualifying year subsequent to December 31, 1996 (the addition of the "b" alternative in this part of the motion was added by voice vote, see below).

For catcher vessels in the shore-based or mothership fishery, significant historic participation is defined as:

a. having landed at least 500 mt of whiting in any one qualifying year; or
b. having landed at least 1,000 mt of whiting in any one qualifying year.

Mr. Lockhart asked for clarification on the proposed qualifying years in the alternatives. Mr. Melcher said the qualifying years are based on concepts developed during the original Council deliberations on this matter in 2001 and that these would capture the historic sector-specific participants in the fishery over the years.

Mr. Myer asked Mr. Melcher, for clarification, if the motion includes any provisions for a vessel to qualify for one sector and then cross over into another in a future season. Mr. Melcher said a CV could qualify for more than on sector depending on its historic participation, but this motion does not allow for cross-over.

Mr. Anderson stated the Pacific whiting fishery can be difficult to parse into specific sectors as participation varies and as the fishery evolved into the sectors we have today. He is supportive of the qualifying years as portrayed in the motion, but wants to ensure the preliminary analyses have the flexibility of considering different qualifying periods for the catcher/processor (CP) and mothership (MS) sectors versus the catcher vessels (CVs). He feels the range of alternatives on the table will allow the Council to fully understand the implications of each qualifying period and should provide an adequate

measure of protection to the Pacific whiting fishery. He would not want our ability to rule out to use the qualifying period in alternatives 2 and 3 until he has an understanding of the effects of the differences. He understands people want to make this simple but moved to add an additional qualifying period for the CP and MS sectors under alternatives 2 and 3 for the purpose of the analysis that would look at qualifying landings prior to 1997. Mr. Cedergreen seconded the amendment to the motion.

Mr. Melcher stated he is not opposed to the motion, but asked Mr. Anderson and NMFS for assistance in collecting and analyzing data for the at-sea sectors as Oregon staff primarily has access to the shoreside whiting data. Mr. Lockhart and Mr. Anderson stated that although specific assignments have not been made regarding the workload associated with the motion. WDFW and NWR staff would be available to help.

The amendment to Motion 10 passed.

Mr. Myer stated that the amendment to the motion should shed light on the issue of CP vessels participation in limited MS type activities in the mid-1990's as the Pacific whiting fishery was developing its current sector structure.

Mr. Moore noted the analysis should consider the length of the whiting season in relation to participation by numbers of vessels and consider the latent effect of AFA vessels that have not yet participated in the West Coast fisheries. He stated there are a number of AFA vessels that could participate in the whiting fishery; some with large capacity. If you look at the latent capacity you will get some idea of what the potential harm could be.

Mr. Anderson said there are 112 AFA qualified vessels, some would qualify under the alternatives set in the motion. It will be important to the seasonal structure of the Alaskan pollock fishery and the Pacific whiting fishery to assess the potential of new AFA entrants.

Motion 10 passed.

E.4 Final Consideration of Inseason Adjustments (if Needed)

This Agenda Item was cancelled since there were no inseason adjustments recommended under Agenda Item E.2.

F. Habitat

F.1 Current Habitat Issues (04/03/07; 9:13 am)

F.1.a Report of the Habitat Committee

Ms. Jennifer Gilden provided the agenda item overview.

Mr. Stuart Ellis provided Agenda Item F.1.a, Supplemental Habitat Report. Mr. Ellis talked about educating the recreational community about aquatic invasive species (AIS), and work being done to stop the spread of AIS.

Mr. Sones asked if there are national and international organizations dealing with invasive species. Mr. Ellis said international efforts are limited, but there are efforts to avoid transmission of marine species in the ballast water of ships. He referred the Council to the 100th Meridian Initiative website (100thmeridian.org).

Chairman Hansen said PSMFC has been working on this for a long time. Mr. Ellis agreed they have done an effective job of coordinating a multi-agency group to work on this issue.

Mr. Helvey said he was pleased the HC is looking at invasive species. He asked whether there were other invasive species the Council should be aware of. Mr. Ellis said there are problems with invasive plants and other species, like green crabs, that damage estuary areas; this is especially a problem in areas where managed fish stocks live and reproduce. He noted that it is hard to tell how best the Council can focus on this.

Mr. Roth, in response to Mr. Sones' question about national efforts, said that USFWS is addressing this problem on national and regional levels. USFWS takes this very seriously; it is often listed as a threat to endangered species. He discussed the importance of promoting public awareness of AIS, and said the Council can play a role in that effort. He suggested having a presentation on this issue before the Council.

Mr. Corrigan said that USCG does have a ballast water program at the international and national levels. Chairman Hansen asked how long these organisms could live, in terms of changing ballast water at sea. Mr. Corrigan could not answer without more information. Mr. Ellis said that measures like having commercial ships change ballast water at sea, and having boaters wash off their boats, are designed to be easy steps that address most of the problem. However, these measures do not completely solve the problem.

Mr. Sones asked about scientific research done on this topic. Mr. Ellis said there had been some research, but it was limited by resources and by the severity of the measures needed to kill these animals. For example, zebra mussels can be killed with hot water, but with other measures there is a risk of killing other animals and plants as well.

Dr. McIsaac asked about how the eleven wave energy proposals discussed in the HC report would affect fish habitat. Mr. Ellis said that most of the proposals involve anchoring some sort of floating platform to the sea floor. The anchoring would cause some disturbance, and the necessary underwater electrical cables would also disturb habitat. There is also speculation that the electromagnetic field from the generator itself might have effects on fish behavior. However, the HC is not aware of specific data or studies showing specific negative effects. The HC is primarily concerned about who regulates these efforts, where and how they will be sited, and to whom the Council would need to communicate regarding EFH concerns.

Mr. Warrens said he had a conversation with NMFS office in Portland regarding the anchor sites, which are roughly three to six square miles. There may be unforeseen consequences. The marine entanglement issue is one the HC might want to look into. Mr. Ellis said most of the proposals appear to be less than three miles offshore.

Mr. Sones said each of these proposals will go through an EIS, which would allow the Council to comment on them at that time.

F.1.b Reports and Comments of Advisory Bodies

None.

F.1.c Public Comment

None.

F.1.d. Council Action: Consider Habitat Committee Recommendations

Council discussion – see above during HC Report. Ms. Fosmark said there was concern about the effects of a wave energy project on crabbing grounds in the Trinidad area.

G. Salmon Management

Mr. Dave Ortmann chaired the salmon agenda items.

G.1 NMFS Klamath River Coho Recovery Plan (04/03/07; 9:41 am)

G.1.a Agenda Item Overview

Mr. Chuck Tracy presented the agenda item overview.

G.1.b NMFS Report

Mr. Mark Helvey presented Agenda Items G.1.b, NMFS Report and Supplemental NMFS Report.

G.1.c Agency and Tribal Comments

Mr. Mike Orcutt, Hoopa Valley Tribe, presented Agenda item G.1.c, Supplemental Comments of Hoopa Valley Tribe.

G.1.d Reports and Comments of Advisory Bodies

Mr. Dave Hillemeier presented Agenda Item G.1.d, Supplemental SAS Report.

Mr. Melcher asked it the reference to single species management referred to harvest management. Mr. Hillemeier replied no, but to single species recovery plans such as suckers and coho in the Klamath Basin.

G.1.e Public Comment

None.

G.1.f Council Discussion

Ms. Michele Culver asked if there would be an update on the Klamath coho recovery plan at the June Council meeting. Mr. Helvey replied there were no plans to allow for public comment before the July 7 deadline.

Mr. Melcher requested the Klamath coho recovery plan be coordinated with the ESA recovery plan for southern Oregon/northern California coastal coho to ensure the two plans were compatible.

Ms. Culver requested the Klamath coho recovery plan be made available in early July for review by the SAS and HC.

G.2 Tentative Adoption of 2007 Ocean Salmon Management Measures for Analysis

G.2.a Agenda Item Overview (04/03/07; 9:59 am)

Mr. Tracy presented the agenda item overview.

G.2.b Update on Estimated Impacts of March 2007 Options

Mr. Dell Simmons summarized Preseason Report II, Analysis of Proposed Regulatory Options for 2007 Ocean Salmon Fisheries. He noted catch projection updates for 2007, with Northern British Columbia fishery limits down 20%, West Coast Vancouver Island catch limits down 11%, and Alaskan catch limits down 5%. The changes resulted in a reduction of 0.2% to the lower Columbia River natural (Coweeman) tule Chinook exploitation rate estimates; Interior Fraser coho impacts below the 10.0% limit, Stillaguamish coho impacts below the 40% limit, and; Puyallup and Stillaguamish Chinook impacts still over the ESA limits.

Mr. Melcher asked if the PSC Chinook model was being used to evaluate the Coweeman tule exploitation rate. Mr. Simmons replied no, only the Chinook FRAM was used, although the Snake River fall index used both models because of the more northerly distribution of Snake River fall Chinook.

G.2.c Summary of Public Hearings

Mr. Mark Cedergreen summarized Agenda Item G.2.c, Supplemental Public Hearing Report 1.
Mr. Moore summarized Agenda Item G.2.c, Supplemental Public Hearing Report 2.
Mr. Roger Thomas summarized Agenda Item G.2.c, Supplemental Public Hearing Report 3.

G.2.d U.S. Section of the Pacific Salmon Commission Recommendations

Mr. Melcher reported the PSC held a manager to manager meeting on March 16.

G.2.e North of Cape Falcon Forum Recommendations

Mr. Melcher reported that discussions were ongoing.

G.2.f NMFS Recommendations

None.

G.2.g Tribal Recommendations

Mr. Hillemeier, Yurok Tribe recommended full utilization of Klamath fall Chinook, including allocation of uncaught ocean fish to the inriver fisheries. The options that did not allocate all harvestable fish to the inriver fisheries and resulted in projected escapements greater than 35,000 naturally spawning adults directly affected the tribal allocation. He requested the tentative management measures include allocation to inriver fisheries that brings the spawning escapement down to 35,000 naturally spawning adults.

Mr. Herb Jackson presented Agenda Item G.2.g, Supplemental CRITFC Comments.

Mr. Orcutt presented Agenda Item G.2.g, Supplemental Comments of Hoopa Valley Tribe.

Mr. Melcher asked if the Hoopa Valley Tribe was concerned with the 50% likelihood of escapement under 35,000 if the Council targeted the floor. Mr. Orcutt replied the Hoopa Valley Tribe's primary concern was conservation.

Mr. Lockhart asked if the Hoopa Valley Tribe was requesting the qualifying factors in Amendment 15 be in the regulations, not just the FMP. Mr. Orcutt replied yes

Mr. Sones presented Agenda Item G.2.g, Supplemental Tentative Adoption of Treaty Troll Quotas.

G.2.h State Recommendations

None.

G.2.i Reports and Comments of Advisory Bodies (04/03/07; 1:12 pm)

The SAS presented Agenda Item G.2.i, Supplemental SAS Report.

Mr. Olson noted there was agreement that if the Chinook quota in the non-Indian commercial fishery north of Cape Falcon was taken, a coho only fishery would be allowed in the Columbia River subarea if sufficient impacts for Chinook release mortality were available.

Mr. Lockhart asked what the intent was of having different landing and possession limits north and south of Leadbetter Point. Mr. Olson replied to slow effort transfer from south of Cape Falcon because of the very low Chinook quota north of Cape Falcon, with the possibility of exceeding the commercial quota and impacting the recreational quota.

Mr. Anderson asked if the proposed landing limits would allow access to the coho available in the Columbia River subarea. Mr. Olson replied they would since Chinook abundance in that subarea was typically low compared to coho abundance.

Mr. Melcher noted that historically a 75 Chinook landing limit was considered minimal for economic viability and asked how the SAS arrived at the 30 Chinook per open period landing limit. Mr. Olson replied they looked at the recent value of the fish, which is considerably higher than historical values, and an previous season with a 35 Chinook landing limit that attracted interest form south of Cape Falcon, then reduced the limit to 30 Chinook as a starting point.

Mr. Melcher asked if the 30 Chinook landing limit was adequate for the Columbia River subarea, and if there was concern over the small overall quota why was a 75 Chinook landing limit recommended for the northern subareas? Mr. Olson replied the run to the fishing grounds was longer up north and required greater landings to make the effort worthwhile.

Mr. Heikkila noted the following corrections:

- Page 2, Cape Falcon to Humbug Mt. commercial non-selective coho fishery: Change the Chinook landing and possession limit from 50 per vessel per calendar week to 75 per vessel per calendar week.

Mr. Melcher requested more specificity in the area closure between the Bandon south jetty and Humbug Mt. (Bandon High Spot) in the Florence south jetty to Humbug Mt. commercial fishery. Mr. Heikkila replied the Enforcement Consultants had been provide the coordinates.

Mr. Hillemeier recommended the tentatively adopted management measures include an allocation to Klamath inriver fisheries resulting in an escapement of 35,000 naturally spawning adult Klamath River fall Chinook.

Mr. MacLean noted the following corrections:

- Page 3, Pt. Arena to Pigeon Pt. commercial fishery: strike "and September 30" from the next to last sentence.
- Page 4, Minimum Size table, Pt. Arena to U.S./Mexico border October 3-14 and 26.0 Chinook total length: Change to October 1-12 and 27.0 Chinook total length.

G.2.j Summary of Written Public Comments

Mr. Tracy presented Agenda Item G.2.j, Summary of Public Comment.

G.2.k Public Comment (04/03/07; 1:45 pm)

Mr. Dave Bitts, PCFFA, Eureka, CA
Mr. Ben Platt, Salmon Trollers Marketing Association, Fort Bragg, CA
Mr. Doug Fricke, Washington Trollers Association, Hoquiam, WA
Mr. Ben Doane, KMZ Fisheries Coalition, Willow Creek, CA
Mr. Jim Welter, KMZ Fisheries Coalition, Brookings, OR
Mr. Steve Wilson, Washington Trollers Association, Federal Way, WA
Mr. Duncan MacLean, Half Moon Bay Fishermen's Marketing Association, El Granada, CA

Ms. Vojkovich asked if Mr. MacLean proposed to exchange time in July for time in June in the San Francisco and Monterey areas. Mr. MacLean replied he was requesting an analysis of the cost rather than proposing the change at this time.

Mr. Scott Boley, Oregon Salmon Commission, Gold Beach, OR

Mr. Lockhart asked Mr. Boley when the Bandon High Spot closure proposal was first made public. Mr. Boley replied the area was described at the March 2007 Council Meeting and in Preseason Report II, and the trigger in August was first proposed at the March 26, 2007 public hearing in Coos Bay, Oregon.

Mr. Joel Kawahara, Salmon Trollers Marketing Association, Seattle, WA

G.2.l Council Action: Tentatively Adopt Management Measures for 2007 Ocean Salmon Fisheries

The following recommendations were made utilizing, Agenda Item G.2.i, Supplemental SAS Report:

Ms. Vojkovich directed the STT to analyze the SAS proposals in Agenda Item G.2.i, Supplemental SAS Report, as corrected, with additional guidance that the KMZ recreational ocean fishery achieve a 17% allocation and the STT was to report on the relative KRFC impacts of June fishing time in terms of July opportunity for the San Francisco and Monterey commercial fishery.

Mr. Melcher requested a better definition of the Bandon High Spot.

Dr. McIsaac asked if the Bandon High Spot trigger should be included. Mr. Melcher replied yes.

Mr. Anderson concurred with the Council direction, and urged the SAS to continue discussion of the commercial landing limit differences north and south of Leadbetter Point to achieve consensus.

Mr. Sones recommend for tentative adoption and analysis by the STT treaty Indian quotas of: 35,000 Chinook and 38,000 coho with the Chinook quota split 50/50 between the May/June and July-September fishery periods.

G.3 Methodology Review Process and Preliminary Topic Selection for 2007 (04/04/07; 11:18 am)

Mr. Gordy Williams presented Supplemental Informational Report 2.

Mr. Lockhart reported NMFS was waiting on budget clarification before moving forward on the GSI sampling plan for 2007 Oregon and California fisheries, but was planning on providing a study design in the near future.

G.3.a Agenda Item Overview (04/04/07; 11:08 am)

Mr. Tracy presented the agenda item overview.

G.3.b Scientific and Statistical Committee Report

Dr. Pete Lawson presented Agenda Item G.3.b, Supplemental SSC Report.

Mr. Melcher asked if the SSC discussed reviewing recovery exploitation rates for Coweeman tule Chinook. Dr. Lawson replied no.

G.3.c State, Tribal, and Federal Agency Recommendations

None.

G.3.d Reports and Comments of Advisory Bodies

Mr. Andy Rankis presented Agenda Item G.3.d, Supplemental MEW Report.

Mr. Melcher asked for clarification on the statement that Central Valley Chinook CWT data would not be available for 8-10 years. Mr. Grover replied the constant fractional marking program would not have three full broods available until that time, which would provide production group CWT data and full run reconstruction data.

Mr. Melcher observed that including Central Valley stocks in the FRAM would improve model accuracy north of Cape Falcon as well as south, as would additional tag groups representing lower Columbia River natural tule Chinook.

Mr. Roth asked what the workload and time frame would be to incorporate California stocks into Chinook FRAM. Mr. Rankis replied it would require several people from various agencies at least two years if current CWT groups were representative.

Mr. Grover presented Agenda Item G.3.d, Supplemental STT Report.

Dr. McIsaac asked if the report on recovery exploitation rates for lower Columbia River natural tule Chinook would include genetic information. Mr. Lockhart replied no.

Dr. McIsaac asked if the Klamath River fall Chinook birth date analysis would be ready for review this year. Mr. Grover replied no because the CWT data for years prior to about 2002 are still unavailable.

Messrs. Butch Smith, Kent Martin, and Dan Wolford presented Agenda Item G.3.d, Supplemental SAS Report.

Chairman Hansen asked how fall credit card debt could be forecast. Mr. Wolford replied historical catch rates were one possibility.

G.3.e Public Comment

None.

G.3.f Council Guidance on Potential Methodologies to Review in 2007 (04/04/07; 1:10 pm)

Mr. Melcher recommended potential methodology review topics include the four items identified in Agenda Item G.3.b, Supplemental SSC Report, with the top priorities being the CWT representations for lower Columbia River natural coho and tule Chinook. Other topics to add to the list are the review of the recovery exploitation rate (RER) report identified in Agenda Item G.3.c, Supplemental STT Report, and an analysis of the Klamath River fall Chinook birth date identified in Agenda Item G,3,c, Supplemental SAS Report. The incorporation of California stocks into Chinook FRAM would be a low priority.

Dr. McIsaac asked who would be preparing the report on the Klamath River fall Chinook birth date issue if the CWT data were available. Mr. Melcher replied it should be an STT responsibility.

Mr. Anderson requested the development of the RER for lower Columbia River natural coho be included on the list of topics. Mr. Melcher concurred.

Mr. Roth asked if other stocks south of Cape Falcon could be incorporated into Chinook FRAM ahead of the Central Valley stocks. Mr. Melcher replied that other stocks like KRFC and Rogue River stocks would have relatively minor effects on model performance in comparison to Central Valley stock.

Dr. McIsaac asked if there would be an experimental design for a GSI sampling program available for review this fall. Mr. Lockhart replied NOAA Fisheries would take the lead on that report and make it available in time for review.

G.4 Clarify Council Direction on 2007 Management Measures (if Needed) (04/04/07; 2:34 pm)

G.4.a Agenda Item Overview

Mr. Tracy presented the agenda item overview.

G.4.b Report of the Salmon Technical Team (STT)

Mr. Simmons presented Agenda Item G.4.b, Supplemental STT Report. He noted the Snake River fall Chinook index was misreported at 70.7% and should be 69.4%, and the Skagit coho criteria should be no more than 35% rather than no more than 30%, so the projected exploitation rate of 33% is in compliance; the lower Columbia River natural tule Chinook and Klamath River fall Chinook exploitation rates

exceeded their respective standards and would require additional shaping of fisheries. He reported that KRFC impacts in July were 2/3 the rate of impacts in June for the San Francisco and Monterey troll cells.

Dr. McIsaac asked if the Klamath River recreational fishery was capable of harvesting 9,900 adult Chinook as assumed in the STT analysis. Mr. Grover replied yes.

G.4.c Reports and Comments of Advisory Bodies

None.

G.4.d Public Comment

Mr. Joel Kawahara, Washington Trollers Association, Seattle, WA

G.4.e Council Guidance and Direction

Mr. Melcher recommended changing the Cape Falcon to Florence south Jetty commercial fishery season dates in July, August and September to July 11-30, August 4-28 and September 6-10 and 20-24. Those changes should fully address the KRFC age-4 ocean harvest rate issue, but not quite fully address the Coweeman tule RER issue.

Mr. Sones recommended changing the allocation of the Chinook quota in the treaty Indian fisheries to 21,500 in the May-June fishery and 13,500 in the July-September fishery to help address the Coweeman tule issue.

Mr. Melcher requested the agreement reached in the SAS regarding landing and possession limits in the north of Cape Falcon non-Indian commercial fisheries be included in the package. Mr. Heikkila replied the proposal was impact neutral, and included a landing and possession limits for the May 1-2 and 5-8 open periods of 60 Chinook north of Leadbetter Point and 40 Chinook south of Leadbetter Point, then 60 Chinook north of Leadbetter Point and 30 Chinook south of Leadbetter point thereafter for the remainder of the May-June season; for the June-September fishery the landing limits would be as proposed.

The Council reconvened on Thursday morning at 8:10 am to provide additional guidance.

Messrs. Simmons and Grover reported that the guidance received Wednesday evening resulted in an age-4 ocean harvest rate on KRFC of 16.1% and additional guidance was necessary to bring the regulation package into compliance with the ESA consultation standard for California Coastal Chinook of no more than a 16.0% ocean harvest rate on KRFC.

Mr. Melcher asked if KRFC were the only stock not in compliance. Mr. Simmons replied Coweeman tules were also close to the ESA limit.

Mr. Melcher directed the STT and SAS to work together on Oregon fisheries by reducing quotas in the June, July and/or August KMZ commercial fisheries to meet the KRFC standard; to change the KMZ recreational season dates to help achieve a 17% share of KRFC impacts for that fishery, and; to modify California commercial and recreational fisheries if additional shaping is needed. Ms. Vojkovich concurred.

The Council reconvened on Thursday afternoon at 3:45 pm to provide additional guidance.

Mr. Simmons presented Agenda Item G.5.b, Supplemental STT Report, and noted a modeling error was discovered raising the Coweeman index to 42.3%.

Mr. Melcher observed the modeling error appeared to affect south of Cape Falcon Commercial fisheries and asked for elaboration. Mr. Simmons replied the error occurred in the March Options presented in Preseason Report II. There was also a rounding issue discovered earlier in the day that had some effect.

Dr. McIsaac asked if the change in Coweeman impacts in the north of Cape Falcon non-Indian commercial fishery was also the result of rounding protocol. Mr. Simmons replied no, those fisheries were not modeled with effort scalars like south of Cape Falcon fisheries, but as catch quotas.

Mr. Melcher directed the STT eliminate September 20-24 from the Cape Falcon to Humbug Mt. commercial fishery; change the October 4-10 an 18-24 to October 1-31 in the Cape Falcon to Florence south Jetty commercial fishery; and close the Bandon high spot area in September and October regardless of the 15,000 trigger in August.

Ms. Vojkovich asked if the STT had any flexibility to add or subtract days to achieve the objectives. Dr. Hanson recommended the Council give latitude for individual Council members to work with the STT and Council staff to bring the proposed management measures into compliance prior to initiating Agenda Item G.5. The Council concurred.

G.5 Final Action on 2007 Salmon Management Measures

G.5.a Agenda Item Overview (04/06/07; 8:04 am)

Mr. Tracy presented the agenda item overview

G.5.b STT Analysis of Impacts

Mr. Simmons presented Agenda Item G.5.b, Supplemental STT Report 2; he reported that conservation objectives for all stocks were being met, including the Coweeman tule exploitation rate, although the KMZ ocean recreational fishery share was at 16.2%. The Skagit coho spawning escapement was less than the FMP objective, but met the annual management agreement of a total exploitation rate of no more than 35%.

Mr. Melcher asked if the STT could elaborate on the increase in the non-Indian commercial Coweeman tule impacts from 4.8% to 4.9% with no change in overall quotas. Mr. Simmons replied the change in allocation between the May-June and July-September treaty Indian Chinook quota was the cause.

Mr. Sones asked if a proposed roll-over of up to 5,714 Chinook from the May-June quota to increase the July-September quota by up to 2,000 Chinook in the treaty Indian fishery was modeled. Mr. Simmons replied yes, and that the proposal was impact neutral with respect to Coweeman tules and Puget Sound Chinook.

G.5.c Agency and Tribal Comments

Messrs. Kirby Heath and Stuart Ellis presented Agenda Item G.5.c, Supplemental CRITFC Comments.

Mr. George Kautsky presented Agenda Item G.5.c, Supplemental Comments of Hoopa Valley Tribe.

Mr. Sones presented Agenda Item G.5.c, The 2007 Ocean Treaty Troll Fishery.

Mr. Melcher reported that subsequent to the Council direction on Thursday, April 5, the STT was given further direction to reduce September fishing days in the Oregon non-Indian troll fishery to four days in order to comply with the 42.0% Coweeman tule Chinook limit as opposed to the five days the Council initially recommended.

Mr. Anderson noted a proposal would be made to close the Grays Harbor Control Zone during August and September in the Queets River to Leadbetter Point recreational fishery to help achieve the spawning escapement goal for Grays Harbor fall Chinook.

G.5.d Reports and Comments of Advisory Bodies

None.

G.5.e Public Comment

None.

G.5.f Council Action: Adopt Final Measures

Mr. Melcher moved (Motion 13) to adopt for commercial and recreational fisheries for the area Cape Falcon to the Oregon/California border as described in Agenda Item G.5.b, Supplemental STT Report 2, with the following changes:

- Page 2, Cape Falcon to Humbug Mt. commercial fishery: Change "September 7-10" to "September 10-13".
- Change "landing and possession limit of 75 Chinook per vessel per calendar week in September and October (C.7)" to "landing and possession limit of 150 Chinook per vessel per calendar week in September and 75 per vessel per calendar week in October (C.7)".

Mr. Moore seconded the motion.

Mr. Melcher explained that the September 7-10 dates straddled two different calendar weeks so the open period was shifted to one week and the landing limit increased.

Motion 13 passed.

Ms. Vojkovich moved (Motion 14) to adopt the commercial and recreational salmon management measures described in Agenda Item G.5.b, Supplemental STT Report 2 for the areas from the Oregon/California border to the U.S./Mexico border. Mr. Thomas seconded the motion; Motion 14 passed.

Mr. Sones moved (Motion 15) to adopt Agenda Item G.5.f, Treaty Indian Ocean Troll; Mr. Warrens seconded the motion. Motion 15 passed.

Mr. Anderson requested Mr. Sones delay action on Motion 15 until the North of Falcon process was concluded.

Mr. Sones moved (Motion 16) to Table Motion 15 until the Washington/Tribal discussions were concluded. Mr. Warrens seconded the motion. Motion 16 passed.

Mr. Warrens moved (Motion 18) to untable Motion 15. Mr. Moore seconded the motion; Motion 18 passed.

Mr. Anderson moved (Motion 19) to amend Motion 15 to include the adoption of the final non-Indian commercial and recreational management measures for the area north of Cape Falcon, Oregon as described in Agenda Item G.5.b, Supplemental STT Report 2, with one addition:

- Page 7, Queets River to and Leadbetter Point recreational fishery: add the Grays Harbor Control Zone as an area that would be closed beginning August 1. Mr. Cedergreen seconded the motion.

Motion 19 passed.

Motion 15 passed as amended.

H. Pacific Halibut Management

H.1 Incidental Catch Regulations in the Salmon Troll and Fixed Gear Sablefish Fisheries

Vice Chairman Dave Ortmann chaired this agenda item.

H.1.a Agenda Item Overview (04/04/07; 10:43 am)

Mr. Tracy presented the agenda item overview.

H.1.b State, Tribal, and Federal Agency Recommendations

None.

H.1.c Reports and Comments of Advisory Bodies

Mr. Tom Ghio presented Agenda Item H.1.c, Supplemental GAP Report.
Messrs. Paul Heikkila and Jim Olson presented Agenda Item H.1.c, Supplemental SAS Report.

H.1.d Public Comment

Mr. Doug Fricke, salmon troller, Hoquiam, Washington

Mr. Sones asked which alternative Mr. Fricke was recommending. Mr. Fricke replied Alternative 2 from Agenda Item H.1, Situation Summary.

Mr. Melcher asked if Mr. Fricke expected salmon trollers to target halibut to take advantage of the opportunity afforded by Alternative 2. Mr. Fricke replied the incidence of targeting would not increase, but if conditions were similar to 2006, where halibut were encountered higher in the water column, trollers would be able to utilize a larger portion of the allocation in 2007 than they were able to do in 2006.

H.1.e Council Action: Adopt Final Annual Incidental Halibut Harvest Restrictions

Mr. Melcher moved (Motion 8) to adopt the status quo alternative for the salmon troll landing restrictions for Pacific halibut caught incidentally in the May/June fishery, including the "C-shaped" yelloweye rockfish conservation area as an area to be voluntarily avoided. Mr. Warrens seconded the motion.

Mr. Melcher felt mitigation for low salmon quotas in the north of Cape Falcon area should be dealt with in the salmon process rather than the halibut process.

Motion 8 passed; Ms. Vojkovich voted no and Mr. Sones abstained.

Ms. Culver moved (Motion 9) to adopt the status quo alternative for landing limits on incidental halibut harvest in the fixed gear primary sablefish fishery north of Point Chehalis. Mr. Cedergreen seconded the motion.

Ms. Culver observed the status quo restrictions have worked well in the last few years.

Motion 9 passed.

I. Marine Protected Areas

I.1 Review of Oregon Ocean Policy Advisory Council (OPAC) Report

I.1.a Agenda Item Overview (04/05/07; 11:15 am)

Mr. Burner provided the agenda item overview.

I.1.b Reports and Comments of Advisory Bodies

Mr. John Holloway provided Agenda Item I.1.b, Supplemental GAP Report. Mr. Stuart Ellis provided Agenda Item I.1.b, Supplemental HC Report. Mr. Rod Moore provided Agenda Item I.1.b, Supplemental LC Report.

I.1.c Public Comment

Mr. Jim Welter, Brookings, OR

I.1.d. Council Action: Approve Comments for Submission to OPAC

Mr. Warrens said this issue of a National Marine Sanctuary on the Oregon coast was first presented to OPAC in 2005. There have since been a number of meetings of the OPAC Marine Sanctuary Working Group. These meetings culminated in the December 15, 2006 status report which is in the briefing book under Agenda Item I.1.a. All OPAC meetings allowed ample opportunity for public input and the meetings were well attended. Mr. Warren's felt the overriding issue that concerns the Council regarding NMSs, is the issue of fisheries management authority. He added that the Council's experience with NMSs in California and to a lesser degree in Washington, has shed some doubt on Governor Kulongoski's stated intent for fishery management authority to remain solely under the juristdiction of the Council and the State. Mr. Warrens reminded the Council that the Channel Islands NMS has proposed changes to their Designation Document to provide for fishery management authority. In this regard, Mr. Warrens felt that in some degree Governor Kulongoski was ill-advised on the State or the Council's ability to maintain fishery management authority in fishery management.

Mr. Warrens moved (Motion 11) and Ms. Fosmark seconded a motion that the Council accept the GAP report and direct the Council staff to forward the GAP report to Mr. Mike Carrier of Governor Kulongoski's Natural Resources Office including any appropriate language changes that may be recommended in the course of Council discussion.

Mr. Moore said the LC recommended the Council take and action similar to the motion, but also recommended requesting the Council be a continuing part of State deliberations that affect the Council's jurisdiction. Mr. Warrens said the motion also includes the documents received during public testimony.

Ms. Culver said she is in regular communication with the Olympic Coast NMS staff and asked Mr. Helvey about the status of the "flow chart" that compares and contrasts management actions under the MSA and the NMSA and provides descriptions of authorities under the larger NOAA umbrella. Mr. Helvey responded he did not know the status of that report and stated the last time he saw the document it was still a draft. Ms. Cooney added that she did not think it was final yet.

Ms. Culver expressed concerns with forwarding advisory reports as written and would like to make it clear in any Council letter that the GAP statement does not necessarily represent the views of the entire Council. Her concerns were based on her discomfort with some of the wording in the statement and her opinion that some of the statements may not be accurate.

Mr. Warrens stated that his motion would include latitude for Council staff to correct or omit any glaring errors or inaccuracies stated. Mr. Warrens agreed the GAP report may need some edits and the motion would allow Council staff to make those corrections. However, he said that he finds each NMS process to be different form one another and the GAP report reflects that experience. He asked Ms. Culver to provide any specific comments or corrections to the Council staff, but he would still encourage the letter to be sent to the Governor's Natural Resources Office to reflect the intent of the report from the GAP.

Ms. Fosmark asked if the motion includes the supplemental public comments and if so, the accuracies for those comments made in those letters would be reviewed after this meeting. Ms. Fosmark pledged to send any necessary supporting documents.

Mr. Melcher said he is not comfortable with sending the letter without reviewing a draft. Additionally, he has concerns about submitting comments on the NMSP review of the OPAC report as he is reluctant to comment on other people's comments.

In response, Mr. Warrens asked Dr. McIsaac if the letter could be drafted and distributed so that all folks on the Council have an opportunity to make edits before it is finalized. Dr. McIsaac reviewed the Councils review process and felt it could be followed in this example.

Mr. Warrens said the intent of the letter should reflect the comments accurately and it is his desire to rely on Council staff to take the GAP report and make modifications so it is acceptable to all members of this Council.

Mr. Mallet noted the situation summary for the agenda item states Council action as considering a letter to OPAC, not to the Governor's Natural Resource Office. He felt the Council should first tell OPAC what the Council thinks of the proposal and secondly provide them with the public and advisory comments and provide them with a list of the advisors serving on the GAP.

Mr. Warrens said it would be more appropriate to draft the letter to Mr. Carrier of the Governor's Natural Resource Office with the copies going to OPAC members. Mr. Mallet reiterated the letter ought to be the Council's position on this proposal, and then in addition, include the statements from the public and GAP

so the Governor and OPAC understand all of the perspectives and positions accurately. Mr. Warrens agreed.

Ms. Vojkovich voiced her discomfort with how this is developing. She is not supportive of Council staff modifying the GAP statement and preferred their statement be forwarded as they adopted it. She felt the letter should be short and be limited to expressing the Council experience with fishery management in NMS and the Council's desire to stay informed of Oregon's activities and proposals.

Mr. Helvey agrees with Ms. Vojkovich. Based on his experience in California, the NMS approach the Council with goals and objectives already approved. He wondered about adding a third element to the letter requesting clarification on the goals and objectives of an Oregon NMS.

Mr. Sones also agreed with Ms. Vojkovich regarding the GAP statement. The problem of fishery jurisdiction exists in national legislation and the Council should continue to work at that level.

Ms. Fosmark recommended the Council's recent activity on incorporating ecosystem-principles into fishery management should be incorporated into the model.

Mr. Warrens asked to revise the motion to reflect the comments of Ms. Vojkovich, Mr. Helvey and others and that the Council include the GAP statement as written.

Ms. Cooney clarified that the motion includes Ms. Fosmark's recommendation to include language regarding the Council's proposed ecosystem FMP.

Dr. McIsaac reviewed Motion 11. Motion 11 passed.

J. Highly Migratory Species Management

J.1 NMFS Report (04/06/07; 8:56 am)

J.1.a Southwest Region Activity Report

Mr. Mark Helvey turned the Council's attention to Agenda Item J.1.a, NMFS Report. He also referenced the letter attached as Agenda Item J.1.c, Public Comment, and recommended the Council task the HMSMT to begin examining the regulations for the shallow-set swordfish fishery.

Mr. McIsaac recommended the Council authorize a letter to Mr. Bill Robinson (NMFS PIRO) with a request that he approach the Western and Central Pacific Fisheries Commission (WCPFC) to reschedule the Northern Committee meeting, which is scheduled during the same week as the Council's September meeting. Mr. Helvey concurred.

J.1.b Southwest Fishery Science Center Report

Mr. Gary Sakagawa provided an update on SWFSC activities. He overviewed upcoming workshops prior to the June Council meeting and potential outcomes.

He alerted the Council that the International Scientific Committee for Tuna and Tuna-like Species (ISC) held a workshop to update the north Pacific albacore stock assessment and that a report is in preparation and to be made public in May; it will be deliberated by the ISC in July. The results are expected to be about the same as reported in 2004.

A March 26 ISC workshop on striped marlin was held and the report is in preparation. Preliminary results indicate that catch and stock biomass are at low levels in comparison to previous years.

Mr. Moore asked for clarification on North Pacific albacore stock status. Dr. Sakagawa said we don't have a proxy for F_{MSY}, but fishing mortality exceeds those proxies that have been traditionally used.

Dr. McIsaac asked about peer review of the North Pacific albacore stock assessment and the timing of any such activities. Dr. Sakagawa said that U.S. scientists do have a sense that there is international peer review through the workshop process. He explained the ISC process for completing a stock assessment. Ms. Vojkovich asked if there is any industry involvement in the process. Dr. Sakagawa said it is just the scientists, but they may bring in anecdotal information from the fishermen. Dr. McIsaac asked if September would be the most appropriate time for Council review of these stock assessments. Dr. Sakagawa mentioned IATTC involvement, citing the May Stock Assessment Working Group meeting. He discussed the relation between the Inter-American Tropical Tuna Commission (IATTC) process and the WCPFC.

J.1.c Reports and Comments of Advisory Bodies

Mr. Craig Heberer provided Agenda Item J.1.c, Supplemental HMSMT Report.

J.1.d Public Comment

None

J.1.e Council Discussion

Mr. Moore asked Ms. Vojkovich about current California landing restrictions on longline-caught fish. Ms. Vojkovich said they allow landings as long as the fish have been taken outside of the EEZ.

Ms. Culver asked Mr. Helvey about the current restrictions on shallow-set longlining outside the EEZ. She was confused because the public comment indicated fishing would occur east of 150° W longitude to the EEZ boundary, an area where this fishing is prohibited under the ESA.

Dr. Dahl said his understanding is that the HMS FMP prohibited shallow-set longline west of 150° W longitude; as submitted it would have allowed it east of 150° W longitude. That provision was disapproved based on the ESA section 7 consultation. But Mr. Gibbs (public comment letter) possesses a Hawaii limited entry longline permit which allows him to fish in that area. Mr. Helvey said Mr. Gibbs could also land swordfish in West Coast ports.

Ms. Culver asked what has changed since 2004 that would have any bearing on this activity that the HMSMT could examine. Mr. Helvey said the FMP did not include sea turtle protections as required under the ESA.

Dr. McIsaac said tasking the HMSMT relates to balancing workload, and we will see that under Agenda Item C.7.

To clarify, Ms. Vojkovich said it sounds like there are provisions that could be developed that would meet the ESA requirements; it is not a data issue. It is something that the HMSMT could work on from that perspective.

Ms. Culver said she was not concerned about workload, but whether the HMSMT could do something with this. She recommended that the guidance should be for the HMSMT to look at management measures that could be put in place.

Dr. Dahl said the next agenda item will provide information on mitigation measures in the Hawaii shallow-set fishery, which will speak to the issue of the types of new information that are available relative to considering the shallow-set longline fishery.

Mr. Helvey said the HMSMT would be conferencing with the WPFMC's Pelagics Plan Team in a few weeks and this issue might be an agenda item.

Dr. McIsaac asked if there is any schedule in the FMP relative to amendments. Dr. Dahl said the only schedule he is aware of covers biennial management measures specifications; FMP amendments can come up at any time.

Mr. Ortmann said the Council could task the Executive Director to write a letter to Mr. Bill Robinson (NMFS PIRO) and request the WCPFC Northern Committee meeting be rescheduled for October this year and also in 2008 and beyond to avoid conflict with the September Council meeting. The Council concurred with this guidance. Ms. Vojkovich said we should provide Mr. Robinson with the Council schedule for the next several years.

Mr. Hansen asked if, after hearing Agenda Item J.2, the HMSMT will get better guidance on the issue discussed above in relation to Mr. Gibb's public comment. Dr. Dahl said he thought so and the issue of tasking the HMSMT can be revisited under Agenda Item C.7.

J.2 Exempted Fishing Permit (EFP) for Longline Fishing in the West Coast Exclusive Economic Zone

J.2.a Agenda Item Overview (04/06/07; 9:35 am)

Dr. Kit Dahl provided the agenda item overview.

J.2.b NMFS Report

Ms. Jana Swimmer provided a PowerPoint presentation, available on the Council's website at: http://www.pcouncil.org/bb/2007/0407/J2b_NMFS_sup.pdf

J.2.c Reports and Comments of Advisory Bodies

Dr. Bob Conrad provided Agenda Item J.2.c, Supplemental SSC Report. Mr. Wayne Heikkila provided Agenda Item J.2.c, Supplemental HMSAS Report. Mr. Heberer provided Agenda Item J.2.c, Supplemental HMSMT Report.

J.2.d Public Comment

Ms. Kate Wing, NRDC, San Francisco, CA
Ms. Karen Steele, Turtle Island Restoration Network, San Francisco, CA
Ms. Meghan Jeans, Ocean Conservancy, San Francisco, CA
Mr. Ben Enticknap, Oceana, Portland, OR
Mr. August Felando, commercial purse seiner, San Diego, CA
Mr. Pete Dupuy, Ocean Pacific Sea Food, Tarzana, CA

J.2.e Council Action: Adopt a Preferred Alternative for the Longline EFP

Mr. Moore moved and Mr. Warrens seconded a motion (Motion 17) to adopt as a preferred alternative, alternative 3 as shown in the draft EA (Agenda Item J.2.a, Attachment 1), with the caps as recommended by the HMSMT: 1 short-finned pilot whale, 1 sperm whale, 1 humpback whale, and 12 striped marlin. In addition, caps on leatherback and loggerhead takes will be based on the section 7 consultation incidental take statement (ITS) and caps on seabird takes, if necessary as a result of a section 7 consultation.

Mr. Moore reviewed the information the Council had received and said restrictions are required on the EFP and those restrictions should be based on the best scientific information available. Based on the information received, he thought the EFP should go forward in order to learn about the activity.

Ms. Fosmark said she supports the motion and offered a friendly amendment to let the caps be set based on the outcome of the section 7 consultation, as discussed in the Supplemental HMSMT Report.

Mr. Moore replied his motion is based on the HMSMT recommendations, setting caps for 3 marine mammal species and striped marlin and basing sea turtle and seabird caps on the section 7 consultation. He thought this was the same as what Ms. Fosmark is proposing. Ms. Fosmark said she is proposing to set all of the caps based on the section 7 consultation and that these caps would apply just to this EFP. Mr. Moore said the motion refers to this EFP and the caps, as he understands, are consistent with what Ms. Fosmark is asking for.

Ms. Petras explained that the section 7 consultation conducted by NMFS PRD will cover all ESA-listed marine mammals and sea turtles and the consultation conducted by the USFWS will cover ESA-listed seabirds. Some of the species, such as short finned pilot whales, are under the MMPA but are not ESA listed and striped marlin is ESA listed. Mr. Moore asked if sperm whales are ESA listed. Ms Petras said yes. Then Mr. Moore asked if the ESA section 7 consultation could come up with a number different than the caps proposed by the HMSMT. Ms. Petras said that the cap of 1 sperm whale related to the MMPA potential biological removal (PBR) value, which is a different standard than what is under the ESA. Sperm whales may not be part of the ESA consultation.

Mr. Moore then asked Mr. Feder if there is a conflict between the ESA and the MMPA with regard to the HMSMT recommendation because the section 7 consultation could come up with a number different than the PBR value under the MMPA. In this case what guides us? Mr. Feder said that the action has to conform to both mandates and pointed out that the ITS (resulting from the section 7 consultation) does not establish a take limit, it is simply an estimate of what take levels will result from the proposed action. Mr. Moore then asked what would happen if the Council followed a recommendation where a take was allowed that exceeded the PBR but was less than a value coming out of the ITS. Ms. Petras said that the HMSMT was looking at marine mammals with low PBRs when identifying marine mammal caps; there are processes that are triggered if PBR is exceeded. But generally PBR is something looked at retrospectively and reflects an assessment of the level of removals a population can sustain. It is a different policy decision than what falls under the ESA. Since the likelihood of actual takes for some of these species is remote it may be that under the ESA no concern is raised.

Ms. Fosmark offered a friendly amendment to Motion 17 to allow the section 7 consultation to occur and the outcome of that would set the caps for ESA-listed marine mammals. Both the maker and seconder agreed.

Mr. Myer expressed his opposition to the motion because of the concern that the EFP could lead to a shift of effort from outside the EEZ to inside the EEZ even though he is supportive of the goal of converting drift gillnet vessels to another gear type.

Ms. Culver said she shared Mr. Myer's concerns. She didn't see a clear path from the EFP to any subsequent fishery. Second, an experimental drift gillnet fishery off Washington in the 1980s indicates that the leatherback sea turtle CPUE is significantly higher off of Washington than off of California and Oregon. Therefore a potential longline fishery causes concern, considering this likely higher CPUE. She said the EFP would represent a leap of faith since, prior to a Council decision, NMFS has been unwilling to provide an estimate of the number of turtles that would be taken in the EFP fishery and to set turtle caps prior to getting the ITS. She would like to reach the goal while addressing these concerns about potential elevated takes. For these reasons she will vote against the motion.

Mr. Helvey said it was not the case that NMFS was unwilling to identify caps, but SFD doesn't under section 7 actions. He wanted to address Mr. Myer's and Ms. Culver's concerns about this decision being a "leap of faith" and the long-term goals. The EFP is a first step to answer questions about economic viability. If it is successful further analysis will be necessary to address concerns of other fisheries and the environmental community's concerns. Ultimately NMFS has an interest in looking at more conservative gear types to land swordfish off the U.S. West Coast as a substitute for imports. For these reasons NMFS will vote for the motion.

Mr. Cedergreen also shared Mr. Myer's and Ms. Culver's concerns and the issues the SSC raised in their report. Therefore, he is going to vote against the motion.

Ms. Fosmark, to explain her amendment to the motion, said she wanted to make sure we did not set the caps too low or too high in relation to the ITS. Also, the intention is not to increase fishing opportunity but provide a cleaner (lower bycatch) alternative to drift gillnet gear, and provide product that the U.S. public wants.

Ms. Vojkovich said California state policy on longlines has not changed; therefore, she will be voting no on the motion.

Mr. Moore, speaking to the concerns raised by Mr. Myer and Ms. Culver, said that the way to address concerns about fishing off northern Oregon and Washington is to offer a friendly amendment related to geographical scope rather than throw out the whole EFP. We need to get the initial data in order to take the next steps.

Ms. Culver agreed with Mr. Moore about an amendment if that were her only concern. But it would not address her concern about setting caps based on the ITS. Such caps might address biological concerns but not the other conservation or social concerns that have been raised. Approving the EFP without specifying caps for protected species is not acceptable to her. Without any data available she cannot offer an amendment with numbers for those caps.

Mr. Melcher spoke in favor of the motion. He thinks that the concerns that have been raised will be addressed when moving forward from the EFP. The point of the EFP is to try to make things better, not to expand into new fisheries. A one-vessel test is not going to answer all the questions, but it will provide some answers to some questions.

Mr. Ortmann recognized the good points raised by others. Focusing on the purpose of the EFP, to find cleaner ways to fish, which is what we are supposed to be doing, it is a shame to throw it all away when we have taken it this far. He also said the results should be apparent even if the EFP only involves one vessel and regardless of statistical validity. He considers this to be the least risk approach we could possibly take to look at a cleaner way of fishing. For these reasons he is inclined to support the motion at this point.

Mr. Mallet said he shares the concerns raised by the environmental groups about the need for cleaner fisheries and was impressed by the Supplemental NMFS Report (Agenda Item J.2.b). If the results are somewhat similar to what Hawaii found, that is an indication that it may work. For these reasons he supports the motion.

Mr. Myer, as he said earlier, would like to support the motion and for that reason is going to move to amend the motion to restrict the EFP to south of 45° N latitude. Mr. Cedergreen seconded the amendment to Motion 17.

Mr. Moore, after checking with Mr. Helvey and Dr. Dahl, pointed out that this boundary is the same as the northern boundary of the drift gillnet sea turtle conservation area.

Chairman Hansen asked for the vote on the Motion 17 amendment. The amendment to Motion 17 passed.

Mr. Sones said this is an important issue, and he wanted to speak to the tribes' position. He will vote in favor of the motion because of the need to look at new technologies to reduce impacts and get new information. The U.S. can demonstrate these techniques to international fisheries that have bycatch issues, and put pressure on them to use these technologies. We need to demonstrate cleaner methods to minimize impacts to endangered species. The caps should be stringent and the section 7 consultation should identify the caps levels. The EFP will gather more information about the geographical distribution of total mortality of endangered species.

Dr. McIsaac asked Mr. Moore to go through the catch caps again. Mr. Moore did so. Mr. McIsaac read back the motion with the amendments.

The Roll Call was called on main Motion 17. Motion 17 passed as amended with 9 yes and 4 no votes. Mr. Thomas, Mr. Cedergreen, Ms. Culver, and Ms. Vojkovich voted no.

J.3 Albacore Fishing Effort Characterization

J.3.a Agenda Item Overview (04/06/07; 1:39 pm)

Dr. McIsaac provided the agenda item overview.

J.3.b Southwest Fishery Science Center Report

Ms. Suzanne Kohin provided a Powerpoint presentation to the Council. See the following webpage: http://www.pcouncil.org/bb/2007/0407/J3b_SWFSC_sup.pdf

J.3.c Reports and Comments of Advisory Bodies

Dr. Conrad provided Agenda Item J.3.c, Supplemental SSC Report. There were several questions about the SSC's recommendation to use partial F values. Dr. Fox discussed the intent of the IATTC and WCPFC resolutions and pointed out that they called for characterization of fishing effort, not fishing mortality.

Mr. Heberer provided Agenda Item J.3.c, Supplemental HMSMT Report. Mr. Wayne Heikkila provided Agenda Item J.3.c, Supplemental HMSAS Report. There were several questions relating to the differences between the HMSMT and HMSAS recommendations.

J.3.d Public Comment

Mr. Wayne Heikkila, Western Fish Boat Owners Association, Redding, CA
Mr. Chip Bissell, American Albacore Fishing Association, Oak View, CA
Mr. Doug Fricke, Washington Trollers Association, Hoquiam, WA

J.3.e Council Action: Take final Action to Adopt, or Adopt for Public Review, a Characterization of Historical U.S. North Pacific Albacore Fishing Effort

Ms. Vojkovich said there are still some questions about how to transmit this information to the right people, such as the delegations to the IATTC and WCPFC. Having said that, they should be given as much information as possible.

Dr. McIsaac said it would be useful for the Council to make a statement that U.S. albacore fishing effort is not increasing, which can be transmitted to the IATTC, since the State Department may not be aware of that. In addition, there are U.S. Commissioners that might want to know that the Council has looked at this. Further, any agreement or conclusion about U.S. effort, and any assignments, should be put on the record.

Mr. Moore agreed with Ms. Vojkovich that as much information as needed should be provided to the U.S. delegations, through whatever is the appropriate channel. As far as the Council revisiting this, he didn't think it would be necessary as long as the Council agreed on the methodology.

Mr. Melcher said the partial F component should not be included, but just to the characterization of effort presented by the HMSMT. He also agreed with the previous comments about providing these data to the U.S. delegations. Finally, if we can make a statement that effort is not increasing, we should.

Ms. Culver provided guidance that the Council should accept all of the information presented to us from the SWFSC and HMSMT and forward that information to the U.S. delegation and that the Council include a statement based on all that information that we do not believe albacore fishing effort is increasing. The Council concurred with this guidance.

Mr. Helvey asked if Mr. Melcher supported including the partial F method of characterization. Mr. Melcher said he did not recommend including it. Ms. Culver agreed.

Ms. Vojkovich commented that the Council needs to ensure that better information is circulated on these issues so there is less confusion, for example so the SSC better understood the original assignment in this case.

Dr. Dahl asked for clarification on whether Council guidance was to include or not include any further analysis of the partial F method. Ms. Culver said the guidance is to not work further on partial F and not to forward that to the U.S. delegation.

J.4 Yellowfin Tuna Overfishing

J.4.a Agenda Item Overview (04/06/07; 2:54 pm)

Dr. Dahl provided the agenda item overview. The Council decided to combine this agenda item with Agenda Item J.5.

J.5 COP for Making Highly Migratory Species Recommendations to Regional Fishery Management Organizations

J.5.a Agenda Item Overview (04/06/07; 3:05 pm)

Dr. Dahl provided the agenda item overview.

J.5.b Reports and Comments of Advisory Bodies

Mr. Moore provided Agenda Item J.5.b, Supplemental LC Report. Dr. Steve Wertz provided Agenda Item J.5.b, Supplemental HMSMT Report. Mr. Heikkila provided Agenda Item J.5.b, Supplemental HMSAS Report.

J.5.c Public Comment

Mr. Doug Fricke, Washington Trollers Association, Hoquiam, WA
Mr. Peter Flournoy, International Law Offices, San Diego, CA

J.5.d Council Action: Adopt COP for Public Review and Make Related Recommendations

Mr. Moore moved (Motion 20) to have the Executive Director continue to work on the MOU and incorporate the suggestion of the LC to add the Chair of the GAC to the WCPFC advisory committee and the recommendations of the HMSAS to replace the seat for one Pacific Council area albacore troll fishery representative with a commercial at-large representative in a number equivalent to the number designated for Western Pacific region commercial representatives. Mr. Warrens seconded the motion.

Ms. Culver asked if the Council was taking final action on the MOU.

Mr. Moore said the motion is not to take final action but to continue to negotiate the MOU along with these changes. Ms. Culver asked if there will be future review of the MOU by the Council. Mr. Moore said he presumes the Executive Director will report back to the Council during the negotiation process. Dr. McIsaac emphasized that the negotiations will be a long process and Council members may be involved in the final stage of negotiation. He expects the MOU will come before the Council one or more times before it becomes final.

Ms. Vojkovich said there should be some legal guidance provided in addition to the work of the three Executive Directors.

Mr. Helvey said that the State Department and the two Regional Administrators will discuss the draft MOU shortly and will provide comments to the Council Executive Directors in the near future.

Ms. Fosmark asked about seeking an HMS exemption from the MSRA ACL/AM provisions (MSA sec. 303(a)(15), as amended). Mr. Moore said he would address that in a later motion.

Motion 20 passed.

Mr. Moore moved (Motion 21) to send the draft COP out for public review and comment, along with the non-substantive edits proposed by the HMSAS. Mr. Warrens seconded the motion. Motion 21 passed.

Mr. Moore noted that the Council earlier directed the advisory bodies to provide scoping comments to NMFS on the items discussed under agenda item C.2 (MSA reauthorization). He moved (Motion 22) to

include the statement from the HMSAS Supplemental Report that the EIS thoroughly review the effect of conflicting international treaty obligations and other statutes on the new MSRA requirements under sec. 303(a)(15) (MSA as amended) as part of the package sent under agenda item C.2. Mr. Warrens seconded the motion.

Mr. Moore said this was an effort to state the issue raised by the two questions in the HMSAS Report.

Ms. Cooney said that any member of the public can submit additional comments before the scoping period ends.

Motion 22 passed.

J.6 Council Recommendations on Conservation Measures to be Considered by the Inter-American Tropical Tuna Commission (IATTC)

J.6.a Agenda Item Overview (04/06/07; 4:10 pm)

Dr. Dahl provided the agenda item overview.

J.6.b Reports and Comments of Advisory Bodies

Dr. Steve Stohs provided Agenda Item J.6.b, Supplemental HMSMT Report.

J.6.c Public Comment

Mr. Peter Flournoy, International Law Offices, San Diego, CA

J.6.d Council Action: Identify Recommendations to the U.S. Delegation to the IATTC on Measures to Conserve Bigeye and Yellowfin Tuna

Ms. Vojkovich echoed the discussion in the situation summary suggesting that the Council revisit this issue at the June meeting and have a verbal exchange with one or more IATTC Commissioners.

Ms. Culver asked Mr. Helvey whether he thought the Council should respond to the letter from Mr. McInnis (Agenda Item J.4.b, Supplemental NMFS Report) indicating that yellowfin tuna would be subject to sec. 304(i) of the MSA, as amended. She also pointed out that the language in this section is conditional on whether there is an international agreement to end overfishing and wondered if any action should be taken before the June IATTC meeting, when such an agreement might be reached. The Supplemental HMSMT Report under Agenda Item J.4.b recommended that no additional domestic regulations are necessary at this time (MSA sec. 304(i)(2)(A)); recommendations for actions at the international level (MSA sec. 304(i)(2)(B)) may also be unnecessary contingent on the results of the IATTC meeting. Then the Council wouldn't have to do anything at all.

Mr. Helvey asked for clarification.

Ms. Culver said, first, that she thought the Council did not need to adopt any recommendations before the June IATTC meeting, and given the new timeline triggered by Mr. McInnis's letter (which establishes a one-year time period starting March 30, 2007) we have more time to discuss whether the Council needs to respond at all to the MSA sec. 304(i) requirements. Mr. Helvey said the Council did not need to respond to Mr. McInnis's letter with the type of discussion Ms. Culver outlined. But he did think that the Council

should provide some recommendations to the U.S. delegation in order to set a precedent for how the Council is involved in this process.

Ms. Vojkovich discussed the timing of IATTC and Council meetings and pointed out the difficulties of the Council becoming engaged prior to the June IATTC meeting. Ms. Vojkovich said she agreed with Mr. Helvey; if we drop out of the process at this point it may signal a lack of interest.

Dr. McIsaac agreed that this Council meeting was the opportunity to meaningfully weigh in with recommendations to the IATTC. He then reviewed the information that had been presented at this meeting, saying there was not a lot of information to consider, but it was more than in the previous year.

Mr. Helvey mentioned the new IATTC representative on the HMSMT, who may provide an opportunity to get some advance information in future years.

Ms. Culver wondered what guidance Mr. Helvey could give in this situation. While recognizing the timing problems, he encouraged the Council to stay involved in the process for this cycle.

Ms. Vojkovich wondered if the general comments in the HMSMT Report could be the basis of a set of recommendations.

Mr. Helvey suggested that some of the elements of the U.S. proposal put forward at the February ad hoc IATTC meeting could also be referenced in a recommendation.

Dr. Dahl provided a summary of the guidance received, stating that staff will draft a letter over the Chairman's signature containing elements of the discussion in the HMSMT report and the U.S. delegation proposals from the February IATTC meeting. Also, the Council indicated it would not be productive to revisit this issue at the June Council meeting. Finally, subsequent to the June IATTC meeting, the HMSMT may need to revisit this to develop more specific proposals to satisfactorily address the MSA requirements.

ADJOURN

The 188th Council meeting was adjourned at 5:16 pm on Friday, April 6, 2007.

DRAFT	**DRAFT**
Council Chairman	**Date**

DRAFT VOTING LOG
Pacific Fishery Management Council
April 2007

Motion 1: Approve the agenda as shown in Agenda Item A.4, Council Meeting Agenda.

Moved by: Rod Moore Seconded by: Curt Melcher
Motion 1 passed.

Motion 2: Forward to NMFS under the scoping process, the recommendations contained in the SSC Report, GMT Report, GAP Report, and LC Report as a means of identifying issues to be included in the scoping process and potential solutions for the question of how to develop annual catch limits and accountability issues. The motion also included sending comments received from other Council advisory bodies during the NMFS scoping process public comment period.

Moved by: Rod Moore Seconded by: Mr. Warrens
Motion 2 passed.

Motion 3: Adopt the minutes as shown in Agenda item C.3, Draft September 2006 Council Meeting Minutes.

Moved by: Dale Myer Seconded by: Curt Melcher
Motion 3 passed.

Motion 4: Appoint Ms. Joanna Grebel to replace Ms. Susan Ashcraft on the Groundfish Management Team.

Moved by: Marija Vojkovich Seconded by: Roger Thomas
Motion 4 passed.

Motion 5: At the request of NOAA Fisheries, establish a Council Coordination Committee consisting of the chairs, vice chairs, and executive directors of each of the eight regional fishery management councils, other council members, and staff. The chairs, vice chairs, and executive directors shall be voting members. The six NOAA Fisheries Regional Administrators or their designees, other council members, and staff shall be non-voting members. The Council Coordinating Committee shall meet from time to time as appropriate to discuss issues of relevance to all councils. The Council Coordinating Committee may establish such subcommittees as it deems appropriate.

Moved by: Marija Vojkovich Seconded by: Frank Lockhart
Motion 5 passed.

Motion 6: Have the Council staff and the Chairman work together to produce a draft COP regarding the EFHOC and have that draft available for Council and Council advisory body review at the June meeting.
Moved by: Frank Warrens Seconded by: Rod Moore
Motion 6 passed.

Motion 7: Appoint a Plan Development Team (PDT) for an Ecosystem FMP to be chaired by an SSC representative and consisting of one member each from the STT, SAS, GMT, GAP, HMSMT, HMSAS, CPSMT, CPSAS, HC, and EC and that the team be charged with developing the purpose and need, potential goals, and objectives of an Ecosystem FMP. The PDT is to provide the Council a report on the matter at a future undetermined date.

Moved by: Rod Moore Seconded by: Marija Vojkovich
Motion 7 passed.

Motion 8: Adopt for the salmon troll fishery the landing restrictions for Pacific halibut caught incidentally in the May/June fishery, Status quo – Beginning May 1, license holders may land no more than 1 halibut per each 3 Chinook, except 1 halibut may be landed without meeting the ratio requirement, and no more than 35 halibut may be landed per trip. Halibut retained must be no less than 32 inches in total length (with head on). This includes the "C-shaped" yelloweye rockfish conservation area as an area to be voluntarily avoided (the YRCA is as follows: from 48°00.00' N latitude; 125°14.00' W longitude to 48°02.00' N latitude; 125°14.00' W longitude to 48°02.00' N latitude; 125°16.50' W longitude to 48°00.00' N latitude; 125°16.50' W longitude and connecting back to 48°00.00' N latitude; 125°14.00' W longitude).

Moved by: Curt Melcher Seconded by: Frank Warrens
Motion 8 passed. Ms. Vojkovich voted no. Mr. Sones abstained.

Motion 9: Adopt for the landing limits on incidental halibut harvest in the fixed gear primary sablefish fishery north of Point Chehalis: Status Quo – Beginning May 1, restrict incidental halibut landings to 100 pounds (dressed weight) of halibut for every 1,000 pounds (dressed weight) of sablefish landed and up to 2 additional halibut in excess of the 100 pounds per 1,000-pound ratio per landing. Retention of halibut allowed beginning May 1.

Moved by: Michele Culver Seconded by: Mark Cedergreen
Motion 9 passed.

Motion 10: Adopt a preliminary range of alternatives for Amendment 15 to the Pacific Groundfish FMP as follows:

Alternative 1: Status quo.

Alternative 2: Prohibit participation in the shoreside, catcher/processor, and mothership sectors of the Pacific whiting fishery by AFA-qualified vessels that do not have a significant historic participation record in those sectors between January 1, 1994 and January 1, 2006.

Alternative 3: Prohibit participation in the shoreside, catcher/processor, and mothership sectors of the Pacific whiting fishery by AFA-qualified vessels that do not have a significant historic participation record in those sectors between January 1, 1994 and January 1, 2007.

For both Alternative 2 and Alternative 3, "significant historic participation" is defined in two alternative ways for analysis.

For catcher/processors, significant historic participation is defined as:

a) having caught and processed at least 1,000 metric tons (mt) of whiting in any one qualifying year; or
b) having caught and processed at least 1,000 mt of whiting in any one qualifying year subsequent to December 31, 1996 (the addition of the "b" alternative in this part of the motion was added by voice vote, see below).

For motherships, significant historic participation is defined as:

a) having received at least 1,000 mt of whiting in any one qualifying year; or
b) having received at least 1,000 mt of whiting in any one qualifying year subsequent to December 31, 1996 (the addition of the "b" alternative in this part of the motion was added by voice vote, see below).

For catcher vessels in the shore-based or mothership fishery, significant historic participation is defined as:

a) having landed at least 500 mt of whiting in any one qualifying year; or
b) having landed at least 1,000 mt of whiting in any one qualifying year.

Moved by: Curt Melcher Seconded by: Rod Moore

Amndt #1 Add an additional qualifying period for the CPS and MS sectors under alternatives 2 and 3 for the purpose of the analysis that would look at qualifying landings prior to 1997.

Amendment passed.
Motion 10 passed.

Motion 11: Accept the GAP report and direct the Council staff to forward a letter and the GAP report to Mr. Mike Carrier of Governor Kulongoski's Natural Resources Office including any appropriate comments recommended in the course of Council discussion. The motion also includes adding discussion language regarding the Council's proposed ecosystem FMP.

Moved by: Frank Warrens Seconded by: Kathy Fosmark
Motion 11 passed.

Motion 12: Adopt the Legislative Committee Report as shown in Agenda Item C.6.b, Supplemental LC Report.

Moved by: Frank Warrens Seconded by: Curt Melcher
Motion 12 passed.

Motion 13: Utilizing Agenda Item G.5.b, Supplemental STT Report 2, adopt commercial and recreational fisheries for the area Cape Falcon to the Oregon/California border as described with the following changes:

Page 2, in the area Cape Falcon to Humbug Mt. commercial fishery, change the September 7-10 date to read "September 10-13"; in the bulleted section, change "landing and posession limit of 75 Chinook per vessel per calendar week in September (C.7)" to read "landing and posession limit of 150 Chinook per vessel per calendar week in September and 75 per vessel per calendar week in October (C.7)".

Moved by: Curt Melcher Seconded by: Rod Moore
Motion 13 passed.

Motion 14: Utilizing Agenda Item G.5.b, Supplemental STT Report 2, adopt the commercial and recreational salmon management measures as shown for the areas from the Oregon/California border to the US/Mexico border.

Moved by: Marija Vojkovich Seconded by: Roger Thomas
Motion 14 passed.

Motion 15: For the 2007 Treaty Indian ocean salmon troll fisheries, adopt Agenda Item G.5.f, Treaty Indian Ocean Troll Final Measures.

Moved by: David Sones Seconded by: Frank Warrens
Motion 15 tabled.

Motion 16: Table Motion 15 until the Washington/Tribal discussions were finished.

Moved by; David Sones Seconded by: Frank Warrens
Motion 16 passed.

Motion 17: Adopt as a preferred alternative, alternative 3 as shown in the draft EA (Agenda Item J.2.a, Attachment 1), with the caps as recommended by the HMSMT: 1 short-finned pilot whale, 1 sperm whale, 1 humpback whale, and 12 striped marlin. In addition, caps on leatherback and loggerhead takes will be based on the Section 7 consultation incidental take statement (ITS) and caps on seabird takes, if necessary as a result of a Section 7 consultation. Include the friendly amendment to allow the Section 7 consultation to occur and the outcome of that would set the caps for ESA-listed marine mammals.

Moved by: Rod Moore Seconded by: Frank Warrens

Amndt #1: Amend the motion to restrict the EFP to south of 45° N latitude.

Moved by: Dale Myer Seconded by: Mark Cedergreen
Amendment passed.
Main Motion 17 passed as amended. Mr. Thomas, Mr. Cedergreen, Ms. Culver and Ms. Vojkovich voted no.

Motion 18: Untable Motion 15.

Moved by: Frank Warrens Seconded by: Rod Moore
Motion 18 passed.

Motion 19: Amend Motion 15 to include the adoption of the final non-Indian commercial and recreational management measures for the area north of Cape Falcon, Oregon as described in Agenda Item G.5.b, Supplemental STT Report 2, with one addition:

Page 7, Queets River to and Leadbetter Point recreational fishery: add the Grays Harbor Control Zone as an area that would be closed beginning August 1.

Moved by: Phil Anderson Seconded by: Mark Cedergreen
Amendment to Motion 19 passed.
Motion 19 passed as amended.

Motion 20: Have the Executive Director continue to work on the MOU and incorporate the suggestion of the LC to add the Chair of the GAC to the WCPFC advisory committee and the recommendations of the HMSAS to replace the seat for one Pacific Council area albacore troll fishery representative with a commercial at-large representative in a number equivalent to the number designated for Western Pacific region commercial representatives.

Moved by: Rod Moore Seconded by: Frank Warrens
Motion 20 passed.

Motion 21: Send the draft COP out for public review and comment, along with the non-substantive edits proposed by the HMSAS.

Moved by: Rod Moore Seconded by: Frank Warrens
Motion 21 passed.

Motion 22: Include the statement from the HMSAS Supplemental Report that the EIS thoroughly review the effect of conflicting international treaty obligations and other statutes on the new MSRA requirements under sec. 303(a)(15) (MSA as amended) as part of the package sent under Agenda Item C.2.

Moved by: Rod Moore Seconded by: Frank Warrens
Motion 22 passed.

The full record of the Pacific Fishery Management Council (Council) March 5-9, 2007 meeting is available at the Council office, and consists of the following:

1. The draft agenda.

2. The approved agenda with notations as to the time each agenda item was addressed, with summary minutes of Council proceedings and key Council documents referenced in the relevant agenda item. The summary minutes consists of a narrative (1) on particularly noteworthy elements of the gavel to gavel components of the Council meeting, including the Call to Order segment at the onset of the Council meeting, and (2) summaries of pertinent Council discussion during each Council Guidance, Discussion, or Action item in the Agenda. The summary narrative of Council Guidance, Discussion, or Action items includes detailed descriptions of rationale leading to a motion (or leading to a consensus to not make a motion) and discussion between the initial motion statement and the final vote.

3. A set of audio recordings of the actual testimony, presentations, and discussion that occurred at the meeting. Recordings are labeled so as to facilitate tape or CD-ROM review of a particular agenda item, by cross referencing with the time labeled agenda.

4. All written documents produced for consideration at the Council meeting, including (1) the pre-meeting briefing book materials, (2) all pre-meeting supplemental documents for the briefing book, (3) all supplemental documents produced or received at the Council meeting, validated as labeled by the Council Secretariat and distributed to Council Members, and (4) public comments and miscellaneous visual aids or handout materials used in presentations to Council Members during the open session.

5. A copy of the Council Decision Document, a document distributed immediately after the meeting which contains very brief descriptions of Council decisions.

DRAFT MINUTES

Pacific Fishery Management Council

DOUBLETREE HOTEL
2001 POINT WEST WAY, SACRAMENTO, CA 95815
TELEPHONE 916-929-8855
March 5-9, 2007

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ADJOURN 44

A. Call to Order

A.1 Opening Remarks, Introductions

Mr. Don Hansen, Chair, called the 187th meeting of the Pacific Fishery Management Council to order on Monday, March 5, 2007 at 2:05 pm.

A closed executive session was held from 1 to 2 pm to discuss litigation and personnel matters.

A.2 Roll Call

Dr. Donald McIsaac, Council Executive Director, called the roll. The following Council Members were present:

Mr. Phil Anderson (Washington State Official)
Mr. Mark Cedergreen (Washington Obligatory)
Ms. Kathy Fosmark (California Obligatory)
Mr. Donald Hansen, Chairman (At-Large)
Dr. Dave Hanson, Parlimentarian (Pacific States Marine Fisheries Commission, non voting)
Mr. Frank Lockhart (National Marine Fisheries Service, Northwest Region)
Mr. Jerry Mallet (State of Idaho Official)
CDR Peter Martin (US Coast Guard, non-voting)
Mr. Curt Melcher (State of Oregon Official)
Mr. Rod Moore (At-Large)
Mr. Dale Myer (At- Large)
Mr. Dave Ortmann, Vice Chairman (Idaho Obligatory)
Mr. Tim Roth (US Fish and Wildlife Service, non voting)
Mr. David Sones (Tribal Obligatory)
Mr. Roger Thomas (At-Large)
Ms. Marija Vojkovich (State of California Official)
Mr. Frank Warrens (Oregon Obligatory)

The following Council member was absent from the meeting:

Mr. David Hogan (US State Department, non voting)

A.3 Executive Director's Report

Dr. McIsaac provided an overview of the Informational Reports found in the briefing book.

A.4 Council Action: Approve Agenda

The Council approved the March meeting agenda as shown in Agenda Item A.4, Council Meeting Agenda (Motion 1 moved by Mr. Rod Moore and seconded by Mr. Curt Melcher).

B. Enforcement Issues

B.1 Enforcement Report: Overview of Joint Enforcement Agreement Program

B.1.a Agenda Item Overview

Mr. Jim Seger provided the agenda item overview. 03/05/07; 2:14 pm

B.1.b Report of the Enforcement Consultants

Cpt. Mike Cenci provided a DVD which demonstrated NOAA Fisheries' Joint Enforcement Agreements (JEAs) between the Oregon State Police, California Department of Fish and Game, and Washington Department of Fish and Wildlife Law Enforcement. Cpt. Cenci introduced the Enforcement Consultants and their partners.

B.1.c Reports and Comments of Advisory Bodies

None.

B.1.d Public Comment

None.

B.1.e Council Action: Consider Enforcement Committee Recommendations

Mr. Melcher thanked WDFW and CDFG enforcement for the dungeness crab patrols that went on this winter.

C. Coastal Pelagic Species Management

C.1 National Marine Fisheries Service (NMFS) Report

Mr. Mike Burner provided a brief agenda item overview. (03/05/07; 3:41 pm)

C.1.a NMFS Activities

Mr. Mark Helvey referred to Agenda Item C.1.a, Attachment 1 and Supplemental Agenda Item C.1.a, Attachment 3. Mr. Helvey reported that as of February 16, 2007, 6,551 mt of the 13,845 mt harvest guideline for the directed fishery has been landed and noted that NMFS and CDFG will continue to monitor the fishery and will limit the fishery to incidental landings of 6,000 mt if appropriate.

Mr. Helvey reviewed the CPS regulatory actions contained in Agenda Item C.1.a, Attachment 3.

C.1.b Reports and Comments of Advisory Bodies

None.

C.1.c Public Comment

None.

C.1.d Council Discussion

None.

C.2 Stock Assessment Review (STAR) Panel Terms of Reference for 2007

C.2.a Agenda Item Overview

Mr. Burner provided the agenda item overview. (03/05/07; 3:45 pm)

C.2.b Agency and Tribal Comments

None.

C.2.c Reports and Comments of Advisory Bodies

Mr. Burner read, for the record, Agenda Item C.2.c, Supplemental SSC Report.

C.2.d Public Comment

None.

C.2.e Council Action: Adopt Final Coastal Pelagic Species STAR Terms of Reference

Mr. Moore moved and Mr. Warrens seconded a motion (Motion 2) to adopt the CPS STAR Terms of Reference as shown in Agenda Item C.2.a, Attachment 1. Mr. Moore noted the reference to new MSA provisions in the SSC statement and suggested a broader discussion on the topic under Agenda Item D.2. Motion 2 passed.

D. Administrative Matters

D.1 Future Council Meeting Agenda Planning (03/06/07; 8:01 am)

D.1.a Agenda Item Overview

Dr. McIsaac provided the agenda item overview and noted (1) the work planning attachment covering the trawl individual quota and intersector allocation programs, and the 2009-2010 groundfish management specifications process, and (2) the Habitat Committee report.

D.1.b Reports and Comments of Advisory Bodies

Mr. Stuart Ellis provided Agenda Item D.1.b, Supplemental HC Report.

D.1.c Public Comment

None.

D.1.d Council Discussion of Future Council Meeting Agenda Topics

The Council members worked with the Chairman and Executive Director to flesh out agenda item topics for future Council meetings and to refine the April Council agenda. Those items included initial consideration of an ecosystem fishery management plan, and a response to the Oregon Ocean Policy Advisory Committee (OPAC) report on marine sanctuaries.

D.2 Review and Planning for Implementation of New Requirements Resulting from Reauthorization of the Magnuson-Stevens Act

D.2.a Agenda Item Overview (03/07/06; 8:08 am)

Mr. Mike Burner provided the agenda item overview and reviewed Agenda Item D.2.a, Attachment 3.

D.2.b Reports and Comments of Advisory Bodies

Mr. Bob Conrad provided Agenda Item D.2.b, Supplemental SSC Report. Mr. Moore noted that the SSC currently reviews assessment documents and STAR Panel reports and that those documents then provide the Council with harvest level recommendations. He asked if the SSC sees this process as an indirect mechanism under which the SSC recommends harvest levels. Mr. Conrad stated that the SSC feels the current process works well and provides sound scientific advice and an appropriate separation of science and policy. The SSC is asking if the current process meets the new provisions of the MSA. Mr. Lockhart felt the Council can make a strong case that its current relationship with the SSC meets the new MSA requirements. Dr. McIsaac noted the SSC statement under Agenda Item C.2 addresses the potential blurring of the distinction between science and policy and commends the SSC for bringing these comments and concerns forward.

Mr. Stuart Ellis provided Agenda Item D.2.b, Supplemental HC Report. Mr. Burner read Agenda Item D.2.b, Supplemental LC Report.

D.2.c Public Comment

Mr. Joel Kawahara, troller, Seattle, WA

D.2.d Council Action: Direct Planning and Action on New Requirements as Needed for Timely Implementation

Mr. Lockhart said the passage of the MSRA requires a great deal of action by NMFS to implement the new provisions in the time specified. Establishing annual catch limits (ACLs) and developing new environmental review requirements are the two largest work items for the Council in the near future. Mr. Lockhart mentioned an upcoming *Federal Register* notice announcing scoping sessions on ACLs and highlighted a proposed scoping session during the April Council meeting on April 3. He concluded by announcing that he and Mr. Helvey are serving on the plan review team for getting these new requirements implemented.

Mr. Melcher asked who is completing the required recovery plan for Klamath River coho. Mr. Lockhart stated that the NMFS SWR is in the lead and currently working on the report.

Mr. Moore asked Mr. Lockhart about the timing of Council responses and asked for recommendations on how the Council should prioritize the tasks at hand. Mr. Lockhart said the annual catch limits matter is

perhaps of highest priority followed by the development of new environmental review procedures. Mr. Lockhart noted that appointments to the U.S./Canada Pacific whiting process are not as critical because 2007 management will continue under the old regime and U.S. appointments to the new process could wait until June.

Ms. Vojkovich asked Mr. Lockhart for a practical definition of "annual catch limits." Mr. Lockhart said a formal definition and application of ACLs has not been completed and that the April 3 scoping session will be very important because NMFS is eager for input on the matter. There is a wide range of fishery management issues around the nation to which ACLs are to be applied and how they will be applied to West Coast fisheries cannot be answered at this time. He reiterated that it will be crucial for the Council to provide guidance to NMFS in April.

Dr. McIsaac stated that in discussions with the SSC it was noted that annual catch limits cover a wide variety of items from science-based ABCs to more policy-based OYs. It will be important for the Council to express its opinion of what ACLs are and how they are applied as the policies and guidance on the matter are developed by NMFS.

Mr. Lockhart reiterated that this measure was likely intended to apply to other Councils and he feels this Council is already operating as Congress intends in the new MSA. It will be important for the Council to make a clear case to this effect.

Mr. Melcher asked for more clarification on the Klamath River coho recovery plan and asked if development of the plan was going to be a "top down" process or will there be opportunities for participation by the States. Mr. Helvey said the Arcata field office is taking the lead on preparing that document and he anticipates availability of a first draft in the middle of April. Mr. Sones asked if the Klamath Tribes are involved in working on the report. Mr. Helvey said they are and noted that NMFS is not reinventing the plan, rather NMFS is pulling together existing coho recovery information and policies that the Tribes and States have already been involved in.

Dr. McIsaac asked if the Klamath River Coho Recovery Plan has a fishery management component that would be appropriate for Council review in April. Mr. Helvey said he did not think the first draft report will be completed by the April meeting, but he added the schedule could be amended to get Council input in April as the June meeting will too late.

Mr. Anderson asked if the provision to develop a Memorandum of Understanding (MOU) for highly migratory species (HMS) management is scheduled for implementation immediately and if NMFS is asking the HMSMT for feedback in development of the MOU. Mr. Helvey said that NMFS and the Council should look for opportunities such as the April HMSMT meeting and a planned joint meeting between the HMSMT and the Western Pacific Fishery Management Council (WPFMC) for development and review of the MOU.

Dr. McIsaac stated that unlike the Pacific whiting situation, the Western and Coastal Pacific Fisheries Commission (WCPFC) is already a functioning body and the U.S. will be entering the process later than most nations. Therefore, there is some urgency to establishing an MOU. He is working with the Executive Directors of the North Pacific Fishery Management Council (NPFMC) and the WPFMC in developing a draft MOU in time for review by the HMS advisory bodies and the Council in April. Dr. McIsaac added that the joint meeting of the Council and WPFMC HMS groups is scheduled for April 17-19.

Ms. Fosmark asked Mr. Helvey about addressing the lack of oversight and poor reporting of HMS landings by foreign governments, specifically catch accountability for tuna caught in U.S. waters and

landed in Canada. Ms. Fosmark asked how NMFS intends to use the new MSA provisions to deal with this problem. Mr. Helvey replied that NMFS is working on these details and is very interested in Council input during the April scoping process.

Mr. Moore asked Dr. McIsaac if he had considered the Council staff's capability to manage the workload resulting from all of the requirements and timelines of the new MSA given all the other Council tasks and existing staff and budget limitations. Dr. McIsaac said Council staff has given serious thought to the workload aspect. He said that at this meeting the Council staff wanted to expose the Council to the full magnitude of the changes in the reauthorized MSA. Our strategy is to expose Council to all the changes and then discuss urgent items at the April meeting such as ACLs and a revised environmental review procedure. He said he is not interested in moving policy development from the Council to the Council staff and that at the April meeting there will be statements from the LC and other advisory bodies to assist in developing Council recommendations on many of the new provisions. Dr. McIsaac asked the Council to anticipate MSA reauthorization will be a consistent agenda item throughout 2007 as the new provisions are implemented.

Mr. Moore stated he was not suggesting the Council Executive Director and staff decide policy matters, but he thought it would be helpful for the Council members to be cognizant of available Council staff resources as policies and recommendations are developed.

Chairman Hansen asked Mr. Lockhart if the LC report contains a comprehensive list of urgent matters for the April meeting. Mr. Lockhart said the recommendations are good with the exception of the Pacific whiting treaty. The treaty itself has not yet been ratified. The implementing language was agreed to by both parties and approved by Congress, but the treaty is not in effect until the instruments of ratification are delivered to the President for signature. He understands that will happen soon and that the Council would not need to address the matter in April.

Mr. Moore moved and Mr. Myer seconded a motion (Motion 6) to accept the report of the Legislative Committee as shown in Agenda Item D.2.b, Supplemental LC Report with the following edit: change the sentence that reads: "The LC recommends the Council and its advisory bodies begin planning for U.S. appointees in April" to say "The LC recommends the Council and its advisory bodies begin planning for U.S. appointees in June". Motion 6 passed.

D.3 Approval of Council Meeting Minutes

D.3.a Council Member Review and Comments

None.

D.3.b Council Action: Approve June 2006 Minutes

Mr. Warrens moved and Ms. Vojkovich seconded a motion (Motion 15) to approve the June 2006 meeting minutes as shown in Agenda Item D.3.b, June 2006 Council Minutes.

Motion 15 passed.

D.4 Legislative Matters (03/09/07 1:26 pm)

D.4.a Agenda Item Overview

Mr. Burner provided the agenda item overview.

D.4.b Legislative Committee Report

Mr. Burner summarized Agenda Item D.4.b, Supplemental LC Report.

D.4.c Reports and Comments of Advisory Bodies

None.

D.4.d Public Comment

Mr. Joel Kawahara, troller, Seattle, WA
Ms. Ann Maurice, Ad Hoc Committee, Occidental, CA
Ms. Ellen Faulkner, North Coast Consumers Alliance, Redwood Valley, CA

D.4.e Council Discussion

Mr. Moore moved and Mr. Cedergreen seconded a motion (Motion 16) to direct Council staff to track potential introduction of a revised version of the National Offshore Aquaculture Act and provide the information to the LC and Council at a later date. Motion 16 passed.

Mr. Moore moved and Mr. Warrens seconded a motion (Motion 17) stating that, if requested by Congress, have the Council ED send a response reflecting the LC concerns on H.R. 1187. Mr. Warrens seconded the motion. Mr. Lockhart abstained.

Ms. Fosmark spoke in support of a sending a letter in accordance with the LC recommendations and emphasized her concerns about new Sanctuary authorities identified in the bill.

Mr. Moore presumed that under the guidance given by this motion that the Executive Director would check with Council members for appropriate comments by Council members before sending the letter.

Mr. Thomas concurred with Ms. Fosmark's remarks on the legislation and expressed specific concern with the authority to regulate vessel discharges. This authority should remain under the USCG.

Mr. Warrens noted that in Agenda Item D.4.a, Supplemental Attachment 4 bottom of page 6, H.R. 1187 states that discharges do not apply to the discharge of fish or fish parts or biodegradable effluents from operable marine sanitation devices. Mr. Moore stated that the LC was recommending the Council request clarification on this part of the bill and confirm that the USCG retains its current level of authority on these matters.

Motion 17 passed.

D.5 Appointment to Advisory Bodies, Standing Committees, and Other Forums, and Changes to Council Operating Procedures (COP) as Needed

D.5.a Agenda Item Overview

Dr. John Coon provided the agenda item overview.

D.5.b Reports and Comments of Advisory Bodies

None.

D.5.c Public Comment

None.

D.5.d Council Action: Consider Changes to COP and Appoint New Advisory Body Members as Needed

Mr. Anderson moved and Mr. Cedergreen seconded a motion (Motion 18) to appoint Ms. Heather Reed to replace Ms. Michele Culver on the Groundfish Management Team. Motion 18 passed.

Mr. Anderson moved and Mr. Melcher seconded a motion (Motion 19) to appoint Dr. Stephen A. Barrager to the Groundfish Allocation Committee as the conservation advisory member. Motion 19 passed.

Ms. Vojkovich moved and Mr. Thomas seconded a motion (Motion 20) to appoint Mr. Steve Foltz to the Highly Migratory Species Advisory Subpanel for the Processors South of Cape Mendocino position. Motion 20 passed.

Mr. Lockhart moved and Mr. Moore seconded a motion (Motion 21) to appoint Mr. Lyle Enriquez to replace Ms. Elizabeth Petras on the Highly Migratory Species Management Team (HMSMT). Motion 21 passed.

Mr. Lockhart moved and Mr. Moore seconded a motion (Motion 22) to appoint Mr. Brian Hallman as the IATTC representative on the HMSMT. Motion 22 passed.

Dr. McIsaac noted Ms. Ginny Goblirsch has resigned as the community representative on the Ad Hoc Groundfish Trawl Individual Quota Committee (TIQC). Through consensus, the Council directed the staff to advertise for that vacancy.

D.6 Council Three-Meeting Outlook and April 2007 Council Meeting Agenda (03/09/07; 2:51 pm)

D.6.a Agenda Item Overview

Dr. McIsaac provided the agenda item overview and noted changes from the Monday review which included the addition of groundfish stock assessments in June, postponing the final approval of the whiting monitoring program, development of alternatives for Amendment 15, review of the OPAC report, and a NMFS coho rebuilding plan report.

D.6.b Reports and Comments of Advisory Bodies

Mr. Tom Ghio provided Agenda Item D.6.b, Supplemental GAP Report. Ms. Vojkovich read agenda Item D.1.b, Supplemental HC Report.

D.6.c Public Comment

None.

D.6.d Council Action: Adopt April 2007 Council Agenda, and Provide Guidance on Three Meeting Outlook and Priorities for Advisory Body Consideration

Council members worked with the Executive Director and Council staff to adopt the April 2007 Council agenda, provide guidance on the three-meeting outlook, and develop priorities for advisory body consideration.

There was a discussion on how to proceed with dealing with future AFA issues, knowing that the emergency rule, if adopted by NMFS, would only be a stop gap measure. While the IQ program might take care of the long term issues, Mr. Melcher supported bringing draft alternatives for Amendment 15 to the April meeting with further refinement in June and final adoption in September to deal with issues until the IQ program came on line. Dr. McIsaac cautioned that with limited staff resources and competing demands, we would need to do a simplified Amendment 15. Mr. Melcher stated that he would work to free up ODFW staff time to work on the amendment and have some preliminary options for April. ODFW does not have the economic expertise to do the full analysis and should not be depended on as the sole source of document development.

Mr. Lockhart said the Olympic Coast NMS has asked to be put on the June agenda tentatively to provide a presentation on their coral cruise.

Mr. Moore asked Mr. Lockhart about moving Amendment 10 (whiting monitoring) to June. Are we going to have it done in time for fishermen and processors to be able to comply with it? Mr. Lockhart replied in the affirmative, he was assured by his staff that if we approve it in June, we can have it in place for 2008.

Mr. Moore asked Mr. Lockhart, if the processor rule which is going to have some new requirements is not going to be in effect for April, would it be done in time for the June fisheries? Mr. Lockhart said he thinks so. Mr. Moore asked to suspend it until next season. Mr. Lockhart said he hears the concerns.

Mr. Anderson suggested moving all Friday groundfish items to Thursday and moving all HMS items to Friday.

Mr. Anderson moved and Ms. Vojkovich seconded a motion (Motion 25) to adopt the draft April agenda concepts as discussed and as shown in Agenda Item D.6.a, Supplemental Attachment 2. Motion 25 passed.

E. Groundfish Management

E.1 Groundfish Harvest Policy Evaluation Workshop Report

E.1.a Agenda Item Overview

Dr. McIsaac provided the agenda item overview.

E.1.b Workshop Report

Dr. Martin Dorn provided a PowerPoint presentation (download from Council website: Agenda Item E.1.b, Supplemental Workshop Report PowerPoint Presentation).

Mr. Moore asked about stocks with high recruitment variability such as whiting. Will OY projections for such stocks always trend downward? Dr. Dorn said that was an oversimplification but, in most cases, projection trends would be downward since strong recruitment occurs infrequently. The biomass abundance pattern for stocks like whiting are occasional peaks, followed by downward trends until the next strong year class is evident. The management challenge for whiting is developing a control rule that will not cause the stock to become overfished, even in the absence of fishing. Considerations like caps that preserve the abundance of strong year classes until the next strong recruitment event are recommended.

Mr. Anderson requested clarification on considerations for developing harvest policies for stocks like whiting with highly variable recruitment. The point, as he understood it, is that the highly variable whiting stock will decline in abundance from healthy levels to overfished levels even in the absence of fishing. However, managers should still consider the effects of fishing when deciding whiting harvest levels even when the stock is declining for other reasons, such as climatic conditions. Dr. Dorn said there is an effect of fishing on whiting abundance, but it is not the primary determinant of recruitment and biomass.

Mr. Anderson asked what is meant by the recommendation to develop harvest policies that perform robustly in the face of climatic regime shifts. Dr. Dorn replied it depends on the management objectives. An example of harvest policies that perform robustly in the face of climatic regime shifts are the control rules for sardine harvest. Environmental indices are used to characterize the climatic regime and prescribed harvest rates are lower when the regime is less productive. Such considerations could potentially also be applied in managing some groundfish stocks, when recruitment potential correlates with climatic regimes.

Ms. Vojkovich asked if the "Next Steps" recommended by the workshop participants are in priority order. Dr. Dorn said not necessarily- many of these next steps could occur simultaneously. The SSC and/or the Council could certainly prioritize these next steps.

Ms. Vojkovich asked if the recommended review of CPS harvest policies would focus on policies for managing finfish or should the focus be on squid management, where MSY proxies are used. Dr. Dorn said the participants wanted to focus on harvest policies for CPS finfish.

Dr. McIsaac acknowledged Dr. Dorn's strong role in setting up, chairing, and reporting on the Harvest Policy Evaluation Workshop and thanked him for his efforts.

E.1.c Reports and Comments of Advisory Bodies

SSC Report

Dr. Robert Conrad provided Agenda Item E.1.c, Supplemental SSC Report.

Dr. McIsaac asked about the SSC recommendation to complete work to calculate a prior (assumed value) for steepness for rockfish species as soon as possible to share with assessment authors and STAR penal members. Who is tasked to do this? Dr. Conrad said Dr. Dorn will complete this assignment.

Dr. McIsaac asked about the recommended time frame to convene the next harvest policy evaluation workshop to occur during the off year at a time that doesn't impact OYs for 2009-10. Is this recommended time frame after June 2008, when the Council is scheduled to decide final management measures for 2009-10 fisheries? Dr. Conrad said the SSC was focusing on a workshop in early 2008, possibly in January or February. Dr. McIsaac asked if the timing for a decision to consider changing

harvest policies would occur after June 2008 and Dr. Conrad said yes since the SSC envisions a three-meeting process would be needed to change harvest policies.

Mr. Moore asked if there was any SSC discussion on calculating or specifying priors on steepness for sablefish and Dr. Conrad said the SSC did not specifically discuss sablefish assessment recommendations. Dr. Dorn clarified the SSC discussion focused on classifications of species assessed in the last cycle. The problem with doing this for sablefish is that there are no other similar species to compare steepness values. This is really a question better suited for the next sablefish STAR panel.

E.1.d Public Comment

None.

E.1.e Council Discussion

Dr. McIsaac said we can put the workshop on the long-term planner. Mr. Moore encouraged the Council to move forward with another workshop. In terms of setting a harvest policy for whiting, we need to stay within the U.S.-Canada whiting treaty provisions on how harvest policy should be developed and decided.

Mr. Phil Anderson said these are critical issues for us to be engaged in, and encouraged the scientific community to stay engaged in it. He supports Dr. Dorn's work and the recommendations for the next steps in these investigations.

Mr. Dale Myer thanked the scientific community for their efforts in this workshop. He felt the B_0, dynamic B_0, B_{MSY} evaluations, as well as harvest policies for Pacific whiting should be the highest priorities for the next workshop.

Ms. Kathy Fosmark thanked Dr. Dorn for his report, and felt we should go forward with another workshop and fine tune this ongoing process. She wanted to prioritize investigating harvest policies for CPS species.

Ms. Vojkovich said there was advice to stock assessment authors in the workshop report, and wanted to make sure the next "batch" of stock assessment authors receive this advice.

E.2 NMFS Report (03/07/07; 9:45 am)

Mr. Bob Lohn introduced Mr. Barry Thom as the new Deputy Regional Administrator of the NMFS Northwest Region, replacing Joe Scordino. He also formally expressed the regrets of Dr. Bill Hogarth that he was not able to come to the Council meeting. Mr. Lohn then spoke about the revised Magnuson Act and how the Pacific Council serves as a role model for the rest of the Councils as we move forward in implementing the new amendments. Mr. Rod McInnis spoke briefly about the Council's participation in a recent Inter-American Tropical Tuna Commission meeting and other international issues.

E.2.a Regulatory Activities

Mr. Lockhart provided a brief report, referencing the recent Federal Register Notices (Agenda Item E.2.a, Attachment 1). Mr. Lockhart notified the Council that petrale sole experienced overfishing in 2005 (Agenda Item E.2.a, Attachment 2). As the letter points out, however, the Council took action to address this before NMFS sent the notifying letter, and therefore the Council needs to take no further action.

E.2.b Science Center Activities

Dr. Elizabeth Clarke provided an update on science center activities. The STAR Panel for the whiting stock assessment was held in February and included a Center for Independent Experts- selected reviewer and a reviewer selected from Canada, in hopes of moving forward with a process similar to that which will be required by the Whiting Treaty. A Stock Synthesis 2 training was held in early March and went very well. The NWFSC is holding a series of pre-assessment workshops on the stock assessments that they are sponsoring, in order to allow interested public to engage with the authors. The observer program is training the next class of observers in mid-March. The NWFSC is continuing its planning of the hake acoustic survey, which will take place this year, and is also working on inter-calibrations with the OSCAR DYSON. The NWFSC is still continuing planning for the bottom trawl survey. Dr. Clarke also discussed an item submitted by the SWFSC (Agenda Item E.2.b, Attachment 3), which is a summary of bronzespotted rockfish conservation concerns. Finally, Dr. Clarke referenced a total mortality report produced by the NWFSC.

Dr. McIsaac asked whether the purpose of including the report on bronzespotted rockfish in the briefing book was to inform the Council, rather than to request a bag limit change or to introduce a new stock for stock assessment purposes in this cycle. Mr. Lockhart stated that NMFS is not proposing any action at this point and that the report is informational for the Council. He said that he sees it appropriate for the Council to receive new information as it becomes available.

Dr. Jim Hastie provided a presentation on the total mortality report (Agenda Item E.2.b, Attachment 1 and Agenda Item E.2.b, Supplemental Science Center Activities Powerpoint). Dr. Hastie highlighted total mortality of canary rockfish, given the report's findings that the species' OY was exceeded by 1.9 mt. He explained that this overage was primarily due to trawl catches in the northern fishery shoreward of the RCA. In trying to evaluate what factors led to this, it became apparent that the rates used to model the fishery in late 2005 and 2006, which had been derived from the Oregon selective flatfish trawl EFP, were actually considerably lower than those being seen in the 2005 fishery. Dr. Hastie then reviewed a finer spatial analysis of the canary rockfish bycatch rates (Agenda Item E.2.b, Attachment 2) and suggested potential reasons for the difference between the bycatch rate observed during the EFP and that which occurred in the 2005 fishery.

Mr. Anderson explained that there is a notable difference between the tribal and non-tribal trawl bycatch rates of canary rockfish. Dr. Hastie responded that he had not had discussions with technical managers of the tribal fisheries related to fishing practices that yield these differences. Mr. Anderson then noted that there was a higher percentage of trawls observed on the northern Washington coast as compared to other parts of the coast. He asked if there could be a bias brought about by observing one region, for instance, six months out of the year as compared to another area that is observed two months, given that the lower observation rates could allow for greater opportunity for operators to change their behavior and so yield a different bycatch rate. Dr. Hastie responded that confidence in an estimate's precision increases with higher observation, and he acknowledged that there is a greater chance for a vessel operator to change behavior while not being observed. Mr. Anderson then asked if higher bycatch rates also corresponded to a higher relative distribution of abundance for that area. Dr. Hastie replied that in general the pattern is consistent between the trawl survey data and the bycatch rate, given that the biggest survey tows are generally found in northern Washington. With respect to Dungeness crab bycatch, Mr. Anderson asked whether data was available in higher spatial resolution for its bycatch rate in the north. Dr. Hastie said that such data had not been produced but could be.

Responding to questions from Mr. Moore, Dr. Hastie noted the increase in the bycatch rate from the first four months of 2005 to the first four months of 2006; it was these two windows of data that were used to try to capture the fishery's bycatch rates. Mr. Moore asked if there had been changes to influencing

factors between the two years, such as changes to participation levels. In the observed trips, Dr. Hastie responded, there had been a shift in effort from south of Leadbetter Point to north.

Dr. McIsaac asked about the possibility of an early alert mechanism, so that the Council could be informed about significantly higher bycatch rates in time to take better corrective action. Dr. Clarke said that the current schedule is based on that agreed to by the Groundfish Information Policy Committee. She then offered that she could present to the Council in April an analysis of an alternative schedule, warning, however, that real-time reporting of catch is not possible due to bottlenecks in the process (e.g., fishtickets). Dr. Hastie suggested that the science center could provide the Council with updated bycatch rates on a more frequent basis.

E.2.c Reports and Comments of Advisory Bodies

None.

E.2.d Public Comment

None.

E.2.e Council Discussion on NMFS Report for Groundfish

None.

E.3 Pacific Whiting Harvest Specifications and Management Measures for 2007

E.3.a Agenda Item Overview (03/07/07; 10:52 am)

Mr. John DeVore provided the agenda item overview.

Ms. Eileen Cooney explained the implementing rules for the U.S.-Canada allocation awaits ratification of the Pacific whiting treaty. Therefore, the Council needs to do this until the international whiting advisory bodies are developed. Mr. Moore asked if it was appropriate for the Council to recommend a whiting ABC and OY today and Ms. Cooney said yes.

E.3.b Reports and Comments of Advisory Bodies

SSC Report

Drs. Conrad and Conser provided Agenda Item E.3.b, Supplemental SSC Report.

Mr. Moore asked if the revised executive summary to the new stock assessment provided the most accurate decision table and Dr. Conser said yes.

Mr. Moore said he was confused with the q statement in the last paragraph of the SSC report, which states, "while the absolute biomass level is very sensitive to the value assumed for q, the trend is less so." He asked how this statement was consistent with the flat trend from the acoustic survey data. Dr. Tom Helser, the lead author of the new whiting assessment, said the acoustic survey data points are flat with little annual contrast. The 1986 data point, which did provide contrast, was removed from the series on the advice of an earlier STAR panel. Age and length compositions in the assessment show much annual variation in recruitment and biomass and are mismatched with the acoustic survey data. The catchability coefficient, q, is therefore used as a scalar when determining biomass trends.

Mr. Anderson noted there was extensive age and length data in the assessment and asked what was gained by the extensive sampling needed to obtain these data. Dr. Helser replied these data were used to determine recruitment events and the age structure of the population. Mr. Anderson asked if these data were collected coastwide in the U.S. and Canada and used in the assessment. Dr. Helser said yes, the survey has few data points and more information is therefore derived from age and length compositions.

GMT Report

Ms. Kelly Ames and Mr. Merrick Burden provided Agenda Item E.3.b, Supplemental GMT Report.

Mr. Moore noted the statement, "near average recruitment in 2003 and 2004" in the second paragraph of the GMT report. He also noted the assessment suggested these were above average year classes. Mr. Burden answered this would be true if the 1999 year class was removed from the assessment.

Mr. Moore asked about the concept of setting an OY based on bycatch rates from the non-tribal fishery. Why not include observed bycatch rates from the tribal fleet? Mr. Burden said the assumption was that the Council would continue to specify bycatch caps for the non-tribal sectors and not for the tribal fleet. Mr. Moore said the fishery has been managed with the same whiting OY during the last two years, a lower OY three years ago, and none of the non-tribal bycatch caps have been exceeded. How would this factor into a lower OY? Mr. Burden said the lower OY was due to an increased widow rockfish bycatch rate in the at-sea sectors. Mr. Moore asked if the GMT is expecting this increased trend to continue even though the widow rockfish bycatch rate decreased in the 2006 shorebased whiting fishery and Mr. Burden said yes.

Chairman Hansen asked the states to introduce their new GMT members. Mr. Melcher introduced Ms. Kelly Ames as the new ODFW member and also the new chair of the GMT; and Mr. Anderson introduced Ms. Heather Reed as the new WDFW member of the GMT.

GAP Report

Mr. Tom Ghio provided Agenda Item E.3.b, Supplemental GAP Report. GAP members Dan Waldeck and Bob Alverson were available to answer Council questions.

Ms. Vojkovich asked where the coastwide OY of 364,197 mt came from and Mr. Waldeck said that was last year's OY. Mr. Moore said this would be the coastwide (U.S. + Canada) OY resulting from the specified U.S. OY and the U.S.-Canada allocation approved in the whiting treaty.

Mr. Anderson asked Drs. Conser and Helser if the 2006 specifications in Table h of the revised executive summary were the same as in the last assessment and Dr. Helser said depletion rates, spawning stock biomass estimates, etc. are all new estimates. Mr. Anderson asked if the 2007 values in Table h derived from the acoustic survey and new age/length compositions were subsequent to the last assessment and Dr. Helser said yes. Mr. Moore asked if the total coastwide catch values in Table g were ABCs or OYs and Dr. Helser said they were OYs. Mr. Moore asked where he could find the ABC projections and Dr. Helser said they were in the text on page 11.

Mr. Moore asked if the q=1 model is correct and the total coastwide catch was 300,000 mt, is the depletion rate at the end of 2008 equal to 27.8%. Dr. Helser said no, that would be the depletion rate at the beginning of 2008.

Mr. Moore asked if the last acoustic survey was in 2005 and Dr. Helser said yes. Mr. Moore asked if that meant the only new data in this assessment relative to last year's assessment was fishery catch and age data and Dr. Helser said yes.

E.3.c Public Comment

Ms. Karen Garrison, NRDC, San Francisco, CA
Mr. Mike Okoniewski, Pacific Seafood, Woodland, WA
Mr. Tom Libby, Pt. Adams Packing Company, Astoria, OR
Mr. Ben Enticknap, Oceana, Portland, OR

E.3.d Council Action: Adopt 2007 Stock Assessment, Allowable Biological Catch, Optimum Yield, and Management Measures (03/07/07; 1:20 pm)

Mr. Lockhart said the GMT requested a list of priorities be developed to resolve assessment model uncertainties. He asked Dr. Ray Conser, the STAR Panel chair, to make a list of those priorities. Dr. Conser said some type of follow-up with the GMT would be a useful thing to do.

Mr. Anderson asked the GMT for the estimated depletion rates in 2007 and 2008 using the blended model. Mr. Burden said those estimates were not in the GMT report, but they could be easily provided.

Mr. Moore asked about the discrepancy in the status quo coastwide (U.S. + Canada) OY reported by the GMT and the GAP. He calculated the status quo coastwide OY by dividing the status quo U.S. OY of 269,069 mt by the U.S. allocation percentage of .7388 to derive the GAP-reported figure of 364,197 mt. Mr. DeVore said Mr. Moore's calculation was correct. The GMT-reported OY came from the 2006 assessment, but the 2006 U.S. OY was from the 2005 assessment or, more precisely, a re-specification of the 2005 U.S. OY.

Mr. Moore asked if there was a way to back calculate the coastwide ABC from the coastwide OY last year using the 40-10 rule. Mr. Burden said the OY in these tables are independent of the ABC calculation. Mr. Moore then said he was concerned if the Council were to decide to pick a status quo (2006) US OY and the corresponding coastwide ABC, would we be below the OY that is derived from using the more precautionary assessment model as modified by the 40-10 rule. Mr. Burden said that is correct as indicated in Table g in the STAR panel report.

Mr. Anderson asked Dr. Helser about Table h on page 15 of the revised executive summary of the assessment. The table shows 2005 landings of 360,300 mt and an ABC of 265,000 mt- are these data correct? Dr. Helser said it appears the 2005 ABC value in that table is incorrect; it appears to be a typographic error. Ms. Vojkovich referenced Table e in the same document, which shows a 2005 ABC of 531,124 MT. Mr. DeVore said he referenced last year's assessment document and the ABC value in Table e is the correct specification.

Mr. Anderson said he was still not sure of the 2006 coastwide OY. Mr. DeVore explained it would be 364,197 mt, which is derived by dividing the specified U.S. OY by the U.S. allocation percentage (0.7388). Mr. Anderson asked if that was the coastwide OY value decided last year by the Council and Mr. DeVore said no, the Council specified a coastwide OY of 364,842 mt in 2006.

Ms. Vojkovich asked about the relative strength of the 2003 and 2004 year classes and how well the available fishery dependent data informs us about the relative strength of these year classes. Dr. Helser said there is great uncertainty about the relative strength of these year classes from the fishery dependent data due to the selectivity of the fishing gear, which does not efficiently capture whiting of this size and

age. While the coastwide pre-recruit survey data indicates the 2004 year class is stronger than any since 2001, its strength will not be validated until results of the 2007 acoustic survey are available. Ms. Vojkovich asked if the older assessments that first detected the strong 1999 year class had a similar signal regarding relative year class strength. Dr. Helser said the fishery dependent data in the 2001 assessment showed a very strong signal regarding the strength of the 1999 year class for all fisheries except those in Canada. The signal then was much stronger than the one in this assessment for the 2004 year class.

Mr. Anderson moved and Mr. Cedergreen seconded a motion (Motion 7) to adopt a coastwide 2007 ABC of 612,068 mt for Pacific whiting. This value is calculated using the more conservative q=1 model.

Mr. Moore asked if the intent of the motion is to only specify the ABC and not show preference for the q=1 model and Mr. Anderson said that was correct.

Motion 7 passed.

Mr. Anderson moved and Mr. Cedergreen seconded a motion (Motion 8) to adopt a coastwide 2007 OY of 328,358 mt for Pacific whiting, of which the U.S portion of the whiting OY would be 242,591 mt.

Mr. Anderson explained this is an extremely valuable fishery and conserving the stock merits precaution. This is not a status quo decision. Without a stronger recruitment signal, we need to proceed more cautiously. The 1999 year class is waning and no strong year classes have evidently been produced since. He is concerned with the declining spawning stock biomass and the depletion trend in this assessment. Last year's assessment projected a 2008 depletion of 25.1%. This year's assessment projects a 2009 depletion of 25.9%. He wanted to set a coastwide OY which would result in a 2008 depletion of 26%. The coastwide OY from this motion is about 10% less than the 2006 coastwide OY.

Mr. Moore offered a substitute motion to Motion 8. He moved and Mr. Warrens seconded a substitute motion to adopt a coastwide OY of 364,198 mt, of which the U.S. portion of the OY would be 269,069 mt.

Mr. Moore explained this is the status quo OY specified in 2005 and 2006. The coastwide OY is based on the status quo U.S. OY divided by the U.S. share of 73.88% of the coastwide OY as stipulated in the U.S.-Canada whiting treaty. The whiting fishery has been fairly stable over the long term. The U.S.-Canada STAR Panel reviewed an alternative Canadian assessment model this year which indicated a much lower B_0 and a more stable spawning stock biomass over time. A stock, such as Pacific whiting, with high recruitment variability will always trend down without a super year class in the recent recruitment. The data indicates above average recruitment of the 2003 and 2004 year classes. The Council shouldn't punish industry for stock assessment uncertainty. He recommended staying with status quo harvest specifications this year. This year's acoustic survey will inform next year's assessment on the strength of recent recruitment.

Mr. Myer said he was expecting better recruitment signals in this year's assessment. Without better recruitment, he believes the Council should be more cautious. Therefore, he is against the substitute motion.

Vote on the substitute motion: 6 yes, 7 no. Messrs. Anderson, Thomas, Myer, Cedergreen, Mallet, Ortmann, and Ms. Vojkovich voted no. The substitute motion failed.

Mr. Moore said he intended to vote against the main motion, not out of disrespect, but because of his strong belief the whiting resource is in better shape.

Chairman Hansen asked for the vote. Main Motion 8 passed. Mr. Moore voted no.

Mr. DeVore said the Council still needed to adopt the tribal whiting OY. The US OY tribal allocation sliding scale formula changes if the U.S. OY is under or over 250,000 mt. With a U.S. OY of 242,591 mt, the tribal allocation would be 32,500 mt.

Mr. Sones moved and Mr. Warrens seconded a motion (Motion 9) to adopt a tribal set aside for Pacific whiting of 32,500 mt. This is based on the sliding scale allocation formula developed for tribal whiting fisheries. Motion 9 passed. Mr. Sones abstained from the vote and recused himself from any discussions.

Mr. Moore asked if the Council needed to adopt bycatch caps at this point and Mr. DeVore recommended deferring that decision until the groundfish inseason adjustments Agenda Item E.5.

E.4 Trawl Rationalization (Trawl Individual Quota (TIQ) Program)

E.4.a Agenda Item Overview (03/08/07; 9:04 am)

Mr. Seger provided the agenda item overview.

E.4.b Report of the GAC (03/08/07; 9:49 am)

Dr. McIsaac briefly went over Agenda Item E.4.b, Supplemental GAC Report. Mr. Anderson reviewed the goals and objectives attachment.

E.4.c Report of the TIQC

Mr. Seger provided Agenda Item E.4.c, Supplemental TIQC Report. Mr. Seger also referenced Agenda Item E.4.c, Addendum to Supplemental TIQC Report. Council members asked questions of Mr. Seger regarding the report.

E.4.d Reports and Comments of Advisory Bodies (03/08/07; 10:56 am)

Dr. Conrad provided Agenda Item E.4.d, Supplemental SSC Report. Mr. Ellis provided Agenda Item E.4.d, Supplemental HC Report. Mr. Merrick Burden provided Agenda Item E.4.d, Supplemental GMT Report. Mr. Tom Ghio provided Agenda Item E.4.d, Supplemental GAP Report. Mr. Tommy Ancona, GAP, joined Mr. Ghio to field questions from Council members.

E.4.e Public Comment (03/08/07; 1:17 pm)

Ms. Meghan Jeans, NRDC, San Francisco, CA
Ms. Laura Pagano, NRDC, San Francisco, CA
Mr. Jim Wylen, Environmental Defense, Seattle, WA
Mr. Will Stelle, Environmental Defense, Seattle, WA
Mr. Peter Huhtula, PMCC, Astoria, OR
Mr. Tom Libby, West Coast Seafood Processors Association,
Mr. David Jincks, Midwater Trawlers Cooperative, Newport, OR
Mr. A. Pierre Marchand, Jesse's Ilwaco Fish Company, Ilwaco, WA
Mr. Marion Larkin, trawler, Mount Vernon, WA
Mr. Steve Fick, Fishhawk Fisheries, Astoria, OR
Mr. Matthew Love, Ocean Beauty Seafood, Seattle, WA

Mr. Joe Plesha, Trident Seafoods, Seattle, WA
Mr. Brent Paine, United Catcher Boats, Seattle, WA
Ms. Donna Parker, Arctic Storm Management Group, Seattle, WA
Mr. Kent Craford, West Coast Seafood Processors Association, Portland, OR
Mr. Mike Storey, fisherman, Warrenton, OR
Mr. Robert Smith, fisherman, Warrenton, OR
Mr. Richard Carroll, Ocean Gold Seafoods, Westport, WA
Mr. Mark Cooper, Cooper Fishing, Inc., Toledo, OR
Mr. Bob Osborn, United Anglers of Southern California, Surfside, CA
Mr. Mike Okonowieski, Pacific Seafood, Woodland, WA
Mr. Ralph Brown, trawler, Brookings, OR

E.4.f Council Action: Refine Alternatives (03/08/07; 4:25 pm)

Dr. Dave Hanson moved and Ms. Vojkovich seconded a motion (Motion 10), to adopt the GAC Report E.4.b, including attachments, with the following changes (1) change the goals and objectives in E.4.b to the goals and objectives, as they would be modified by the TIQC Report E.4.c, (2) the modifications provided in Agenda Item E.4.f, Supplemental Motion 1, and (3) the shoreside co-op for analysis. The co-op alternatives should be considered works in progress; however, the time for making additional modifications is limited.

Dr. Hanson favored continued consideration of IFQ alternatives for the mothership and catcher processor sectors, along with co-ops, because of concern for the potential for co-op management to deteriorate into a derby. He also highlighted that the motion does not include a use-or-lose provision.

In response to Mr. Moore, Dr. Hanson confirmed that the motion included the grandfather clauses mentioned in the TIQC report and the mothership and catcher-processor co-op alternatives in the GAC report.

Mr. Anderson moved to amend Motion 10 relative to the goals and objectives recommendations in the TIQC Report, under the goal, third line, following the underlined verbage and after the comma, insert "considers environmental impact;" and under objective 3, after "promote practices, reduce discard mortality," insert "and minimize ecological impacts." Mr. Cedergreen seconded the motion to amend. Mr. Anderson said he was making the amendments in response to public comment about the elimination of the language that referenced ecological impacts and the Habitat Committee report. He also wanted to recognize the groundfish FMP goals and objectives related to EFH. Mr. Lockhart, speaking in support of the amendment noted that the conservation benefits are one of the primary reasons we should pursue this action. Mr. Roth also spoke in support of the amendment as a key tool to better meet our conservation goals. The amendment passed.

With respect to providing entry level opportunities, Dr. Hanson noted the extensive divisibility of quota shares (QS) will allow new entrants to buy small quantities and move into the fishery slowly. The Council discussion noted that this issue needed to be considered but that special entry level opportunities are not necessarily required.

Ms. Vojkovich moved to amend Motion 10 to include an option for equitable sharing of observer costs as part of Option 2 under B.3.1. Mr. Thomas seconded the amendment. Ms. Vojkovich said there are many smaller vessels in California that could not take on the burden of observer costs. She would like to look for ways to more equitably distribute the costs for the small vessels. The amendment passed.

Mr. Lockhart noted that implementation of a carryover provision is going to be challenging for NMFS. The permit office has started putting together a "lessons learned" package for the sablefish program and any other kind of permitting programs. With respect to providing special entry level opportunities, he liked Mr. Brown's idea of having the Council look at this issue after the program has been implemented. He also spoke in support of the option for mandatory information collection, which would help the Council assess the impacts of the program.

Ms. Cooney noted that the co-op alternatives would need to be fleshed out and refined. One issue that will need to be addressed is the proposal for a mandatory commitment to deliver to certain processors for the first two years. This may not be doable under the current Magnuson-Act. Some of the proposals will need rationale for some of the provisions and which dates have been choosen. She also noted the need to clarify the assignment of catch for mothership permits to a co-op and what that means as participants of the co-op change. Mr. Moore encouraged NOAA Fisheries General Counsel to meet with and discuss concerns with the proponents

Mr. Anderson noted the two recommendations by the GMT in their Supplemental Report for allocations based on proxies and asked if Council action was necessary to approve consideration of landing composition information from fish tickets to help determine catch location. Dr. Hanson stated his agreement that GMT proceed in that fashion and Mr. Lockhart concurred. Dr. Hanson noted that the GMT supplemental report recommended dropping the second of the options initially proposed by the GMT and that this was within the intent of his motion. The Council concurred.

Mr. Sones asked about the rationale for not including the GMT recommendation for sideboards for Pacific halibut. Dr. Hanson stated his disagreement with the GMT, noting that IQ programs generally bring about a decrease in bycatch and that this is something the Council can work on later if problems develop. Mr. Anderson did not want to eliminate it. Dr. Hanson said it needs to get fleshed out and discussed and was not necessarily eliminated.

With respect to the attribution of processing history, Mr. Anderson noted the major effort required to analyze Option 2 and his concern that it would detract from meeting the Congressional deadline. Mr. Seger noted that it is likely that we would work with a contractor to develop some of the needed information. Mr. Moore expressed his concern that offloading facilities not receive credit for processing history but concurred with Mr. Anderson that history transfer with the facility transfer or leasing would get messy. Mr. Anderson moved to amend Motion 10 relative to the attribution of processing history, as follows: leave Option 1 as stated, add a new Option 2 that would attribute processing history to the receiver if that entity meets the definition of processor, and create a new Option 3 by modifying the old Option 2 through the elimination of all text following the period after "process." Mr. Moore seconded the amendment. This modification eliminated references to the transfer of processing history with the transfer of a facility. The amendment passed.

Motion 10 passed as amended 3 times.

Ms. Vojkovich (Motion 11) asked Council staff to develop a white paper exploring alternatives to options in the document that she views as addressing "stranded capital." Right now there are two options that deal with the allocation of shares between permits and processors. She heard public testimony that there may be ways other than the allocation of IFQ to processors through which processors economic issues might be addressed. Mr. Thomas seconded the motion. Mr. Moore stated stranded capital is not the only reason for providing an allocation to processors. Mr. Myer did not want to lose focus trying to define "stranded capital." He said he is not in favor of the motion. Ms. Vojkovich explained that her concern was finding different ways to address the fallout impacts on processors, other than allocation of IFQ to processors.

Mr. Moore moved to amend Ms. Vojkovich's motion (Motion 11) and by tasking the GAC and its advisors with recommending suggestions for other alternatives to addressing some of these problems. Mr. Warrens seconded the amendment to Motion 11. Mr. Anderson referenced Objective 6 and the promotion of economic benefits and employment. One of the reasons for the action is concern about overcapitalization. Consolidation will strand capital. The question is how do we get to this objective in a fair way, that avoids putting people out of business. In response to a question from Mr. Anderson, Mr. Seger said Council and NMFS staff have been talking about approaches for estimating stranded capital and approaches to collecting needed information through surveys, etc. These will be pursued in the coming months. On the basis of the potential that some quantitative information may be forthcoming, Mr. Anderson said he would support the amendment to Motion 11. There was a discussion of the motions clarifying that the GAC deliberations would occur first and that a white paper might come out of the GAC discussion. The amendment passed and the main motion passed as amended.

Dr. Dave Hanson moved (Motion 12) to adopt the TIQCs recommendation that the Council ask NMFS, to collect the information needed to evaluate the concentration of ownership as part of the limited entry permit renewal process (Agenda Item E.4.c, Supplemental TIQC Report, page 6). NMFS staff has indicated that this can be done, be in place for 2008, and available for use in the EIS. Mr. Moore seconded the motion. Mr. Moore, asked if some initial work would be done to get the data that would include the processing sector. Dr. Hanson said no, that would not be included as part of the motion. Mr. Moore noted the new MS-Act might provide the authority needed to collect such information. Mr. Seger, noted that information would be available on processors to the degree that processors own permits and that they would be exploring with contractors the possibility of collecting publicly available ownership information on processors. Motion 12 passed.

E.5 Consideration of Inseason Adjustments (03/09/07; 8:10 am)

E.5.a Agenda Item Overview

Mr. John DeVore provided the agenda item overview.

E.5.b Report of the Groundfish Management Team

Ms. Ames and Mr. Burden provided Agenda Item E.5.b, Supplemental GMT Report.

Mr. Moore asked about the projected canary rockfish impacts in this year's limited entry non-whiting trawl fishery under the GMT-recommended adjustments and Mr. Burden answered 8.1 mt.

Mr. Moore noted the GMT's concern with midwater trawls fishing for whiting in the RCA while sorting their catch during the primary season without full monitoring. Why can't an adjustment to this fishing strategy be made as a routine inseason adjustment? Mr. DeVore said a routine adjustment cannot be made because this strategy, its associated impacts, and possible actions to mitigate these impacts were not analyzed in the 2007-08 Groundfish Harvest Specifications and Management Measures EIS. Mr. Moore countered the Council could specify new whiting trip limits and asked Mr. Lockhart and Ms. Cooney why this change could not be routinely made. Mr. Lockhart said Mr. DeVore's conclusion that this change could not be routinely made was correct.

Mr. Anderson noted the GMT was recommending closing shoreward of the trawl RCA north of Cape Alava, which will probably move the small Neah Bay fleet south of Cape Alava. Did the GMT consider the effect of this effort shift? Mr. Burden answered yes, the GMT was trying to shift larger vessels seaward of the RCA. The GMT is uncertain about the effort shift of small vessels.

Mr. Anderson said it is important to pursue hot spot/cold spot (i.e., RCA/GFA [Groundfish Fishing Area]) management to keep from closing large swaths of the coast. He requested help from NMFS on spatial analyses needed to more finely resolve area management strategies.

Mr. Anderson remarked on the GMT recommendation to close the area shoreward of the RCA between the Columbia River and Leadbetter Point to 60 fm. He couldn't understand the GMT's rationale that trawl/crab interactions would be minimized due to a larger shelf area there. He is concerned with trawl interactions with soft-shelled crabs and he noted there is a perception problem with a coincident action to move the trawl fleet inside of 60 fm while closing the crab fishery outside 4 nm. He asked if this adjustment was critical in period 5 and asked the GMT to analyze this prior to inseason adjustment considerations at the April Council meeting. He preferred expanding the trawl RCA to 75 fm in period 5.

Mr. Anderson asked about overfished species' bycatch caps in the whiting fishery and if it was reasonable to increase the widow rockfish cap from 200 mt to 220 mt and Mr. Burden said yes.

Mr. Lockhart mentioned that the NMFS Northwest Region and the Northwest Fisheries Science Center have begun discussing the need for greater spatial analysis. He asked if changing the widow rockfish bycatch cap in the whiting fishery would not have an effect on widow rockfish rebuilding and Mr. Burden said yes, but the action would not compromise the widow rockfish rebuilding plan.

Dr. McIsaac remarked on the bronzespotted rockfish issue discussed under the NMFS Report (Agenda Item E.2) by saying the normal practice is to make changes to a stock's status and management measures for that stock based on recommendations and results from a stock assessment.

E.5.c Agency and Tribal Comments

Tribal Comments

Mr. Steve Joner, representing the Makah Tribe, spoke about strategies employed by the Makah Tribe to reduce canary rockfish and other overfished species' impacts in the two tribal trawl fisheries. The Makah Tribe has a fleet of ten trawl vessels, which may be reduced to eight this year. The majority of canary rockfish bycatch occurs in the midwater trawl fishery. Tribal fishermen minimize bycatch by sharing information from fishermen and observers with the entire fleet. The Tribe also relies on information from non-tribal trawlers, which will be lost if the Council adopts the GMT recommendation to close nearshore trawling north of Cape Alava. An area is deemed safe to fish after 2-3 vessels with at least one observer fish an area and encounter insignificant bycatch. The area stays open until bycatch increases. The canary rockfish bycatch in the tribal midwater trawl fishery targeting yellowtail rockfish in the last few years has been as follows: 2004- 500,000 lbs of yellowtail with 1 mt of canary; 2005- 1,000,000 lbs of yellowtail with 2 mt of canary; and 2006- 250,000 lbs of yellowtail with 1-2 mt of canary. In 2006, the tribal midwater trawl fishery closed early due to concerns with increased canary bycatch. This year the Tribe plans to abandon the high-rise trawls previously used for midwater trawling and will go to a midwater trawl net as defined in federal regulations. The Tribe is encountering more canary rockfish now than in previous years and are working on new strategies to reduce bycatch.

Mr. Anderson said WDFW would share information with the Makah Tribe to shape a more selective tribal fishery and Mr. Joner welcomed the consultation.

NMFS Comments

Mr. Lockhart said the GMT has done a great job of laying out the canary rockfish bycatch problem and

exploring the various options the Council needs to consider to address this concern.

ODFW Comments

Mr. Melcher said ODFW is not currently proposing any inseason changes to their recreational fishery and they are taking these bycatch issues seriously.

WDFW Comments

Mr. Anderson said the proposed changes to the Washington recreational fishery are based on the estimated impacts in their 2006 fishery.

CDFG Comments

Ms. Vojkovich said CDFG is waiting to finalize the 2006 California recreational catch estimates, as well as the re-estimates for their 2004 and 2005 fisheries before proposing inseason adjustments to this year's fishery.

E.5.d Reports and Comments of Advisory Bodies

GAP Report

Mr. Ghio provided Agenda Item E.5.b, Supplemental GAP Report.

Mr. Moore asked if it was possible to limit the number of inseason adjustments requested by the GAP and Mr. Ghio said the GAP would strive to be more selective and vigilant. Mr. Lockhart mentioned the Council's informal policy to not increase fishing opportunities through inseason adjustments in March, but to only consider decreases if needed.

E.5.e Public Comment

Mr. Alan Hightower, F/V Sea Otter, Port Townsend, WA
Mr. Mike Okoniewski, Pacific Seafoods, Woodland, WA
Mr. Ralph Brown, trawler, Brookings, OR
Mr. Ben Enticknap, Oceana, Portland, OR
Mr. Jay Bornstein, Bornstein Seafoods, Bellingham, WA

E.5.f Council Action: Adopt Recommendations for Adjustments to 2007 Fisheries

Mr. Anderson moved and Mr. Moore seconded a motion (Motion 13) to adopt the following inseason adjustments to this year's groundfish fisheries: GMT recommendations #1; #2; #3; and for #4 adopt the bycatch caps for canary, darkblotched, and widow rockfish as recommended by the GAP in Agenda Item E.5.d, Supplemental GAP Report; and #6 (on page 12 of Agenda Item E.5.d, Supplemental GMT Report). For recommendation #6, the analysis does not necessarily have to occur in the Amendment 10 EA.

Mr. Anderson said he thought there was little risk in maintaining the current whiting trawl trip limits outside the primary season since there will be observer coverage for that segment of the fleet. This is why he did not include GMT recommendation #5 in the motion.

Mr. Lockhart said he supports the motion. NMFS will continue to look at whiting trip limits outside the primary season and apprise the Council if any problems emerge. Motion 13 passed.

E.6 Emergency Rule Limiting 2007 Whiting Vessel Participation (03/09/07; 10:09 am)

E.6.a Agenda Item Overview

Mr. Burner provided the agenda item overview.

E.6.b NMFS Report

Mr. Lockhart spoke to Agenda Item E.6.a, Attachment 2; and Agenda Item E.6.a, Attachment 3.

E.6.c Reports and Comments of Advisory Bodies

Mr. Burner noted ODFW submitted written comments (Agenda Item E.6.c, Supplemental ODFW Report) for the Council administrative record. Mr. Ghio provided Agenda Item E.6.c, Supplemental GAP Report.

Mr. Myer noted he would be recusing himself from the vote as advised by NOAA GC as he has financial interests.

E.6.d Public Comment

Mr. Brent Paine, United Catcher Boats, Seattle, WA
Mr. Chris Garbrick, Mark I Inc., Seattle, WA
Mr. Craig Cross, Aleutian Spray Fisheries, Seattle, WA
Mr. Richard Carroll, Ocean Gold Seafoods, Westport, WA
Mr. Craig Cochran, F/V Bay Islander, Newport, OR
Mr. Mark Scheer , Starbound LLC, Seattle, WA
Mr. Tom Libby, Pt. Adams Packing Company, Astoria, OR
Mr. David Jincks, Midwater Trawlers Cooperative, Newport, OR
Ms. Linda Larson, Marten Law Group, Seattle, WA
Mr. John Bundy, Glacier Fish Co., LLC, Seattle, WA
Mr. Mike Hyde, American Seafoods Company, Seattle, WA
Mr. Joe Pleschner, Trident Seafoods, Seattle, WA
Mr. Mike Atteberry, Alaska Ocean Seafoods, Inc., Seattle, WA
Mr. Mike Okoniewski, Pacific Seafood Group, Woodland, WA
Mr. Jim Martin, RFA, Ft. Bragg, CA

E.6.e Council Action: Consider Requesting an Emergency Rule to Limit Vessels in the 2007 Whiting Fishery to Address Conservation Concerns

Ms. Vojkovich moved and Mr. Thomas seconded a motion (Motion 14), to recommend NMFS adopt an emergency rule for the 2007 Pacific whiting fishery that would prohibit participation in the shore-based, catcher processor and mothership sectors of the fishery by any vessel that has no historic participation in these sectors prior to January 1, 2007.

Ms. Vojkovich said she has been a proponent of addressing over capacity and latent capacity issues in our open access groundfish fishery. She reminded the Council of the significant action earlier in the day to close a large portion of the coast in the north to reduce canary rockfish bycatch. We heard during public testimony that there are existing vessels that are already outfitted with the proper gear and capacities to quickly enter the West Coast Pacific whiting fishery. In recent years, we have seen a lot of participation in the Pacific whiting fishery because the price has been attractive and inviting new participants is not

something that would help the groundfish fishery. We take a lot of precautionary management actions based in part on catch and effort projections and in her perspective, this action is a precautionary measure. She stated concern about potential shift in effort from the Pacific whiting fishery to the groundfish bottom trawl fishery by vessels that are not able to compete with new entrants. This situation will only worsen bycatch issues. We have talked about overcapitalization in the groundfish fleet for the many years and we are working on several mechanisms to address overcapitalization. We should not ignore those efforts and provide an avenue that encourages more participation. She believes that people are responsible fishermen as stated in public testimony and that everyone would likely make an effort to avoid bycatch. However, the amount of allowable bycatch for all of our fisheries is very small and she is not comfortable in allowing increased participation that will likely result in less conservative fishing practices.

Mr. Myer asked if the motion would limit participation by both motherships and the catcher vessels that land fish to the motherships. Ms. Vojkovich stated the motion requires historic sector specific activity by all vessels to participate.

Mr. Lockhart stated that in order to maintain the flexibility of the Secretary to review the entire record and make a decision he will have to vote against the motion. His vote is not intended to prejudge the motion or suggest an outcome.

Mr. Anderson stated that this is a tough decision for him as he has been outspoken in his opposition to using emergency rules for the purpose of excluding individuals or vessels from participating in a particular fishery. He spoke to this position at the September 2006 Council meeting and following that meeting he asked WDFW to write a letter to the SOC and Dr. Hogarth opposing the Council's September 2006 action on this matter. He stated he feels just as strongly today as he did then. He said he was persuaded in September 2006 by the testimony regarding the performance of the fishery and the stated needed to prohibit additional effort into this fishery because of the concerns associated with our overfished stocks and salmon listed under ESA. As Ms. Vojkovich said, relative to canary rockfish bycatch, we don't have any room on our bycatch scorecard to exceed our rebuilding OY and we have exceeded the canary rebuilding OY in '03, '04, and '05 and most likely for '06 based on the bycatch update we received this week. We are taking extreme actions to restrict the traditional groundfish sector this year to prevent this from recurring. It is therefore incumbent on us to respond with management actions if a situation develops that has a reasonable degree of risk of exceeding OYs. This motion does that. He is also concerned about the salmon bycatch and acknowledges the public testimony about efforts of the whiting fleet to avoid salmon, but the bottom line is there are newly ESA-listed lower Columbia River coho with lowered exploitation rates and NMFS has revised the recovery standards for lower Columbia River chinook and these changes are having dramatic effects on our salmon fisheries. In recognition of the dramatic reductions to salmon fishery sectors, we need to be cautious. We have reason to believe that not taking this action has the potential of increasing the bycatch of salmon. This action does not set a precedent or prejudge a future decision in the rationalization of the groundfish trawl fishery. He said he will reluctantly support the motion because there is a sound basis established in the record and public testimony that there is a conservation risk for several key species this Council is responsible for managing.

Mr. Cedergreen voiced his support of the motion based on the potential impact to both overfished groundfish and salmon species of concern. The recreational salmon fisheries are not healthy and anything we can do to reduce impacts on the salmon stocks driving our fisheries will be helpful. This is at least a step in the right direction.

Mr. Sones stated he too has struggled with this decision. He is concerned about the use of the emergency rule in this case. He feels emergency rules are intended to address conservation concerns, and although he recognizes the potential conservation issues, after reviewing recent letters from NMFS, he is concerned

about the strength of the conservation issue. He knows how hard the fishermen work to fish conservatively and does not believe that a derby fishery benefits anybody. He is going to vote against the motion and wait until he sees what NMFS has to offer should this motion pass.

Mr. Melcher spoke in favor of the motion. The motion does not represent what ODFW envisioned in September 2006, but he agrees the current participants are doing an exceptional job of fishing responsibly. However, the risk is in the amplification and speed of the fishery as new entrants come into the fishery. As we have heard in public testimony today and in the past, as competition for a limited resource increases, the willingness of all parties to fish responsibly decreases and the Pacific Whiting Conservation Cooperative is a good example of this principle. He is in favor of the motion and concurs with Mr. Anderson and Ms. Vojkovich regarding the thin margin of error on canary rockfish bycatch and the draconian measures taken today to prevent exceeding the OY. We cannot afford to stop taking steps to encourage people to fish responsibly and to remain within our bycatch caps. Not allowing new entrants goes a long way towards those goals. Mr. Melcher noted the GMT report under Agenda Item E.3.b made projections of how long the Pacific whiting fishery would last assuming the current fishing rates. We may fall short of those projections or exceed harvest specifications as bycatch rates and effort levels change without this action. For these reasons, he does view this action as a conservation issue.

Motion 14 vote. Motion 14 passed. Messrs. Lockhart and Sones voted no. Mr. Myer abstained.

F. Pacific Halibut Management

F.1 Report on the International Pacific Halibut Commission Meeting (03/06/07; 9:35 am)

F.1.a Agenda Item Overview

Mr. Chuck Tracy presented the agenda item overview.

F.1.b Summary of Meeting

Mr. Anderson presented Agenda Item F.1.b, IPHC Meeting Summary.

Mr. Anderson recommended the Council direct Dr. McIsaac draft a letter to Dr. Leaman, Executive Director of the IPHC, requesting a meeting between IPHC staff and interested parties from Area 2A to discuss the methodology and implications of the IPHC staff proposed stock assessment.

Mr. Melcher asked if the IPHC included any peer review process for evaluating proposed methodology changes. Mr. Anderson replied there was no formal review process analogous to the Council's SSC review. The IPHC does have an interim meeting in November each year where the IPHC staff has an opportunity to brief the commissioners on proposed changes, prior to adoption at the annual IPHC meeting in January. The Council should be proactive on the proposed stock abundance methodology in order to allow appropriate scientific understanding and review.

Mr. Lockhart asked if the IPHC staff went through a peer review process when developing the proposed methodology. Mr. Anderson replied the IPHC staff works internally to develop proposals and was unaware of any outside or peer review process.

F.1.c Agency and Tribal Comments

None.

F.1.d Reports and Comments of Advisory Bodies

None.

F.1.e Public Comment

None.

F.1.f Council Discussion

Dr. McIsaac asked if there was any Secretarial action regarding the issue of Alaska and Canada exceeding charter catch expectations. Mr. Williams replied the IPHC action was not approved in Washington D.C., and congress was continuing to look at measures that could be implemented in 2007.

Dr. Hanson noted the Canadian and Alaskan charter quotas are taken off the top of the total area allocation, and therefore are using impacts that would otherwise go to directed commercial harvest. The State of Alaska will likely prohibit the skipper and crew from retaining halibut again in 2007, which should help the problem, but will not alleviate it totally for 2007. Mr. Anderson replied the charter allocation is taken off the top, but is a specific number, which has been exceeded, and therefore the overage is not being compensated for by the directed commercial harvest.

Mr. Sones asked if there was discussion about the ecosystem effects on other commercially valuable species of maintaining the Pacific halibut stock at a high level. Mr. Anderson said there was no discussion at the IPHC meeting, nor were concerns raised.

Dr. McIsaac asked if there will be Secretarial action to address the charter overage for 2007. Mr. Williams replied there were active discussions between NMFS and the State of Alaska.

Dr. Hanson noted that the State of Alaska is seeking delegation authority from the NPFMC for managing halibut to the states. That would require reopening the halibut treaty and allowing all states the authority to manage halibut outside the Council process.

Mr. Cedergreen noted that if proposed stock assessment methodology is approved, some Area 2A fisheries would have insufficient quota to be prosecuted.

Dr. McIsaac asked for guidance on timing of a workshop with Area 2A interests and the IPHC staff. Mr. Anderson recommended a presentation in May with distribution of materials so the Council could review the methodology over the summer and provide feedback before the IPHC developed materials for the IPHC interim meeting in November.

Mr. Melcher, Mr. Lockhart, and Mr. Sones supported Mr. Anderson's recommendation.

F.2 Incidental Catch Regulations in the Salmon Troll and Fixed Gear Sablefish Fisheries

F.2.a Agenda Item Overview (03/06/07; 10:12 am)

Mr. Tracy presented the agenda item overview, reviewed the 2006 options that were sent out for public review, and read Agenda Item F.2.b, Supplemental Attachment 2 (Yelloweye rockfish conservation area salmon troll closure) into the record.

F.2.b State Proposals for the Salmon Troll Fishery

None.

F.2.c State Proposals for the Fixed Gear Sablefish Fishery

Mr. Anderson asked if more than one option was necessary for public review. Ms. Cooney replied at least status quo and one other option for comparison purposes was recommended.

F.2.d Tribal Comments

None.

F.2.e Reports and Comments of Advisory Bodies

Mr. Jim Olson presented Agenda Item F.2.e, Supplemental SAS Report.

Mr. Melcher asked what the typical encounter ratio between Halibut and Chinook was. Mr. Olson replied up to one to one; the smaller trip limit in the SAS recommendation would offset any increased catch associated with the lower ratio.

Mr. Tracy read Agenda Item F.2.e, Supplemental GAP Report into the record.

F.2.f Public Comment

Mr. Joel Kawahara, troller, Seattle, Washington

F.2.g Council Action: Adopt Public Review Options for 2007

Mr. Anderson moved (Motion 3) to adopt for public review the options for incidental catch regulations in the non-Indian salmon troll fishery as shown in Agenda Item F.2.e, Supplemental SAS Report, with the correction that the landing limit was per trip rather than per open period. Mr. Cedergreen seconded the motion. Motion 3 passed.

Mr. Anderson moved (Motion 4) to adopt for public review a range of landing restrictions for Pacific Halibut retention in the non-Indian commercial sablefish fishery north of Point Chehalis that include status quo; an option that allows two halibut plus 80 pounds of halibut per 1,000 pounds of sablefish, and; a third option that allows two halibut plus 120 pounds of halibut per 1,000 pounds of sablefish; all options would have an opening date consistent with the May 1 opening of the tiered limit sablefish fishery. Mr. Cedergreen seconded the motion. Motion 4 passed.

Mr. Tracy noted that past public review options for the salmon troll restrictions have included the "C" shaped voluntary yelloweye rockfish conservation area, and recommended the Council notify the public about the mandatory yelloweye rockfish conservation area.

Mr. Anderson moved (Motion 5) to include in the salmon troll options for public review, an option to designate the "C-shaped" yelloweye rockfish conservation area in the North Coast subarea (Washington Marine Area 3and 4) as an area to be voluntarily avoided for salmon troll fishing to protect yelloweye rockfish. Mr. Cedergreen seconded the motion. Motion 5 passed.

G. Salmon Management

G.1 Review of 2006 Fisheries and Summary of 2007 Stock Abundance Estimates

Vice Chairman Ortmann chaired the salmon agenda items.

G.1.a. Report of the Salmon Technical Team (03/06/07; 10:59 am)

Mr. Dell Simmons, Salmon Technical Team (STT) Chair summarized the Review of 2006 Ocean Salmon Fisheries and Preseason Report I: Stock Abundance Analysis of 2007 Ocean Salmon Fisheries.

Mr. Roth noted the Klamath River fall Chinook (KRFC) forecast was the only Chinook stock with a positive trend in 2007, and asked if the STT discussed the reliability of the record age-3 KRFC forecast. Mr. Simmons replied the large jack return was within the historical range, but the age-3 forecast did have substantial variability.

Mr. Melcher noted that while KRFC was the only Chinook stock with a positive trend, several coho stocks had a positive trend in 2007. He asked how the two hatchery stocks used to evaluate impacts on lower Columbia natural (LCN) coho were being integrated. Mr. Milward replied the early and late hatchery stocks were being averaged to estimate the ocean fishery exploitation rate.

Mr. Melcher asked for a summary of Klamath Ocean Harvest Model (KOHM) updates in light of the recoding of coded wire tags (CWT) from tribal fisheries in 2003, 2004, and 2005, and if any additional changes were anticipated during the preseason process. Mr. Mohr replied the corrected CWT database had been incorporated into the KOHM; the contact rate per effort estimates for the Fort Bragg, San Francisco, and Monterey cells were based on the most recent four years, similar to 2006, and; no further updates of the KOHM were anticipated in 2007.

Dr. McIsaac asked if the contact rate was independent of abundance. Mr. Mohr replied yes.

Dr. McIsaac asked if the age-4 KRFC forecast was within the observed range. Mr. Mohr replied it is the lowest forecast on record, but the forecast was within the range of observed returns.

Mr. Melcher asked if the STT was able to incorporate any effect of landing limits in the KOHM, or observed any effects on model performance. Mr. Mohr replied the KOHM performed well in 2006 without incorporating any effects of landing limits.

G.1.b Agency and Tribal Comments

Mr. Anderson noted there would be significant challenges in 2007 associated with declining stock trends for areas north of Cape Falcon.

Ms. Vojkovich noted stock assessment methods and data availability for Central Valley Chinook stocks was improving, and future forecasts should be more accurate.

Mr. Mike Orcutt, Hoopa Valley Tribe, recommended continuing the functions of the Klamath Fishery Management Council. Mr. Kautsky noted the Klamath River Technical Advisory Team functions were carried out this year to facilitate the stock forecast process. He noted that Hoopa Valley tribe is committed to timely and accurate CWT recovery reporting, and is working with PSMFC to archive the data.

Chairman Hansen asked if the KFMC could be reconstituted. Mr. Orcutt replied the resource requires management, and the KFMC process should continue with or without authorizing legislation.

Mr. Melcher noted USFWS had the funding for this federal fiscal year, but no enabling legislation, and asked if leadership could come from the USFWS or through a contract with PSMFC.

Mr. Roth understood DOI and USFWS had 2006 funding directed to the Yreka office for habitat restoration work and to the Arcata office for developing forecast data.

G.1.c Reports and Comments of Advisory Bodies

Dr. Peter Lawson provided Agenda Item G.1.c, Supplemental SSC Report.

G.1.d Public Comment

Mr. Bill Maahs, fisherman, Fort Bragg, CA
Mr. Dean Estep, commercial fisherman, Fort Bragg, CA

G.1.e Council Discussion on Review of 2006 Fisheries and Summary of 2007 Stock Abundance Estimates

None.

G.2 Identification of Management Objectives and Preliminary Definition of 2007 Salmon Management Options

G.2.a Agenda Item Overview (03/06/07; 1:20 pm)

Mr. Tracy provided the agenda item overview.

G.2.b Report of the Pacific Salmon Commission

Mr. Melcher presented Agenda Item G.2.b, Supplemental PSC Report.

Mr. Williams noted two genetic stock identification (GSI) workshops were planned to discuss both technical issues and management needs and implications. A final report is due February 2008.

G.2.c. Report of the South of Falcon Forum Meeting

Mr. Anderson presented Agenda Item G.2.e,and f, Supplemental WDFW/Tribal Recommendations.

G.2.d NMFS Recommendations

Dr. Peter Dygert presented Agenda Item G.2.d, Supplemental NMFS Report. He noted two corrections, the Skagit summer/fall Chinook critical exploitation rate on page 9 should be 17.0% rather than 15.0% because 2007 is a pink salmon year, which allows greater impacts, and the term non-treaty tribal fisheries at the bottom of page 13 should say non-Indian fisheries.

Mr. Melcher asked if the 13.0% exploitation rate limit on Rogue/Klamath (RK) hatchery coho applied to all hatchery releases or only the unmarked component. Dr. Dygert replied the unmarked component,

which best represents the southern Oregon/northern California coastal coho Evolutionarily Significant Unit (ESU).

Mr. Melcher asked for clarification on the two possible sets of assumptions used to estimate impacts on lower Columbia River (LCR) tule Chinook south of Cape Falcon. Dr. Dygert replied the assumptions relate to the assumed age composition used in the run reconstruction process, which affects exploitation rate estimates.

Mr. Melcher asked why the guidance for LCR tule Chinook was not specific to southern U.S. fisheries like the Puget Sound Chinook and LCN coho guidance. Dr. Dygert replied some Puget Sound Chinook exploitation rate limits are total rates and some are southern U.S., depending on the stock and annual stock status. Total exploitation rate is the focus for recovery on all stocks.

G.2.e Tribal Recommendations

Mr. Troy Fletcher, Yurok Tribe, spoke in favor of a KFMC type forum, encouraged a conservative approach to fall ocean fisheries, and stated the Yurok tribes intent to harvest 80% of the tribal allocation of KRFC.

Mr. George Kautsky, Hoopa Valley Tribe, noted the tribe would evaluate tribal needs in light of abundance forecasts and conservation objectives.

Mr. Raphael Bill, Umatilla Tribe, representing the four Columbia River treaty tribes, presented Agenda Item G.2.e, Tribal Recommendations.

Mr. Sones presented Agenda Item G.2.e, Supplemental Tribal Recommendations.

G.2.f State Recommendations

Ms. Vojkovich noted CDFG held an additional public hearing because the KFMC did not meet in 2007. There was renewed interest in inriver fisheries for the Klamath this year, and for as much commercial opportunity as possible in the Fort Bragg area. The California Fish and Game provided guidance to take as many KRFC impacts in the ocean as allowable and provide any remaining impacts to the inriver fisheries. Because of the uncertainty in the high abundance of age-3 KRFC, the CDFG recommended restraint in fall ocean fisheries.

G.2.g Reports and Comments of Advisory Bodies

SAS members presented Agenda Item G.2.g, Supplemental SAS Report.
Mr. Heikkila noted the following corrections:

- Page 3, Cape Falcon to Humbug Mt. commercial fishery, Options I and II, second bullet-Strike October 4-10; 18-24, and include quotas of 15,000 and 10,000 coho, respectively.
- Page 3, Cape Falcon to Humbug Mt. commercial fishery, Option II, second bullet-Insert landing and possession limit of no more than one coho for each Chinook.
- Page 3, Cape Falcon to Humbug Mt. commercial fishery, Option III, first bullet-Change April 1 to April 10.
- Page 4, Humbug Mt. to OR/CA Border commercial fishery, Options II and III, first bullet-Change March 15 to April 1 and April 10, respectively.
- Page 4, Humbug Mt. to OR/CA Border commercial fishery, Option II-Change ...possession and landing limit of 105 fish per vessel per calendar week to ...per calendar week in June, July, August, and September.

Mr. Melcher asked why the Chinook minimum size limit of 27 inches was recommended in Option III. Mr. Heikkila replied to match the California size limit.

Mr. Anderson asked if the industry was aware of the lower exploitation rate limit on LCR tule Chinook when these recommendations were developed. Mr. Heikkila replied the industry representatives were aware it would be lower than in 2006 but did not know the specific value.

Mr. Anderson asked if the industry was aware of the LCN coho listing when the coho fishery recommendations were developed. Mr. Heikkila replied yes, and the opening was delayed to allow more of the LCN coho to leave the area before the fishery commenced.

Mr. MacLean noted the following corrections and clarifications:

- Page 5, Horse Mt. to Pt. Arena commercial fishery, Option I-Possession and landing limit of 20 fish per day per vessel should be changed to …per vessel in April.
- Page 5, Horse Mt. to Pt. Arena commercial fishery, Option II-Possession and landing limit of 30 fish per day per vessel should be changed to …per vessel in September.
- Page 6, Pt. Arena to Pt. Sur commercial fishery, Option I, first bullet-June 29-July 30 should be changed to June 29-July 3.
- Page 6, Pt. Arena to Pt. Sur commercial fishery, Option II, first bullet-The June end date should reflect the number of days in June afforded by closing the May 1-16 period.
- Page 6, Pt. Arena to Pt. Sur commercial fishery, Option III, second and third bullets-The intent was to reflect historical management lines and reduce impacts on KRFC.

Ms. Vojkovich asked why the September quota fisheries opened on Labor Day weekend after the management problems experienced in 2006 with a Labor Day weekend opening in Fort Bragg. Mr. MacLean replied it was an oversight.

Mr. Sorenson noted the following correction:

- Page 13, Cape Falcon to Humbug Mt. recreational fishery, Option II-Add Chinook minimum size limit of 24 inches total length.

Mr. Melcher asked if the 24 inch size limit reflected the uncertainty in the age-3 KRFC forecast. Mr. Sorenson replied yes.

G.2.h Public Comment

Mr. Dave Bitts, PCFFA, Eureka, CA
Ms. Ellen Faulkner, North Coast Consumers Alliance, Redwood Valley, CA
Ms. Ann Maurice, Ad Hoc Committee, Occidental, CA
Mr. Scott Boley, Oregon Salmon Commission, Gold Beach, OR
Mr. Ben Platt, Salmon Trollers Marketing Association, Ft. Bragg, CA
Mr. E.B Duggan, Trinity River Fisheries Group, Willow Creek, CA
Mr. Aaron Newman, Humboldt Fisherman's Marketing Association, Eureka, CA
Mr. Gerald Reinholdt, Reinholdt Fisheries, St. Helens, OR
Mr. Duncan MacLean, Half Moon Bay Fishermen's Marketing Association, El Granada, CA

G.2.i Council Recommendations for Initial Options for STT Collation and Description

Mr. Anderson directed the STT to analyze the proposed SAS options as presented in Agenda Item G.2.g, Supplemental SAS Report, as corrected on the floor, and with the following modifications:

- Page 2, U.S./Canada Border to Cape Falcon commercial fishery, Option III, second bullet-change Cape Flattery control zone open to closed to continue protection for ESA listed Puget Sound Chinook.

Mr. Sones directed the STT to include the tribal fishery options as presented in Agenda Item G.2.e, Supplemental Tribal Recommendations.

Mr. Melcher directed the STT to maintain the 17% allocation to the KMZ ocean recreational fishery.

Ms. Vojkovich concurred with the 17% KMZ ocean recreational fishery allocation and directed the STT to assume a 15% allocation to the inriver recreational fishery. She also recommended avoiding commercial quota fishery openings on holiday weekends; including area landing restrictions when different management lines are used; considering fall commercial fishery opening dates later in September to reduce the effect of the KRFC September 1 birthdate; and splitting the Oregon and California portions of the KMZ recreational fishery for clarity.

Dr. McIsaac asked if there were specific dates for the KMZ and Fort Bragg September quota fishery openings. Ms. Vojkovich recommended September 4th, 10th, and the 17th for KMZ options I, II, and III, respectively.

Mr. Moore asked if the Cape Flattery control zone was closed to both commercial and recreational fisheries. Mr. Anderson replied it was only closed to commercial fisheries, but that recreational closures in the Strait of Juan de Fuca served the same purpose of protecting Puget Sound Chinook.

Ms. Vojkovich directed the STT and SAS work together to address some of the outstanding issues and to consider the need for a closure date in late August to allow accurate accounting of KRFC broods.

G.3 Identification of Stocks Not Meeting Conservation Objectives

G.3.a Agenda Item Overview (03/06/07; 4:35 pm)

Mr. Tracy presented the agenda item overview.

G.3.b Agency and Tribal Comments

Mr. Orcutt, Hoopa Valley Tribe, presented Agenda Item G.3.b, Supplemental Hoopa Tribal Comment.

Mr. Sones presented Agenda Item G.3.b, Supplemental Tribal Comments.

Mr. Lockhart stated NMFS will be sending a letter notifying the Council of the overfished status of KRFC. The date on that letter initiates the one year period for completion of the overfishing review report.

G.3.c Reports and Comments of Advisory Bodies

Dr. Lawson presented Agenda Item G.3.c, Supplemental SSC Report.
Mr. Simmons presented Agenda Item G.3.c, Supplemental STT Report.
Mr. Paul Heikkila presented Agenda Item G.3.c, Supplemental SAS Report.
Mr. Ellis presented Agenda Item G.3.c, Supplemental HC Report.

G.3.d Public Comment

Ms. Ann Maurice, Ad Hoc Committee, Occidental, CA

G.3.e Council Action: Direct Necessary Actions Required by the Salmon Fishery Management Plan

Mr. Anderson confirmed the Quillayute and Queets summer Chinook salmon are exceptions to the Overfishing Criteria of the Salmon FMP by virtue of the low impact rate to those stocks by Council area fisheries. WDFW and the Quileute Tribe were cooperating on a genetic analysis on Quillayute summer Chinook and would provide the Council with a 2007 inriver management agreement. An updated assessment of the Queets River would also be provided to the Council.

Vice Chairman Ortmann confirmed the material in Agenda Item G.3.a, Attachment 2 addressed the identification of stocks, and Mr. Anderson provided direction for the Queets and Quillayute spring/summer Chinook stocks.

Mr. Melcher directed the STT and HC to work with the relevant state and tribal agencies, including the Hoopa Valley Tribe to complete the assessment of the KRFC within one year focusing on the three year period for which the stock failed to meet its conservation objective.

Mr. Moore asked if the SSC should have the opportunity to review the next draft of the KRFC overfishing review before it is finalized. Mr. Melcher replied yes.

G.4 Council Recommendations for 2007 Management Option Analysis (03/07/07; 3:05 pm)

Vice Chairman Ortmann chaired this agenda item.

G.4.a Agenda Item Overview

Mr. Tracy presented the agenda item overview.

Mr. Anderson asked if the NMFS guidance on LCN coho in Agenda Item G.2.d, Supplemental NMFS Report setting a 20% exploitation rate limit was intended to cover all marine fisheries and mainstem Columbia River fisheries, or just Council area marine fisheries as was the case in 2006. Dr. Dygert replied the intent was to cover all marine fisheries, not just Council area fisheries, which would be consistent with OCN and RK coho exploitation rate limits.

G.4.b Report of the STT

Mr. Simmons summarized Agenda Item G.4.b, Supplemental STT Report.

Mr. Anderson asked what level of Columbia River and Canadian fisheries were assumed for the analysis. Mr. Simmons replied the Columbia River fisheries assumed a 15% decrease from a recent year average; Canadian fisheries assumed 2006 levels.

Mr. Melcher asked if the LCR tule Chinook impacts would decrease when 2007 Alaskan and Canadian fishery impacts were known. Mr. Simmons replied some reduction was expected based on decreased abundance of tule stocks and overall stock composition in northern area fisheries.

G.4.c Report of the South of Falcon Forum

None.

G.4.d Reports and Comments of Advisory Bodies

None.

G.4.e Public Comment

Mr. Dave Bitts, PCFFA, Eureka, CA
Mr. Ben Doane, Klamath Management Zone, Willow Creek, CA

Ms. Vojkovich asked if a closure of the KMZ recreational fishery in July to achieve a 17% KMZ ocean recreational allocation would be supported. Mr. Doane replied yes, as long as it was after the July 4th holiday period.

Mr. Melcher asked if shortening the September opportunity from a closing date of the 9th to after the Labor Day weekend would be supported to moderate impacts on 2004 brood KRFC. Mr. Doane replied yes, although allowing fishing through September 4 or 5 would allow local fishers a couple of days after the holiday to finish their season without contributing to the crowded conditions over the Labor Day weekend.

G.4.f Council Direction to the STT and Salmon Advisory Subpanel on Options Development and Analysis

Mr. Anderson asked if north of Cape Falcon ocean fisheries were closed would the PSC Skagit coho exploitation rate objective be achieved. Mr. Simmons replied no.

Mr. Anderson asked to reconvene this agenda item on the morning of 03/08/07 to allow time for regional discussions, which would be necessary before Washington was prepared to give direction to the STT. Ms Vojkovich replied California is prepared to give direction to the SST to allow the first step in the analysis to proceed.

Ms. Vojkovich directed the SAS and STT to structure Option I to achieve a 17% KMZ ocean recreational allocation of KRFC and to have remaining KRFC impacts above the 35,000 natural spawner floor allocated to the inriver fisheries.

Council adjourned for the day and took up a continuation of G.4 on Thursday, March 8 at 8:20 am.

Ms. Vojkovich directed the STT to model inriver Klamath fisheries to achieve escapements of 35,000, 38,000, and 40,000 natural adult spawners for Options I, II, and III, respectively, to provide a range of options reflecting the uncertainty surrounding estimates of spawners.

Mr. Melcher requested NMFS take inseason action to change the Cape Falcon to the Oregon California border commercial fishery open period of March 15 through April 30 to April 10 through 29 with a 100 fish per vessel per calendar week landing and possession limit in April. He noted this action would provide additional summer opportunity off the Oregon coast and reduce LCR tule Chinook impacts. The 100 fish limit will help maintain the integrity of the KOHM and constrain catch if the catch rates are better than expected.

Ms. Vojkovich requested NMFS take inseason action to change the Horse Mt. to Pt. Arena commercial

fishery open period of March 15 through April 30 to April 9 to 13, 16 to 20, and 23 to 27, or attainment of a 2,000 Chinook quota, and with a landing and possession limit of 20 fish per day per vessel, and a requirement that all fish caught in that area must be landed in the area. She noted the reduced opportunity in March and April would provide: additional fishing opportunity in the summer; data from a data poor cell, and; an opportunity to collect GSI samples done during that same period. The Monday to Friday schedule would allow staff adequate time to monitor the quota.

Mr. Lockhart stated that inseason actions require NMFS to consult with the states and Council, which is normally done via teleconference. He asked if any of the states, the Council Chairman or Executive Director had questions or concerns. Hearing none Mr. Lockhart said NMFS concurs with the recommended changes and would proceed with the requested inseason actions.

Ms. Vojkovich directed the STT to model all three options with the recommended inseason actions.

Mr. Melcher directed the STT to make the following changes to the options contained in Agenda Item G.4.b, Supplemental STT report:

- Page 3, Cape Falcon to Humbug Mt. commercial fishery, Option I, first bullet-Open April 10 to 29, May 1 through June 30, July 11 through August 29, September 6 to 10, 20 to 24, and October 4 to 10 and 18 to 24. Landing and possession limit of 75 Chinook per vessel per calendar week in September and October. Strike the second bullet referring to the coho fishery.
- Page 3, Cape Falcon to Humbug Mt. commercial fishery, Option II, first bullet-Open April 10 to 29, May 1 through June 30, July 11 through August 14, and October 4 to 10 and 18 to 24. In the second bullet strike the landing and possession limit of no more than one coho for each Chinook.
- Page 3, Cape Falcon to Humbug Mt. commercial fishery, Option III, first bullet-Open April 10 to 29, May 1 through June 30, July 6 to 11, July 17 through August 29, and October 1 to 31; close the month of September, and raise the minimum size limit for Chinook to 28 inches for the entire season.
- Page 4, Humbug Mt. to OR/CA Border commercial fishery, Option I, first bullet-Change March 15 through May 31 to April 10 to 29, May 1 to 31. Second bullet- Change 1,500 to 2,600. Third bullet-Change July 1 to July 11 and 1,200 to 1,600. Fourth bullet- Change 1,500 to 2,500. Fifth bullet-Change September 1 to September 6; Change landing and possession limit from 35 fish per day per vessel and 105 fish per vessel per calendar week… to 30 fish per day and 90 fish per week.
- Page 4, Humbug Mt. to OR/CA Border commercial fishery, Option II, first bullet-Change March 15 through May 31 to April 10 to 29, May 1 to 31. Second bullet- Change 1,100 to 1,500. Third bullet-Change July 1 to July 11 and 1,000 to 1,200. Fourth bullet- Change 1,000 to 1,500. Fifth bullet-Change September 1 to September 6.
- Page 4, Humbug Mt. to OR/CA Border commercial fishery, Option III, first bullet-Change April 10 through May 31 to April 10 to 29, May 1 to 31; strike the second bullet.
- Page 9, C.9.a-Strike Chinook-only.
- Page 13, Cape Falcon to Humbug Mt. recreational fishery Option I- change the coho quota from 80,000 to 50,000 marked coho.
- Page 13, Cape Falcon to Humbug Mt. recreational fishery Option II- change the coho quota from 60,000 to 40,000 marked coho.
- Page 13, Cape Falcon to Humbug Mt. recreational fishery Option III- change the coho quota from 40,000 to 15,000 coho and include a closure date for the coho fishery of September 9 rather than October 31.
- Page 14, Humbug Mt. to OR/CA Border and OR/Border to Horse Mt. recreational fishery Option I-Change the opening date from May 19 to May 1 and the closing date from September 9 to September 4.
- Page 14, Humbug Mt. to OR/CA Border and OR/Border to Horse Mt. recreational fishery Option III-Change the closing date from September 5 to September 9.

The full summer fishery in the KMZ recreational fishery should allow reserving of some KRFC impacts in the fall fishery for the summer 2008 fishery.

Mr. Anderson directed the STT to make the following changes to the options contained in Agenda Item G.4.b, Supplemental STT report:

- Page 1, Supplemental Management Information, Option I, Bullet 1. Change the Chinook TAC from 45,000 to 35,750 and the coho TAC from 160,000 to 140,000.
- Page 1, Supplemental Management Information, Option II, Bullet 1. Change the Chinook TAC from 35,000 to 32,500.
- Page 1, Supplemental Management Information, Option III, Bullet 1. Change the Chinook TAC from 25,000 to 26,000.
- Page 2, U.S./Canada Border to Queets River commercial fishery, Option III first bullet-Add possession and landing limit of 80 coho per vessel per open period. Second bullet-Add landing and possession limit of 35 Chinook per vessel per open period and strike the gear restriction.

The STT should model: Option I with a 30% reduction in Columbia inriver fisheries harvest rate on LRC tule Chinook; Option III with a 15% reduction, and; Option II with an inriver harvest rate resulting in as close to a 42% total exploitation rate as possible without exceeding the 15% to 30% sideboards. The direction was intended to address concerns for Interior Fraser and Snohomish coho, and LCR tule and Snake River wild fall Chinook concerns.

Mr. Melcher directed the STT to strike the language allowing Oregon permitted vessels to land their catch in Garibaldi, Oregon during the U.S./Canada Border to Cape Falcon commercial fisheries in Options II and III because the quotas were so small and difficult to manage.

Mr. Sones directed the STT to make the following changes to the options contained in Agenda Item G.4.b, Supplemental STT report:

- Page 18, Supplemental Management Information, Bullet 1, Options I and II -Change the Chinook TAC from 40,000 and 32,500 to 35,000 and 30,000, respectively.

The direction was intended to address LCR tule and Snake River wild fall Chinook concerns.

G.5. Council Direction for 2007 Management Options (If Necessary) (03/08/07; 5:47 pm)

G.5.a Agenda Item Overview

Mr. Tracy presented the agenda item overview.

G.5.b Report of the STT

Mr. Simmons presented Agenda Item G.5.b, Supplemental STT Report, and noted some typographical errors.

Mr. Melcher asked why the LCR tule impacts in Canadian and Alaskan fisheries listed in Table 7 increase when Council area impacts decrease. Mr. Simmons replied the effect is in the FRAM because it is a multiple step model and the cohort size through time increases because of the lower fishing impacts in Options II and III.

Mr. Melcher asked why the LCR tule impacts in the Cape Falcon to Humbug Mt. commercial fishery increased form 5.0% in Option 1 to 5.2% in Option II when the only difference was four fishing days in September. Mr. Simmons replied it could be partially a rounding issue, and possibly the way the south of Cape Falcon cells are broken out in FRAM.

G.5.c Reports and Comments of Advisory Bodies

None.

G.5.d Public Comment

Mr. Ben Platt, Salmon Trollers Marketing Association, Fort Bragg, CA
Mr. Daniel Platt, Salmon Trollers Marketing Association, Fort Bragg, CA
Mr. E.B Duggan, Trinity River Restoration Group, Willow Creek, CA

G.5.e Council Guidance and Direction (03/08/07; 6:07 pm)

Ms. Vojkovich directed the STT to make the following changes to the options contained in Agenda Item G.5.b, Supplemental STT report:

- Page 6, Pt. Arena to Pigeon Pt. commercial fishery, Option III, first bullet-Change July 5 through August 29 to May 1 to 31, July 27 to July 3, July 5 to August 29, and September 1 to 29 - Strike the second and third bullets.

Mr. Melcher asked if the KMZ recreational allocation under Option I of 18% needed shaping. Ms. Vojkovich replied not at this time. Mr. Melcher concurred.

Mr. Melcher directed the STT to switch Options II and III for the Cape Falcon to Humbug Mt. commercial fishery to achieve compliance with the LCR tule Chinook exploitation rate limit.

Mr. Anderson directed the STT to model the LCR tule Chinook Columbia River inriver commercial fisheries harvest rate for Option II at 0.078 rather than 0.090, which should help bring the overall exploitation rate down to the 42.0% limit.

Mr. Anderson noted all three Options had Skagit coho spawner escapements less than Salmon FMP objective, but that the annual co-manager agreed to exploitation rates were the controlling factor for 2007 and were being met. He noted the Snohomish coho exploitation rates were above the agreed to limits, but that even by completely closing Council area fisheries the limits could not be achieved; therefore the co-managers would address that issue in the North of Falcon process and arrive at a solution prior to Council adoption of final management measure recommendations in April.

Mr. Sones stated the tribes had no changes to the management measures, but would participate in the North of Falcon process to resolve outstanding coho issues.

Mr. Cedergreen directed the STT to change the opening date of the Queets River to Leadbetter Point recreational fishery in Option III from July 1 to July 15.

G.6 Adoption of 2007 Management Options for Public Review (03/09/07; 1:54 pm)

Mr. Ortmann chaired this agenda item.

G.6.a Agenda Item Overview

Mr. Tracy presented the agenda item overview.

G.6.b Report of the STT

Mr. Simmons presented Agenda Item G.6.b, Supplemental STT Report.

G.6.c Reports and Comments of Advisory Bodies

None.

G.6.d Agency and Tribal Comments

Mr. Mike Orcutt presented Agenda Item G.6.d, Supplemental Comments of the Hoopa Valley Tribe.

Mr. Melcher asked if the concept of full utilization meant the tribe was advocating for floor management of KRFC escapement in 2007. Mr. Orcutt replied yes.

Mr. Dave Sones read into the record Agenda Item G.6.d, Tribal Recommendations, Testimony of the Columbia River Treaty Tribes.

Mr. Roth recommended the Council send a letter to all KFMC participants inquiring about co-manager willingness to facilitate and contribute funds toward a Klamath River management forum fashioned after the North of Falcon process.

G.6.e Public Comment

Ms. Ann Maurice, Ad Hoc Committee, Occidental, CA
Ms. Ellen Faulkner, North Coast Consumers Alliance, Redwood Valley, CA

G.6.f Council Action: Adopt Management Options for Public Review

Mr. Anderson moved (Motion 23) to adopt for public review, the non-Indian commercial and recreational fishery management options as shown in Agenda Item G.6.b, Supplemental STT Report. Mr. Melcher seconded the motion. Motion 23 passed.

Mr. Sones moved (Motion 24) to adopt for public review the treaty troll options shown in Agenda Item G.6.d, Supplemental Treaty Troll Options. Mr. Anderson seconded the motion. Motion 24 passed.

G.7 Salmon Hearings Officers

G.7.a Agenda Item Overview

Mr. Tracy presented the agenda item overview.

G.7.b Council Action: Appoint Hearings Officers

Mr. Anderson recommended Mr. Cedergreen act as hearings officer for the Westport, Washington hearing on March 26, 2007.

Mr. Melcher recommended Mr. Moore act as hearings officer for the Coos Bay, Oregon hearing on March 26, 2007.

Ms. Vojkovich recommended Mr. Thomas act as hearings officer for the Santa Rosa, California hearing on March 27, 2007.

Mr. Lockhart stated Dr. Dygert would represent NMFS at the Westport, Washington hearing on March 26, 2007; Ms. Sarah McAvinchey at the Coos Bay, Oregon hearing on March 26, 2007; and Mr. Helvey at the Santa Rosa, California hearing on March 27, 2007.

CDR Martin stated the Coast Guard would appoint local officers to attend the meetings.

H. Habitat

H.1 Current Habitat Issues (03/07/07; 2:05 pm)

H.1.a Report of the Habitat Committee

Mr. Stuart Ellis said the HC does not have a formal report. They have commented under each applicable agenda item for this meeting. The HC concurs with the EC's report and plan on meeting with them jointly in April to further discuss aquatic invasive species.

H.1.b Reports and Comments of Advisory Bodies

Captain Mike Cenci provided Agenda Item H.1.b, Supplemental EC Report. Mr. Dave Hanson requested that the EC and HC invite Mr. Stephen Phillips. Mr. Tim Roth asked they coordinate with a USFWS representative as well.

H.1.c Public Comment

None.

H.1.d Council Action: Consider Habitat Committee Recommendations

None.

Open Public Comment for Non-Agenda Items

Public comment for items not on the agenda are received at this time. Vice Chairman Dave Ortmann chaired this agenda item.

Ms. Dorothy Lowman, Environmental Defense--extended an invitation to the Wednesday evening informal presentation on IFQs.

Mr. Mike Ricketts, PCFFA, Carmel Valley, California--voiced his concerns and opinions on the Monterey Bay National Marine Sanctuary process; and told the Council he was not in favor of it.

Mr. Doug Fricke, fisherman, Westport, Washington--reminded the Council about the HMSAS' November 2006 statement and their recommendations for the DGN EFP.

Mr. Dave Bitts, PCFFA, Eureka, California--asked the Council to instruct the SSC to review the appropriateness of the FRAM adjustments that were made in last year's salmon season.

Mr. Kenyon Hensel, Hensel's, Crescent City, California--expressed concern over fishing closures in marine sanctuaries and the need to study the impacts of such closures on fisheries outside the closed areas.

Mr. John Holloway, Recreational Fishing Alliance--referred to his letter asking the Council to review the status report submitted by the Ocean Policy Advisory Committee to the Oregon Governor and the review of this report by the National Marine Sanctuary Program.

ADJOURN

The 187th meeting of the Pacific Fishery Management Council was adjourned on Friday, March 9, 2007 at 3:30 pm.

DRAFT	**DRAFT**
Council Chairman	**Date**

DRAFT VOTING LOG
Pacific Fishery Management Council
March 5-9, 2007

Motion 1: Approve the agenda as shown in Agenda Item A.4, Council Meeting Agenda.

Moved by: Rod Moore Seconded by: Curt Melcher
Motion 1 passed.

Motion 2: Adopt the CPS STAR Terms of Reference as shown in Agenda Item C.2.a, Attachment 1.
Motion 2 passed.

Moved by: Rod Moore Seconded by: Frank Warrens
Motion 2 passed.

Motion 3: Adopt for public review the options for incidental catch regulations in the non-Indian salmon troll fishery as shown in Agenda Item F.2.e, Supplemental SAS Report, with the correction that the landing limit was per trip rather than per open period:

Option 1: Status quo.
Option 2: Beginning May 1, license holders may land no more than one Pacific halibut per each two Chinook, except one Pacific halibut may be landed without meeting the ratio requirement, and no more than 30 halibut per trip.

Moved by: Phil Anderson Seconded by: Mark Cedergreen
Motion 3 passed.

Motion 4: Adopt for public review a range of landing restrictions for Pacific halibut retention in the non-Indian commercial sablefish fishery north of Point Chehalis that include status quo; an option that allows two halibut plus 80 pounds of halibut per 1,000 pounds of sablefish, and; a third option that allows two halibut plus 120 pounds of halibut per 1,000 pounds of sablefish; all options would have opening date consistent with the May 1 opening of the tiered limit sablefish fishery.

Moved by: Phil Anderson Seconded by: Mark Cedergreen
Motion 4 passed.

Motion 5: For the 2007 incidental halibut catch in the salmon troll fishery, include in the options for public review, an option to designate the "C-shaped" yelloweye rockfish conservation area in the North Coast subarea (Washington Marine Area 3 and 4) as an area to be voluntarily avoided for salmon troll fishing to protect yelloweye rockfish.

Moved by: Phil Anderson Seconded by: Mark Cedergreen
Motion 5 passed.

Motion 6: Accept the report of the Legislative Committee as shown in Agenda Item D.2.b, Supplemental LC Report with the following edit – change the sentence that reads: "The LC recommends the Council and its advisory bodies begin planning for U.S. appointees in April" to say "The LC recommends the Council and its advisory bodies begin planning for U.S. appointees in **June**".

Moved by: Rod Moore Seconded by: Dale Myer
Motion 6 passed.

Motion 7: Adopt a coastwide 2007 ABC of 612,068 mt for Pacific whiting. This value is calculated using the more conservative q=1 model.

Moved by: Phil Anderson Seconced by: Mark Cedergreen
Motion 7 passed.

Motion 8: Adopt a coastwide OY of 328,358 mt for Pacific whiting (2007), of which the U.S portion of the whiting OY would be 242,591 mt (status quo).

Moved by: Phil Anderson Seconded by: Mark Cedergreen

Substitute: Establish a coastwide OY of 364,198 mt for Pacific whiting (2007), of which the US portion of the whiting OY would be 269,069 mt.

Moved by: Rod Moore Seconded by: Frank Warrens
Vote on Substitute Motion: 6 yes, 7 no. Messrs. Anderson, Thomas, Myer, Cedergreen, Mallet, Ortmann and Ms. Vojkovich voted no.
Substitute Motion failed.

Main Motion 8 passed. Mr. Moore voted no.

Motion 9: Adopt a tribal set aside for Pacific whiting of 32,500 mt. This is based on the sliding scale allocation formula developed for tribal whiting fisheries.

Moved by: David Sones Seconded by: Frank Warrens
Motion 9 passed. Mr. Sones abstained.

Motion 10: Adopt the GAC Report E.4.b, including attachments, with the following changes (1) change the goals and objectives in E.4.b to the goals and objectives, as they would be modified by the TIQC Report E.4.c, (2) the modifications provided in Agenda Item E.4.f, Supplemental Motion 1, and (3) the shoreside co-op for analysis. The co-op alternatives should be considered works in progress; however, the time for making additional modifications is limited. The motion included the grandfather clauses mentioned in the TIQC report and the mothership and catcher-processor co-op alternatives in the GAC report.

Moved by: David Hanson Seconded by: Marija Vojkovich

Amndmnt 1: Relative relative to the goals and objectives recommendations in the TIQC Report, under the goal, third line, following the underlined verbage and after the comma, insert "considers environmental impact;" and under objective 3, after "promote practices, reduce discard mortality," insert "and minimize ecological impacts."

Moved by: Phil Anderson Seconded by: Mark Cedergreen
Amendment 1 to Motion 10 passed.

Amndmnt 2: Include an option for equitable sharing of observer costs as part of Option 2 under B.3.1.

Moved by: Marija Vojkovich Seconded by: Roger Thomas
Amendment 2 to Motion 10 passed.

Amndmnt 3: Relative to the attribution of processing history, as follows: leave Option 1 as stated, add a new Option 2 that would attribute processing history to the receiver if that entity meets the definition of processor, and create a new Option 3 by modifying the old Option 2 through the elimination of all text following the period after "process."

Moved by: Phil Anderson Seconded by: Rod Moore
Amendment 3 to Motion 10 passed.
Main Motion 10 as amended passed.

Motion 11: Direct asked Council staff to develop a white paper exploring alternatives to options in the document that address "stranded capital."

Moved by: Marija Vojkovich Seconded by: Roger Thomas

Amendment: Task the GAC and its advisors with recommending suggestions for other alternatives to addressing some of these problems.

Moved by: Rod Moore Seconded by: Frank Warrens
Amendment to Motion 11 passed.
Main motion as amended passed.

Motion 12: Adopt the TIQCs recommendation that the Council ask NMFS, to collect the information needed to evaluate the concentration of ownership as part of the limited entry permit renewal process (Agenda Item E.4.c, Supplemental TIQC Report, page 6). NMFS staff has indicated that this can be done, be in place for 2008, and available for use in the EIS.

Moved by: Dave Hanson Seconded by: Rod Moore
Motion 12 passed.

Motion 13: Adopt adopt the following inseason adjustments to this year's groundfish fisheries: GMT recommendations #1; #2; #3; and for #4 adopt the bycatch caps for canary, darkblotched, and widow rockfish as recommended by the GAP in Agenda Item E.5.d, Supplemental GAP Report; and #6 (on page 12 of Agenda Item E.5.d, Supplemental GMT Report). For recommendation #6, the analysis does not necessarily have to occur in the Amendment 10 EA.

Moved by: Phil Anderson Seconded by: Rod Moore
Motion 13 passed.

Motion 14: Recommend that NMFS adopt an emergency rule for the 2007 non-tribal Pacific whiting fishery that would prohibit participation in the shore-based, catcher/processor and mothership sectors of the fishery by any vessel that has no sector-specific historic participation prior to January 1, 2007.

Moved by: Marija Vojkovich Seconded by: Roger Thomas
Motion 14 passed.

Motion 15: Approve the June 2006 meeting minutes as shown in Agenda Item D.3.b, June 2006 Council Minutes.

Moved by: Frank Warrens Seconded by: Marija Vojkovich
Motion 15 passed.

Motion 16: Direct Council staff to track potential introduction of a revised version of the National Offshore Aquaculture Act and provide the information to the LC and Council at a later date.

Moved by: Rod Moore Seconded by: Mark Cedergreen
Motion 16 passed.

Motion 17: If requested by Congress, have the Council ED send a response reflecting the LC concerns on H.R. 1187.

Moved by: Rod Moore Seconded by: Frank Warrens
Motion 17 passed. Mr. Lockhart abstained.

Motion 18: Appoint Ms. Heather Reed to replace Ms. Michele Culver on the Groundfish Management Team. Motion 18 passed.

Moved by: Phil Anderson Seconded by: Mark Cedergreen
Motion 18 passed.

Motion 19: Appoint Dr. Stephen A. Barrager to the Groundfish Allocation Committee as the conservation advisory member.

Moved by: Phil Anderson Seconded by: Curt Melcher
Motion 19 passed.

Motion 20: Appoint Mr. Steve Foltz to the Highly Migratory Species Advisory Subpanel for the Processors South of Cape Mendocino position.

Moved by: Marija Vojkovich Seconded by: Roger Thomas
Motion 20 passed.

Motion 21: Appoint Mr. Lyle Enriquez to replace Ms. Elizabeth Petras on the Highly Migratory Species Management Team (HMSMT).

Moved by: Frank Lockhart Seconded by: Rod Moore
Motion 21 passed.

Motion 22: Appoint Mr. Brian Hallman as the IATTC representative on the HMSMT.

Moved by: Frank Lockhart Seconded by: Rod Moore
Motion 22 passed.

Motion 23: Adopt for public review, the non-Indian commercial and recreational fishery management options as shown in Agenda Item G.6.b, Supplemental STT Report.

Moved by: Phil Anderson Seconded by: Curt Melcher
Motion 23 passed.

Motion 24: Adopt for public review the treaty troll options shown in Agenda Item G.6.d, Supplemental Treaty Troll Options.

Moved by: David Sones Seconded by: Phil Anderson
Motion 24 passed.

Motion 25: Adopt the draft April 2007 agenda concepts as discussed and as shown in Agenda Item D.6.a, Supplemental Attachment 2.

Moved by: Phil Anderson Seconded by: Marija Vojkovich
Motion 25 passed.

The full record of the Pacific Fishery Management Council (Council) November 12-17, 2006 meeting is available at the Council office, and consists of the following:

1. The draft agenda.

2. The approved agenda with notations as to the time each agenda item was addressed, with summary minutes of Council proceedings and key Council documents referenced in the relevant agenda item. The summary minutes consists of a narrative (1) on particularly noteworthy elements of the gavel to gavel components of the Council meeting, including the Call to Order segment at the onset of the Council meeting, and (2) summaries of pertinent Council discussion during each Council Guidance, Discussion, or Action item in the Agenda. The summary narrative of Council Guidance, Discussion, or Action items includes detailed descriptions of rationale leading to a motion (or leading to a consensus to not make a motion) and discussion between the initial motion statement and the final vote.

3. A set of audio recordings of the actual testimony, presentations, and discussion that occurred at the meeting. Recordings are labeled so as to facilitate tape or CD-ROM review of a particular agenda item, by cross referencing with the time labeled agenda.

4. All written documents produced for consideration at the Council meeting, including (1) the pre-meeting briefing book materials, (2) all pre-meeting supplemental documents for the briefing book, (3) all supplemental documents produced or received at the Council meeting, validated as labeled by the Council Secretariat and distributed to Council Members, and (4) public comments and miscellaneous visual aids or handout materials used in presentations to Council Members during the open session.

5. A copy of the Council Decision Document, a document distributed immediately after the meeting which contains very brief descriptions of Council decisions.

6. A copy of Council News Winter 2006-2007 • Volume 30, No. 4.

DRAFT MINUTES
Pacific Fishery Management Council
Hilton San Diego/Del Mar Hotel
15575 Jimmy Durante Blvd
Del Mar, California 92014
858-792-5200
November 12-17, 2006

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A. Call to Order

A.1 Opening Remarks, Introductions

Chairman Hansen opened the 186th meeting of the Pacific Fishery Management Council on Monday, November 13, 2006 at 5:17 pm. A closed session was held prior to the start of the meeting to discuss personnel and litigation matters.

A.1.a Swearing in of New Council Member

Mr. Frank Lockhart swore in newly appointed Council member David Sones as the tribal obligatory member.

A.2 Roll Call

Dr. Donald McIsaac, Council Executive Director, called the roll. The following Council Members were present:

Mr. Phil Anderson (Washington State Official)
Mr. Mark Cedergreen (Washington Obligatory)
Ms. Kathy Fosmark (California Obligatory)
Mr. Donald Hansen, Chairman (At-Large)
Dr. Dave Hanson, Parlimentarian (Pacific States Marine Fisheries Commission, non voting)
Mr. Frank Lockhart (National Marine Fisheries Service, Northwest Region)
Mr. Jerry Mallet (State of Idaho Official)
CDR Peter Martin (US Coast Guard, non-voting)
Mr. Curt Melcher (State of Oregon Official)
Mr. Rod Moore (At-Large)
Mr. Dale Myer (At- Large)
Mr. Dave Ortmann, Vice Chairman (Idaho Obligatory)
Mr. Tim Roth (US Fish and Wildlife Service, non voting)
Mr. David Sones (Tribal Obligatory)
Mr. Roger Thomas (At-Large)
Ms. Marija Vojkovich (State of California Official)
Mr. Frank Warrens (Oregon Obligatory)

The following Council member was absent from the Monday and Tuesday sessions of the meeting:

Mr. Gordon Williams (State of Alaska Official, non voting)

The following Council member was absent during the entire meeting:

Mr. David Hogan (US State Department, non voting)

A.3 Executive Director's Report

Dr. Don McIsaac provided the Executive Director's report, including reference to the informational reports.

A.4 Council Action: Approve Agenda

The Council approved the agenda as shown in Agenda Item A.4, Council Meeting Agenda. (Motion 1)

B. Administrative Matters

B.1 Future Council Meeting Agenda Planning (11/14/06; 8:06 am)

B.1.a Agenda Item Overview

Dr. McIsaac provided the agenda item overview and reviewed the proposed three-meeting outlook and March meeting agenda..

B.1.b Agency Reports

Mr. Russell Porter, PSMFC, reported on RecFIN operations with regard to recommendations from their workshop in August and a RecFIN committee meeting in October. He noted that they are trying to develop a more consistent method of handling recreational data among the States and asking for direction from the Council on a list of items provided in Attachment B.1.b. Additionally, they are interested in establishing a procedure for SSC review of pertinent RecFIN issues. He reported that he would be prepared to present the recommendations and other issues to the Council by March and requested a place on the Council agenda at a meeting after that time.

B.1.c Reports and Comments of Advisory Bodies

Ms. Michele Culver provided Agenda Item B.1.c, Supplemental HMSMT Report. Mr. Doug Fricke provided Agenda Item B.1.c, Supplemental HMSAS Report.

B.1.d Public Comment

None.

B.1.e Council Discussion of Future Council Meeting Agenda Topics

None.

B.2 Updated Research and Data Needs (11/16/06; 2:26 pm)

B.2.a Agenda Item Overview

Mr. Mike Burner provided the agenda item overview.

B.2.b Reports and Comments of Advisory Bodies

Mr. Burner read Agenda Item B.2.b, Supplemental HC Report. Dr. Bob Conrad provided Agenda Item B.2.b, Supplemental SSC Report. Mr. Burner read Agenda Item B.2.b, CPSMT Report and Agenda Item B.2.b, CPSAS Report. Ms. Heather Mann provided Agenda Item B.2.b, Supplemental GAP Report. Dr. John Field provided Agenda Item B.2.b, Supplemental GMT Report.

B.2.c Public Comment

Ms. Heather Mann, Munro Consulting, Siletz, Oregon
Mr. Bob Osborn, United Anglers of Southern California, Surfside, California
Mr. Sean Hastings, CINMS, Santa Barbara, California

B.2.d Council Action: Adopt Final Recommendations

Mr. Gordy Williams noted there has not been discussion regarding the salmon sections and asked if the salmon advisory bodies had provided a statement. Mr. Burner said the Salmon Technical Team and Salmon Advisory Subpanel have had this item on their September and November agendas, but given the heavy salmon workload this fall they have not had the opportunity to comment. The schedule this week is a bit awkward as those groups are meeting today. Mr. Burner stated that any comments developed by these groups could be incorporated into the final document. Mr. Williams noted several language changes that would help clarify the document and stated he would work with Council staff to implement them. Mr. Williams wished to clarify that references to a revised MSA refer to the 1996 reauthorization not the current efforts in Congress and to ensure that the language reflects that GSI is intended to complement the CWT system, not to replace it or suggest that the CWT program is unsuitable.

Mr. Moore noted that the process is a bit awkward as the Council will not be able to see the final document prior to distribution, but he understands the time limitation and the need to distribute the document in December.

Mr. Moore moved (Motion 21) that the Council adopt the public review draft, Agenda Item B.2.a, Attachment 1: Research and Data Needs, 2006-2008 as a final document subject to the following changes: incorporate the bullet points (except for bullet point #3) in Agenda Item B.2.b, Supplemental SSC Report; and include comments provided under Agenda Item B.2.b by the GMT, GAP, CPSAS, CPSMT, HC, and any that may be forthcoming from the Salmon Advisory Subpanel and Salmon Technical Team, and the comments from Council members. Mr. Curt Melcher seconded the motion.

Mr. Moore said the Council staff should work with the chairs of the advisory bodies to incorporate their changes. Mr. Moore stated he omitted the third bullet in the SSC statement because there is no other place in the document where we are recommending a cost-benefit analysis of research activities, and he questioned whether it would be appropriate. Mr. Moore was uncertain whether NMFS or the Council has the tools or information to do that type of cost-benefit analysis. Additionally, the Council heard strong recommendations to support the existing language and the use of non-extractive resource assessment methodologies from the groundfish advisory bodies.

Ms. Vojkovich asked if the document would benefit from a review by the West Coast Science Centers to ensure the final version meets everyone's needs.

Dr. McIsaac said, in the past, Council staff took the document to West Coast and national research coordinators in NMFS, but as Mr. Burner indicated, this year's schedule precluded such coordination. Dr. McIsaac noted that January is a critical time for funding and planning decisions and the document really needs to reach finality soon.

Mr. Burner said he noted that although the document was completed on a shortened schedule with less of an opportunity to see the final document, the document has been out for review in various forms since September. Mr. Burner noted that many good comments have come forward at this meeting and that Council staff will do its best to produce a high-quality document for distribution in December.

Mr. Moore agrees with Ms. Vojkovich's ideas about additional coordination is a good one, but with Dr. McIsaac and Mr. Burner's comments about the importance of timing the release of the document, he recommends we direct Council staff to complete and distribute the document as scheduled with the hope there will have more time to review and complete the document in the next cycle.

Motion 21 passed.

B.3 Legislative Matters

This agenda item was removed from the agenda, the Legislative Committee did not meet.

B.4 Fiscal Matters (11/17/06; 4:18 pm)

B.4.a Agenda Item Overview

Dr. Coon provided the agenda item overview.

B.4.b Budget Committee Report

Dr. Coon referenced Agenda Item B.4.b, Supplemental Budget Committee Report.

B.4.c Reports and Comments of Advisory Bodies

None.

B.4.d Public Comment

None.

B.4.e Council Action: Consider Recommendations of the Budget Committee

Mr. Warrens moved and Mr. Ortmann seconded a motion (Motion 29) to approve the report of the Budget Committee as shown in Agenda Item B.4.b, Supplemental Budget Committee Report.

B.5 Appointment of Council Officers and Members of Advisory Bodies, Standing Committees, and Other Forums, Including the 2007-2009 Advisory Body Term and any Necessary Changes to Council Operating Procedures (COP)

B.5.a Agenda Item Overview

Dr. Coon provided the agenda item overview.

B.5.b Reports and Comments of Advisory Bodies

None.

B.5.c Public Comment

None.

B.5.d Council Action: Appoint Council Officers, Consider Changes to COPs, Appoint New Advisory Body Members as Necessary, Including 2007-2009 Advisory Body Term

Mr. Anderson moved and Mr. Cedergreen seconded a motion (Motion 30) to Suspend COP 1 for one year only (2007), and elect as Council Chair Mr. Donald Hansen and Vice Chair Dave Ortmann for the 2007 calendar year. Motion 30 passed.

Mr. Anderson moved and Ms. Vojkovich seconded a motion (Motion 31) to appoint Mr. Keith Lutz to the vacant Tribal Government Position on the STT. Motion 31 passed.

Mr. Warrens moved and Mr. Melcher seconded a motion (Motion 32) to appoint to the Groundfish Allocation Committee, nonvoting positions, Mr. Tom Ghio (Open Access Fishery) and Mr. Daniel Waldeck (Pacific Whiting Fishery). Motion 32 passed.

Mr. Warrens moved and Mr. Melcher seconded a motion (Motion 33) to make an interim appointment of Mr. Steve Barrager to the vacant Conservation Position on the Groundfish Allocation Committee and direct the Council staff to solicit nominations to fill the position with a permanent appointee at the March Council meeting. Motion 33 passed.

Mr. Melcher moved and Mr. Warrens seconded a motion (Motion 34) to appoint the following persons to the 2007-2009 advisory body term for the Coastal Pelagic Species Advisory Subpanel:

California Commercial
Mr. Neil Gugielmo
Ms. Terry Hoinsky
Mr. John Royal

Oregon Commercial
Mr. Eugene Law

Washington Commercial
Mr. Robert Zuanich

California Processor
Ms. Diane Pleschner-Steele

Oregon Processor
Mr. Mike Okoniewski

Washington Processor
Mr. A. Pierre Marchand

California Sport/Charter
CPT Paul Strasser

Conservation
Mr. Ben Enticknap

Motion 34 passed.

Mr. Dale Myer moved and Mr. Mark Cedergreen seconded a motion (Motion 35) to appoint to the 2007-2009 advisory body term for the Groundfish Advisory Subpanel the following people:

Fixed Gear
Mr. Robert Alverson
Mr. Tom Ghio
Mr. Gerry Richter

California Trawl
Mr. Tommy Ancona

Oregon Trawl
Mr. Kelly Smotherman

Washington Trawl
Mr. Marion Larkin

Open Access South of Cape Mendocino
Mr. Daniel Platt

Open Acess North of Cape Mencino
Mr. Kenyon Hensel

Processors
Mr. Barry Cohen
Ms. Heather Mann

At-Sea Processor
Mr. Daniel A. Waldeck

Calfornia Charter South of Point Conception
Mr. Mike Hansen

Calfornia Charter North of Point Conception
Mr. Robert Ingles

Oregon Charter
Mr. Wayne Butler

Washington Charter
Mr. Rhett Weber

Sport Fisheries
Mr. John Holloway
Mr. James Martin
Mr. David Seiler

Conservation
Mr. Steve Barrager

Active Tribal Fisher
Mr. Gordon M. Smith

Motion 35 passed.

Mr. Anderson moved and Mr. Melcher seconded a motion (Motion 36) to appoint to the 2007-2009 advisory body term for the Highly Migratory Species Advisory Subpanel the following persons:

Commercial Troll
Mr. Wayne Heikkila

Commercial Purse Seine
Mr. August Felando

Commercial Gillnet
Mr. Steve Fosmark

Commercial Fisheries
Mr. Pete Dupuy
Mr. Douglas Fricke
Mr. William Sutton

Processor South of Cape Mendocino
None-Council to leave vacant until interest is expressed.

Processor North of Cape Mendocino
Ms. Gayle Parker

California Charter Boat
Mr. Robert Fletcher

Washington/Oregon Charter Boat
Ms. Linda Buell

Private Sport
Mr. Bob Osborne

Conservation
Ms. Meghan Jeans

Public At-Large
Ms. Pamela Tom

Motion 36 passed.

Ms. Vojkovich moved and Mr. Melcher seconded a motion (Motion 37) to appoint the following persons to the 2007-2009 advisory body term for the Salmon Advisory Subpanel:

California Troller
Mr. Duncan MacLean

Oregon Troller
Mr. Paul Heikkila

Washington Troller
Mr. Jim Olson

Commercial Gillnet Fishery
Mr. Kent Martin

Processor
Mr. Gerald Reinholdt

California Charter Boat
Mr. Craig Stone

Oregon Charter Boat
Mr. Mike Sorenson

Washington Charter Boat
Mr. Butch Smith

California Sport Fisher
Mr. Dan Wolford

Oregon Sport Fisher
Mr. Richard Heap

Washington Sport Fisher
Mr. Steve Watrous

Idaho Sport Fisher
Dr. Tom Welsh

Washington Active Tribal Fisher
Mr. Calvin Frank

California Tribal
Mr. Dave Hillemeier

Conservation
Mr. Jim Hie

Motion 37 passed.

Mr. Warrens moved and Mr. Melcher seconded a motion (Motion 38) to appoint the following persons to the 2007-2009 advisory body term for the Habitat Committee

Commercial Fishing Industry
Mr. Joel Kawahara

Sport Fishing Industry
Ms. Liz Hamilton

Conservation
Mr. Mike Osmond

Northwest or Columbia River Tribal Representative
Mr. Stuart Ellis

California Tribal
Mr. Mike Orcutt

Public At-Large
Mr. Sean White

Motion 38 passed.

Mr. Ortmann moved and Mr. Anderson seconded a motion (Motion 39) to appoint the following persons to the 2007-2009 advisory body term for the Council's Scientific and Statistical Committee:

Scientists
Mr. Steve Berkeley
Dr. Thomas Helser
Dr. Stuart Todd Lee
Dr. Lyman McDonald
Dr. Andre E. Punt
Dr. Steve Ralston

Motion 39 passed.

Chairman Hansen appointed the following persons to the Ad Hoc Shoreside Whiting Alternative Workgroup (SWAG):

NMFS NW Region
Mr. Frank Lockhart
Ms. Yvonne deReynier
Ms. Becky Renko

Council Member
Mr. Rod Moore (Chair of SWAG)

WDFW
Mr. Brian Culver

ODFW
Mr. Mark Saelens

CDFG
Ms. Susan Ashcraft

Industry
Ms. Heather Mann
Mr. David Jincks
Mr. Rich Carol

Enforcement
Mr. Dayna Matthews
Cpt. Mike Cenci

Chairman Hansen also appointed Mr. Craig Urness to replace Mr. Frank Dulcich on the Ad Hoc Groundfish Trawl Individual Quota Committee.

B.6 Council Three-Meeting Outlook, Draft March 2007 Council Meeting Agenda, and Workload Priorities (11/17/06; 4:38 pm)

B.6.a Agenda Item Overview

Dr. Don McIsaac provided the agenda item overview.

B.6.b Reports and Comments of Advisory Bodies

Dr. Coon read Agenda Item B.6.b, Supplemental GMT Report and Mr. DeVore read Agenda Item B.6.b, Supplemental GAP Report.

B.6.c Public Comment

Mr. Rod Fujita, ED, San Francisco, California—requested the GMT and Gap to review the Nature Conservancy proposal.

Chairman Hanson noted there was a letter from owner operator Steve Fritz, Morro Bay on this agenda item.

B.6.d Council Guidance on Three Meeting Outlook, March 2007 Council Agenda, and Council Staff Workload, including Priorities for Advisory Body Consideration

Council members worked with the Executive Director and Council staff to determine the March 2007 Council meeting agenda, staff workload, and priorities for advisory body consideration.

Ms. Vojkovich expressed concern that the Council pursue the open access amendment on a timely basis. She stated California would provide assistance. ODFW stated their priority to assist with the American Fisheries Act issues.

C. Highly Migratory Species Management

C.1 National Marine Fisheries Service (NMFS) Report (11/14/06; 8:28 am)

C.1.a Southwest Region Activity Report

Mr. Mark Helvey referred to Agenda Item C.1.a, Attachment 1.

C.1.b Reports and Comments of Advisory Bodies

None.

C.1.c Public Comment

Mr. Doug Fricke, Washington Trollers Association, Hoquiam, Washington

C.1.d Council Discussion

None.

C.2 Final Changes to Routine Management Measures (11/14/06; 8:40 am)

C.2.a Agenda Item Overview

Dr. Kit Dahl provided the agenda item overview.

C.2.b Report of the Highly Migratory Species Management Team

Ms. Culver provided Agenda Item C.2.b, Supplemental HMSMT Report.

C2.c Agency Comments

None.

C.2.d Reports and Comments of Advisory Bodies

Ms. Michele Culver provided Agenda Item C.2.b, Supplemental HMSMT Report. Mr. Doug Fricke provided Agenda Item C.2.b, Supplemental HMSAS Report. Mr. Anthony Warrington provided Agenda Item C.2.b, Supplemental EC Report.

C.2.e Public Comment

Ms. Meghan Jeans, The Ocean Conservancy, San Francisco, California
Mr. Dan Wolford, Coastside Fishing Club, Los Gatos, California
Mr. Bob Osborn, United Anglers of Southern California, Surfside, California
Mr. Bob Fletcher, Sportfishing Association of California, San Diego, California
Mr. Tom Raftican, United Anglers of Southern California, Irvine, California

C.2.f Council Action: Adopt Final Changes to 2007-2008 Routine Management Measures

Mr. Warrens moved and Mr. Thomas seconded a motion (Motion 2), with regard to the vessel marking requirements, to choose option 2 from Agenda Item C.2.a, Attachment 1, which exempts commercial passenger fishing vessels from current federal vessel marking requirements.

Mr. Warrens said some may perceive a problem in Southern California south of Point Conception; but during public testimony Mr. Fletcher and others made excellent arguments for not requiring CPFV marking; the vessel name can be easily seen for vessel identification. He did not think enforcement made a strong enough case for the marking of these vessels; farther north in California, Oregon, and Washington, the point is moot because the concern has to do with incursions of Mexican vessels into U.S. waters.

Mr. Thomas said that most people are not familiar with the Southern California fleet described by Mr. Fletcher, in regard to their size. They are large vessels and the name on the stern is easily visible from any aircraft.

Ms. Vojkovich supported the motion because the original intent of the FMP was to exempt these vessels, and the requirement in regulations was an oversight. She said this change would apply to "six pack" vessels, which are licensed, at least in the state of California. She did not see this as much of a risk for

management of HMS on the West Coast because the issue could be revisited during a future biennial cycle.

Mr. Warrens noted that in 1985 the Council made the same argument with regard to marking charter vessels targeting groundfish.

Mr. Anderson supported the motion; if there is an issue of identifying CPFVs then it goes beyond this particular issue. Although the marking requirement does not seem to him to be much of a burden, he didn't see a compelling case made for retaining the regulation. But he noted that there remains an issue of identifying smaller vessels.

Mr. Cedergreen agreed with Mr. Anderson's statement. As with Mr. Anderson, he noted that the Westport charterboats complied with the regulation and did not find the requirement overly burdensome, but he still supports the exemption.

Motion 2 passed.

Mr. Thomas moved and Mr. Warrens seconded a motion, (Motion 3) to adopt albacore Option 3 and bluefin Option 2 with a 10 fish daily bag limit from Agenda Item C.2.a, Attachment 2. Albacore Option 3 implements a daily bag limit of 25 fish per angler per day north of Point Conception to the California/Oregon border and a daily bag limit of 10 fish per day south of Point Conception to the U.S./Mexican border. Bluefin Option 2 establishes a daily bag limit for bluefin tuna with the Council setting the bag limit amount to 10 fish.

Mr. Thomas said he strongly believes that Point Conception is a very good boundary line for the two albacore daily bag limits and would be easy to enforce. There are many other fishery management boundaries that are difficult to enforce.

Ms. Vojkovich argued for making the regulations as simple as possible, so that anglers can understand them and to make enforcement easier. In addition, these measures are responsive to the IATTC resolution on albacore effort. Finally, the recreational community has made a compelling argument for the differential albacore bag limit. She noted that there are concerns about our knowledge of stock status. At this time the bag limits are more symbolic and not restrictive, although perhaps in the future, as new information becomes available, more restrictions may be needed. Ms. Vojkovich supported the motion.

Mr. Melcher asked the maker of the motion if the bluefin bag limit is a separate additional bag limit, to which the answer was that it is. Noting that in the bluefin options there is a distinct statement about the possession limit being one daily bag limit he asked if that is the case for the albacore option as well. Mr. Thomas said enforcement should answer that question.

Mr. Warrington said that the numbers of fish in the options is a daily bag limit but in California you can get a multi-day permit for up to three daily bag limits on a single trip. Mr. Melcher said the option says that the possession limit is equal to one daily bag limit; does that prevent the multi-day possession limit? Mr. Warrington said for bluefin, unless it gets exempted by the Commission, an angler could continue to possess up to three bluefin daily bag limits under a three-day multi-day permit.

Mr. Helvey commented on Ms. Vojkovich's reference to the symbolic nature of this action. He said no other country has stepped forward to comply with the resolution, so it is an indicator to the international community and to the U.S. delegation to the IATTC about the Council's intent to conserve these tuna stocks.

Mr. Melcher followed-up to clarify whether the daily possession limit would be in Federal regulations and would conflict with the state regulations with respect to multi-day possession limits.

Dr. McIsaac described the motion and said it does reference a possession limit for both the albacore and bluefin bag limits. He thought this could raise the question of inconsistency between Federal and state regulations. Mr. Judson Feder said if there is an inconsistency the Federal limit would prevail, providing the fishing is taking place beyond state waters.

Mr. Anderson referenced Washington regulations and said he didn't read the motion to prevent possession of multiple daily bag limits.

Dr. Dahl pointed out that the decision support document (Agenda Item C.2.a, Attachment 2) describes the options in terms of a bag limit and does not mention a different possession limit. He thought the intent in the HMSMT statement was to recommend a daily bag limit, without precluding the California multi-day permit.

Mr. Cedergreen suggested some wording changes for the motion to resolve the issue. Dr. McIsaac reiterated Dr. Dahl's point about the difference in wording between the decision document and the HMSMT Report. Mr. Thomas confirmed he was referring to the HMSMT report when he made his motion. Mr. Warrington noted that the states can always be more restrictive than the Federal regulations and again described the multi-day permit issued by California.

Ms. Culver said the HMSMT discussed this and their understanding is that in California there is a blanket regulation referencing the possession limit and then there are additional regulations authorizing the multi-day permit, which allows up to three daily bag limits in your possession. The HMSMT's intent was to mimic state regulations in Federal regulations in that regard.

Mr. Thomas said that was the intent of the motion.

Mr. Melcher said the reference to the decision document clarifies it for him and if that is the intent of the motion he is satisfied.

Motion 3 passed.

Mr. Melcher asked the Council to defer consideration of a change in the northern boundary of the Pacific leatherback conservation area until the next biennial management cycle. He noted that the analysis is not ready at this time and pointed out new information that could become available in the next two years to help with this decision. The Council concurred with this recommendation.

C.3 Exempted Fishing Permits (EFP) (11/14/06; 10:25am)

C.3.a Agenda Item Overview

Dr. Kit Dahl provided the agenda item overview.

C.3.b Reports and Comments of Advisory Bodies

Ms. Culver provided Agenda Item C.3.b, Supplemental HMSMT Report. Mr. Fricke provided Agenda Item C.3.b, Supplemental HMSAS Report.

C.3.c Public Comment

Mr. Tom Raftican, United Anglers of Southern California, Irvine, California
Ms. Kate Wing, NRDC, San Francisco, California
Mr. Bob Osborn, United Anglers of Southern California, Surfside, California

Mr. Ben Enticknap, Oceana, Portland, Oregon
Ms. Karen Steele, Turtle Island Restoration Project, Forest Knolls, California
Ms. Meghan Jeans, The Ocean Conservancy, San Francisco, California
Mr. Pete Dupuy, Ocean Pacific Seafood, Tarzana, California

C.3.d Council Action: Consider Drift Gillnet EFP (Status for 2006 and Guidance for 2007) and Preliminary Alternatives for 2007 Shallow Set Longline EFP (11/14/06; 1:17 pm)

Mr. Moore asked if NOAA Fisheries personnel could help clarify what the bycatch levels are in the drift gillnet fishery, because a variety of different statistics were cited in public testimony. Mr. Helvey said that NOAA Fisheries did not have that information available at the present time but Lyle Enriquez, the SWR observer program director, was present to answer questions.

Mr. Moore asked if he could respond to information presented in public testimony on marine mammal impacts. Mr. Enriquez said he was unfamiliar with those impacts but could speak to finfish bycatch. The largest percentage of finfish bycatch is either common mola or blue sharks and the disposition of those fish should be considered. For example, over 90 percent of the common mola are released alive. Other fish species may not be targets of the fishery but are not bycatch, because they are retained. He also said one has to consider whether finfish bycatch mortality presents a conservation concern.

In response to Mr. Moore's questions Ms. Liz Petras said that information is available in the BO and the draft EA. Mr. Moore reiterated his question about information in public testimony on marine mammals, which was presented in different ways. Ms. Petras discussed the 1997 take reduction plan and how it reduced the take of cetaceans in the drift gillnet fishery. She also said the EA presents take-per-unit-of-effort information for protected species and discussed the analysis in that document. She said that for all species the projected takes from the drift gillnet EFP are below the potential biological removal (PBR) standard used in the MMPA.

Mr. Anderson reviewed the Council's previous decision on the drift gillnet EFP for implementation in 2006, noting that any continuation of the EFP in future years would be subject to review and that very restrictive take caps for several marine mammals were recommended. However, NOAA Fisheries informed the Council that it would not apply a take cap of one animal for each of three marine mammals as part of the conditions for the EFP. Mr. Anderson raised this issue at the June 2006 Council meeting, noting his disappointment that NOAA Fisheries had not followed Council recommendations with respect to these caps. He asked for confirmation that NMFS had subsequently put those restrictive take caps back into the proposal. If there is no new information that would cause the Council to reconsider the March decision and given that we have already discussed this issue, the DGN EFP proposal should be forwarded at this time for implementation in 2007 with the same conditions as the Council proposed for 2006. Once the EFP has been conducted in 2007 it could be evaluated and considered for continuation in 2008. If, on the other hand, there is new information the Council is unaware of, then he would not recommend to move forward at this time, before reviewing that new information.

Mr. Helvey said there is no new information the Council is unaware of. However, in reference to Mr. Anderson's discussion, the Council originally recommended a one-animal cap for six marine mammal species, but NOAA Fisheries determined that there was scientific evidence sufficient to support these caps for only three of the six species for which the Council proposed caps. NOAA Fisheries informed the Council that if there was more than one take of the three species without caps they would conduct a review.

Ms. Petras said the three whale species for which the Council recommended caps, but NOAA Fisheries did not propose to implement, were fin, minke, and gray whales. This was because they have relatively high PBR thresholds and there is not a conservation concern sufficient to warrant a cap of one animal for each species.

Mr. Anderson asked about the caps the Council recommended. Ms. Petras reviewed the caps the Council recommended.

Mr. Anderson said he could not recommend the EFP for 2007 if he knew that NMFS had decided not to apply all of the marine mammal caps proposed by the Council.

Ms. Vojkovich noted that the Council does not have before it a description of what NMFS would do in response to a take of one of the three whale species for which the Council recommended caps that NMFS was not going to apply. In addition to asking NMFS to provide that information, she asked Mr. Anderson whether he was satisfied with NMFS's proposed response or could he not support the EFP without the application of caps for those three additional whale species.

Mr. Anderson said from his perspective, the caps on fin, minke, and gray whales were an important component of the Council's recommendation. If he knew NOAA Fisheries was not going to implement that recommendation he would not recommend the EFP for implementation in 2007.

Mr. Helvey said NMFS rejected those caps based on the scientific evidence. But they would consider those types of caps if there is an interaction. Mr. Anderson said he was not satisfied with the argument that the science supports some higher level of mortality for these species. That response does not address the public's concern about a fishery that has interactions with marine mammals at a level they find unacceptable. That acceptable level is different for everybody. It is not just a scientific answer.

Dr. McIsaac asked Mr. Helvey, if this Council did recommend the same caps as last year, would NMFS's response be the same as last year? Mr. Helvey said, in the interest of seeing the EFP go forward, he didn't think the agency would insist on removing these caps, especially given the points made by Mr. Anderson.

Ms. Fosmark said she didn't understand why the caps should be applied if it impeded gathering the necessary scientific information from the EFP. Without the EFP there may not be a fishery to gather the information and this fishery has been striving to stay under the limit for all takes. She supports the caps as planned by NOAA Fisheries to make this EFP possible.

Mr. Moore moved that the Council recommend that NOAA Fisheries grant the EFP for the drift gillnet fishery for the year 2007 under the same terms and conditions, including all of the marine mammal take restrictions recommended in March 2006, and that the results of the EFP be reviewed at the end of the 2007 fishery by our SSC and advisory bodies, and a report be made to the Council before any action taken in 2008. (Motion 4) Mr. Warrens seconded the motion.

Mr. Moore explained the long Council discussion in March. The Council proposed a reasonably conservative approach for this fishery, which made it practicable while addressing conservation concerns. He was disappointed in NOAA Fisheries' removal of the Council-recommended marine mammal caps. He asked Mr. Helvey to communicate to his superiors how strongly the Council feels about this issue. At the same time he thinks the industry is trying to avoid any sort of takes and recognizes that takes could jeopardize continuation of the EFP. At this point the Council has to trust NOAA Fisheries that they will follow the Council's recommendation. He said he is supportive of the motion and in good faith expects NOAA Fisheries to grant the EFP with the provisions set forth by the Council to conserve marine mammals.

Mr. Anderson said he supported the motion.

Mr. Myer said he would vote against the motion because he was not on the Council in March and did not know enough about the issue. Mr. Sones said he was in the same position in terms of not being fully informed on this issue. He pointed out that the tribes are concerned about avoiding bycatch too. For that reason he would not support the motion.

Mr. Helvey said he thought the Council's recommendation would be acceptable to NMFS in the interest of seeing this EFP go forward.

Mr. Cedergreen said he was at the March Council meeting and involved in the discussions, and did not vote for it then, and will not vote for it now.

Motion 4 passed. Messrs. Myer, Cedergreen, and Sones voted no.

Mr. Moore moved (Motion 5) that the Council adopt, as preliminary alternatives for a shallow-set longline EFP for 2007, alternatives 1, 2, and 3 shown in Agenda Item C.3.b, Supplemental HMSMT Report. Mr. Melcher seconded the motion.

Mr. Moore said there was a reasonable range of alternatives from no action to a variety of measures to protect sea turtles, allowing analysis of the potential impacts and sufficient information for the Council to determine whether to proceed with a recommendation.

Dr. Dave Hanson asked about a provision in alternative 2 (item #5) prohibiting the use of lightsticks, which testimony indicated would make the EFP not viable. Did Mr. Moore intend to allow the use of light sticks under this alternative? Mr. Moore said alternative 3, which incorporates measures from alternative 2, would allow the use of lightsticks. Ms. Fosmark offered a friendly amendment to change alternative 2, item # 5 to allow the use of lightsticks to reflect the intent of the maker of the motion. Both maker and seconder agreed.

Mr. Anderson asked the HMSMT if the EFP would generate enough information for future decision-making, given that only one vessel would be involved.

Ms. Culver said the HMSMT addressed that issue in their report under this issue in March. They concluded that one vessel participating in an EFP taking four trips would not all by itself give us enough data to convert drift gillnet to longline gear. She reminded the Council about the original EFP, described in the FMP, which proposed ten vessels participating. Mr. Dupuy (the applicant) resubmitted this proposal in 2005. The Council did not recommend the EFP on either of these occasions so Mr. Dupuy submitted the current proposal involving just one vessel. Mr. Anderson asked if the immediate objective was to determine whether this fishery is economically and/or logistically feasible and whether the EFP could satisfy this objective. Ms. Culver said Mr. Dupuy has heard from other drift gillnet holders that if he demonstrates the economic feasibility, their interest in participating in a longline fishery would be greater.

Ms. Vojkovich said she would not support the motion.

Mr. Helvey said NOAA Fisheries views EFPs as a way to gather scientific information and he didn't think this EFP would gather scientifically valid information on bycatch and other issues. But referencing an earlier comment by Mr. Melcher, this EFP is an initial step to determine whether the fishery is economically viable. Based on the results, a more scientifically robust EFP could be implemented in future years.

Motion 5 passed. Messrs. Thomas, Mallet, Cedergreen, and Ms. Vojkovich voted no. Mr. Myer abstained.

Dr. Dahl asked for reconfirmation that no further Council action is needed on their recommendation for the drift gillnet EFP for 2007. Mr. Melcher said that was his understanding. The Council concurred.

C.4 Fishery Management Plan (FMP) Amendment 1: Overfishing Response for Bigeye Tuna (11/14/06; 2:02 pm)

C.4.a Agenda Item Overview

Dr. Dahl provided the agenda item overview. He also directed attention to Supplemental Attachment 3, an excerpt from the WPFMC's Pelagics Amendment 14.

C.4.b Reports and Comments of Advisory Bodies

Ms. Culver provided Supplemental HMSMT/HMSAS Report. Mr. Doug Fricke came forth to reflect a little bit of the conservation from the HMSMT/HMSAS meetings.

C.4.c Public Comment

Ms. Kate Wing, NRDC, San Francisco, California
Ms. Meghan Jeans, The Ocean Conservancy, San Francisco, California
Mr. Bob Osborn, United Anglers of Southern California, Surfside, California

C.4.d Council Action: Adopt Final Preferred FMP Amendment Alternative

Ms. Vojkovich asked whether or not there was a requirement for the Council to amend the FMP to address this issue.

Mr. Helvey said the notification letter said both the WPFMC and PFMC needed to take some action. NOAA Fisheries is currently reviewing an FMP amendment submitted by the WPFMC to address bigeye tuna overfishing Pacific-wide. Since bigeye is a single Pacific-wide stock, just a single plan amendment addressing overfishing Pacific-wide is necessary. For this reason the obligation for this Council to do something may not be necessary.

Mr. Feder said Mr. Helvey put it well. He said we are in an awkward position because of the statement in the original notification letter calling on both councils to take action. WPFMC has acted more quickly to develop an amendment addressing overfishing Pacific-wide. If that plan amendment is approved it would resolve the issue. Two plan amendments dealing with the same goal would not be necessary. That said, if the PFMC wants to go ahead and affirm what WPFMC is recommending by amending the HMS plan that is okay; if the PFMC wants to propose their own amendment, that is also okay, but would require an analysis to determine that the effect of the two plans is still sufficient to end overfishing.

Mr. Helvey discussed the evolution of WPFMC's Pelagics Amendment 14. Originally it did not address purse seine impacts in the Eastern Pacific Ocean, which are the main cause of overfishing. This Council then provided recommendations to the WPFMC to address overfishing in the EPO, which were incorporated into the amendment. Ms. Vojkovich asked Mr. Helvey if the PFMC recommendations were based on the IATTC staff recommendations for ending bigeye overfishing. He said yes, emphasizing that IATTC staff has the requisite expertise on tropical tunas. Amendment 14 incorporates their advice. He also pointed out that Council-managed fisheries catch very little bigeye, so it is not necessary to invest a lot of additional time on this issue and create more work than is necessary.

Ms. Vojkovich asked for confirmation that much of the excerpted portion of Amendment 14 (Supplemental Attachement 3) proposed a process for Council engagement in the international arena with respect to bigeye tuna overfishing and related issues. Mr. Helvey agreed and said he thought it important for the Council to set up those formal protocols. That is how overfishing will be ended. He pointed out the Council's letter to the IATTC GAC as a first step. Over time, this Council should implement a more organized process for interacting in the international arena.

Mr. Feder said the process WPFMC proposes in Amendment 14 does not have to be the process used by this Council.

Ms. Vojkovich asked why, if we endorse what is in Amendment 14, we wouldn't also endorse the process laid out there? Mr. Feder said if this Council wants to implement such a process, they should set up their own process. He does not view those processes as part of the plan that actually ends bigeye overfishing.

Mr. Sones asked whether the overfishing determination came from the international forum or domestically. Mr. Helvey said the determination of overfishing came out of the international forum in that it was based on an IATTC stock assessment report. Mr. Sones said he was concerned about disproportionately affecting domestic fisheries without effectively addressing the causes of overfishing at the international level.

Mr. Moore said his understanding is that if the Council took no action, we would in fact have responded to overfishing, because it is addressed through Amendment 14. At the same time, if we separately want to draw up our own plan on how were going to interact with IATTC and other international bodies, we can do that as separate and distinct from addressing overfishing. Mr. Feder agreed with this assessment. Ms. Fosmark echoed Mr. Moore's comments.

Dr. McIsaac spoke to Supplemental Attachment 3 (Pelagics Amendment 14 excerpt), and asked if the Council's recommendations were included in that document on page 7, International Option 2. Dr. Dahl said yes, and reviewed the relation between the recommendations made at the April Council meeting and the current Amendment 14.

Ms. Vojkovich moved (Motion 6) that the Council use International Alternative 2, "end overfishing immediately," on page 7 of Agenda Item C.4.a, Supplemental Attachment 3 as an amendment to the Pacific Council's HMS FMP. Mr. Anderson seconded the motion.

Ms. Vojkovich said that although we don't have to amend the FMP, Amendment 14, International Alternative 2, ends overfishing and, as explained by Dr. McIsaac, includes the previous recommendations made by this Council. She also noted public comment about the fundamental need for the Council to be actively involved in issues relative to HMS as an equal partner with WPFMC. If we adopt this recommendation and implement it in our FMP, it accomplishes those objectives.

Mr. Melcher added that in the Supplemental HMSAS/HMSMT Report it states that Pelagics Amendment 14 International Alternative 2 would meet the objectives to end overfishing of BET. He supports the motion.

Motion 6 passed.

Ms. Vojkovich said that the issue of the process and protocol for PFMC involvement at the international level with these HMS issues hasn't been dealt with. We should consider the process set forth in the Pelagics Amendment 14 excerpt as a guideline for developing an operating procedure for this Council to use with bigeye and yellowfin under the next agenda item. Dr. Dahl pointed to proposed amendment language on page 8 of Attachment 1 that would authorize development of such a procedure.

Ms. Vojkovich said she was concerned about adding language to the FMP that would take an amendment to change. With that, Ms. Vojkovich moved and Mr. Moore seconded a motion (motion 7) to adopt Agenda Item C.4.a, Supplemental Attachment 3 as a standalone document so that the Council could change it more frequently than an FMP amendment and it would be on a different track than the FMP amendment. Motion 7 passed.

Ms. Vojkovich reiterated some of the comments Ms. Wing made about our commitment for working with the WPFMC and the fact that we have not been able to make that happen over the past few years. Since the next agenda item is yellowfin, we need to make that connection to WPFMC. However, we consider doing that, we need to do something concrete relative to that coordination in the next year.

Mr. Melcher moved (Motion 8) to adopt the housecleaning and language changes as identified in Agenda Item C.4.a, Attachment 2: Proposed Non-substantive Reorganization of the HMS FMP. Mr. Moore seconded the motion.

Motion 8 passed.

C.5 Yellowfin Tuna Status (11/14/06; 3:35 pm)

C.5.a Agenda Item Overview

Dr. Dahl provided the agenda item overview.

C.5.b Reports and Comments of Advisory Bodies

Ms. Culver provided Agenda Item C.5.b, Supplemental HMSMT Report. Dr. Bob Conrad provided Agenda Item C.5.b, SSC Report. Mr. Fricke provided Agenda Item C.5.b, Supplemental HMSAS Report.

C.5.c Public Comment

Ms. Meghan Jeans, The Ocean Conservancy, San Francisco, California

C.5.d Council Action: Consider Stock Assessment and Possible Overfishing Implications

Ms. Vojkovich asked about the discussion in Agenda Item C.5.a, Attachment 1 (NOAA Fisheries overfishing determination letter) regarding reference points. She said she knows the HMSMT has been planning to identify reference points. But based on this letter, is this something that the HMSMT should not work on because there is another, better mechanism? Mr. Helvey said he thinks what is important is to distinguish between temperate tuna (albacore and bluefin) and tropical tunas (bigeye and yellowfin). The SWFSC has expertise in the temperate tunas and their recommendation for these species is for this Council to evaluate and potentially adopt reference points that have been identified by RFMOs and international scientific bodies. The HMSMT should be tracking what is going on with temperate tunas and it is not clear to him that anything needs to be done for the tropical tunas. The SWFSC does not have a problem accepting what is proposed by the IATTC.

Ms. Vojkovich also asked about HMS-related meetings that are scheduled for the first quarter of 2007, specifically the IATTC GAC meeting in January and the IATTC meeting in February. She also wanted to know what NMFS's work plan is between this Council meeting and the next one in March.

Mr. Helvey said NMFS could distribute information about these upcoming meetings to Council members. With regard to NMFS participation in addressing yellowfin overfishing, they would like to work with the HMSMT and HMSAS, without the full burden falling on his staff. In a follow-up question, Ms. Vojkovich discussed Council engagement in these meetings, which could involve attendance by

HMSMT/HMSAS members at those meetings and then follow-up. Mr. Helvey said participation would be appropriate. Given that U.S. catch of yellowfin in the EPO is very low, he thought that the Council should primarily rely on IATTC staff scientists with respect to developing recommendations.

Mr. Moore raised the question of timing, based on the date of the notification letter. Doing something in one year from that date would require Council final action at the September 2007 meeting, while IATTC action will occur in June and the Council may only learn of it at their September meeting. He wondered how to coordinate these activities.

Mr. Helvey discussed the Council endorsing the IATTC scientists' recommendations and pushing those goals for ending EPO yellowfin overfishing at the international level as part of a plan amendment framework. This is similar to the process used for bigeye.

Mr. Moore asked if the Council response similar to what was done for bigeye, where the Council established some basic goals offered as recommendations to the IATTC, would be a sufficient response for yellowfin, in the form of a plan or regulatory amendment. Mr. Feder said that if the recommendations to be implemented were sufficient to end overfishing then the answer is yes. In a follow-up Mr. Moore asked about the significance of the June IATTC meeting, if Council recommendations will be based on staff scientists' advice. Based on past performance, he doubted the IATTC would adopt any measures to end yellowfin overfishing at its next meeting. Mr. Moore said his understanding was based on the HMSAS request that the Council defer action until after the June IATTC meeting so see what action they took.

Mr. Helvey said IATTC meets annually, and through a plan amendment perhaps the Council could take a more active role in engaging the IATTC, in particular by supporting IATTC staff scientists' recommendations.

Mr. Anderson referenced the discussion of yellowfin tuna in the WPFMC's Pelagics Amendment 14, asking about the conservation result. Mr. Helvey pointed out that Amendment 14 only addresses the WCPO yellowfin stock while this Council was notified about the EPO stock.

Noting that ceasing U.S. West Coast yellowfin catch would do nothing to end overfishing, Mr. Anderson asked how the Council would establish a framework to engage with the IATTC and WPFMC and whether regulations applicable to yellowfin fishing activity in the West Coast EEZ would be necessary.

Given the very low U.S. yellowfin catch, Mr. Helvey said that unilateral action is not advisable; instead this Council should work with the WPFMC to develop recommendations for the IATTC. Even though it doesn't have a role in eastern Pacific yellowfin, the WPFMC does participate in IATTC, and going to the IATTC with a joint statement could carry a lot of weight.

Mr. Sones asked when IATTC scientific staff recommendations would become available and how this would mesh with the Council process. He also sought confirmation that Council adoption of these recommendations would be sufficient. Mr. Helvey said he was unsure of the timing and discussed the upcoming February IATTC meeting. Mr. Sones hoped that the Council could get the staff recommendations in time to develop advice for the June IATTC meeting and wondered whether there would be sufficient time to meet the one-year statutory deadline for an FMP amendment. Mr. Helvey said he views this as an ongoing process with continuing advice to the IATTC.

Ms. Vojkovich recommended that the Council respond to the NOAA Fisheries determination letter, informing them that the Council will be providing advice to RFMOs. Furthermore, she recommended that Council staff and at least two members of our HMSMT and HMSAS attend the February IATTC meeting and the January GAC meeting. She would also try to attend these meetings as a Council

representative. After these meetings the HMSMT could start developing alternatives for an FMP amendment, with Council action later in the year.

Dr. McIsaac asked about the timing related to the statutory deadline; does the one-year clock start with the date on the letter or the day when the Council was informed, i.e., today? Mr. Feder said NOAA Fisheries interprets the one-year clock, which is the time frame for the Council to actually transmit their action, to begin with the date on the letter. Dr. McIsaac asked if NMFS considered that this Council bases its decisions on the scientific recommendations of its SSC with respect to stock assessments (which also inform the overfishing determination). Based on this process, was the October 25 letter date intended to cause the Council to miss the one-year deadline? Mr. Helvey said, not at all; the timing of the letter was only so it could be included in the November briefing book and it was submitted after NMFS had a chance to review the SSC's comments.

Mr. Anderson said the Council was notified today, and the timeline should not be based on when Council staff received the letter.

Mr. Helvey clarified that an FMP amendment would be required to address this issue.

Mr. Anderson pointed out that the notification letter says the Council may implement an FMP amendment or proposed regulations. Mr. Helvey argued that an FMP amendment is more appropriate in this circumstance, because domestic fisheries (which are subject to regulation) catch a negligible amount of yellowfin.

Dr. McIsaac reviewed the Council recommendations. He said Council staff will draft a letter to NOAA Fisheries describing the process for responding to overfishing in general terms. This will include attendance by the Council staff, a Council member, and two members from HMSAS and HMSMST at the February IATTC meeting. After that meeting, the HMSMT and HMSAS would meet to develop recommendations for Council consideration in time for the June Council meeting. The letter would also discuss a timeline for development of an FMP amendment. It may also describe possible components of the Council response, including the importance of international action and a focus on longline and purse seine fisheries.

Mr. Anderson asked about the budget implications of sending staff and HMSMT and HMSAS members to the GAC and IATTC meetings. Mr. Moore shared Mr. Anderson's concerns about the budgetary impacts. The Council could also write a letter to the U.S. Commissioners urging them to act vigorously in the IATTC arena.

The Council concurred with the guidance and Dr. Dahl said staff had sufficient direction.

D. Groundfish Management

D.1 NMFS Report (11/14/06; 4:35 pm)

Vice Chairman Dave Ortmann chaired Agenda Item D.1.

D.1.a Activity Reports

Mr. Frank Lockhart provided an update of regulatory activities since the last Council meeting. Agenda Item D.1.a, Attachment 1 is a list of Federal Register notices published by the Northwest Regional Office (NWR) from August 30, 2006 through October 25, 2006. The final rule for Amendment 18 was published on November 13. The NWR has not yet analyzed a fee system for the sablefish endorsement program and will look to the Alaska program as an example. NMFS expects a fee system will be

implemented by January 2008. The VMS rule for open access fisheries has not been finalized yet due to workload conflicts. Work is proceeding on this front and NMFS expects the VMS rule will be in place sometime during the spring of 2007.
Dr. Elizabeth Clarke provided an update of Northwest Fisheries Science Center (NWFSC) activities. The NWFSC held a workshop two weeks ago to discuss how to incorporate the new NWFSC trawl survey results in stock assessments and a report will be forthcoming. The final canary rockfish catch estimates in the 2006 NMFS bottom trawl survey was 7.2 mt. The NWFSC also has an informal meeting scheduled tomorrow to discuss the best format and content of new observer data reports.

D.1.b Reports and Comments of Advisory Bodies

None.

D.1.c Public Comment

None.

D.1.d Council Discussion

None.

D.2 Groundfish Bycatch Work Plan (11/14/06; 4:50 pm)

D.2.a Agenda Item Overview

Dr. Kit Dahl provided the Agenda Item Overview.

D.2.b Reports and Comments of Advisory Bodies

Ms. Susan Ashcraft provided Agenda Item D.2.b, Supplemental GMT Report. Ms. Heather Mann provided Agenda Item D.2.b, Supplemental GAP Report.

D.2.c Public Comment

Ms. Karen Garrison, NRDC, San Francisco, California
Mr. Ben Enticknap, Oceana, Portland, Oregon
Ms. Meghan Jeans, The Ocean Conservancy, San Francisco, California
Mr. Peter Hutula, PMCC, Astoria, Oregon
Mr. Bob Osborn, United Anglers of Southern California, Surfside, California

D.2.d Council Action: Adopt Final Groundfish Bycatch Work Plan

Mr. Lockhart discussed some elements of the work plan, including provision for gear switching, which could be considered under the intersector allocation process, and improved data collection, analysis, and delivery. With regard to the latter, PSMFC is in the lead so it is not a subject of this work plan, but the Council could request a report at their September or November meeting. He was unsure about how to incorporate any changes to the work plan at this point.

Mr. Ortmann said the GAP asked for a flexible plan, and the document should explain how the work plan can be amended.

Mr. Anderson asked if there is a legal requirement for this bycatch work plan. Ms. Cooney said there is not; it is just a mechanism for determining how to implement Amendment 18.

Mr. Anderson discussed a planning process at his agency, pointing out that it is a huge task. He wondered how specific the work plan needed to be; pointing out that more specificity would require a lot more work. He said there are some additional Council activities that are not described in the work plan that could be added. He thought the Council has made bycatch mitigation a high priority, and related activities are only partially reflected in the work plan document. He discussed the desire to speed data delivery, and recent efforts to do so. He thought it was a good idea to have a more focused discussion of this objective. He said he was unsure of what to do going forward, especially with respect to providing more detail in the work plan. Based on public testimony, he thought there are additional activities that could be specified in the work plan matrix. With respect to data delivery, he suggested a meeting in the near future of Council, NMFS, and PSMFC staff to address concerns raised during public testimony. This could be built into the work plan.

Ms. Vojkovich agreed that, based on her experience, work planning can be time consuming. However, she is also frustrated by the lack of strategic vision. There may be a need in some instances to have a long-term plan, looking forward as far as ten years in order to address all issues that are of lower priority. Therefore, she is interested in a work plan that identifies decision points three to five years in the future. Also, the timeline does not reflect the various work load related issues needed to achieve objectives. She did not think that the biennial harvest specifications need to be in the work plan. It is a routine task, not something specific to bycatch mitigation. State responsibilities should also be identified; and lead agencies should be identified.

Mr. Anderson agreed the work plan should focus on bycatch minimization but felt that the groundfish harvest specifications process should be part of the consideration in order to identify potential workload bottlenecks.

Ms. Cooney pointed out that a number of bycatch mitigation measures, such as RCAs and trip limits, have been implemented through the harvest specifications process, so it can be considered part of bycatch minimization.

Mr. Lockhart agreed that the GMT and GAP comments need to be incorporated into this document.

Vice Chairman Ortmann asked if the Council is at the point where it could adopt this work plan, pointing out that it will need to be revised in the future as circumstances change.

Mr. Lockhart said that Council discussion has identified a few refinements to the work plan. He thought that along with input from his staff and Council staff these revisions could be made. He emphasized that the work plan needs to be flexible and would likely be subject to change. He discussed when any revisions stemming from Council discussion could be made; it would not be immediately.

Vice Chairman Ortmann said getting a final document to start with and building on that in the future, as necessary, would be a preferred process.

Mr. Melcher felt that the work plan should serve us, not be something that we serve. That implies flexibility to modify the plan going forward. He also asked that any changes include the March or April TIQ issue.

Mr. Anderson said this is going to be a guidance document, not a policy document. To the extent he can help in making some edits to the document, he would be happy to do that. He listed some specific initiatives that could be incorporated into the work plan: gear switching, bycatch caps, expedited data delivery, electronic logbooks, etc. A revised document could be distributed as an informational report in the March briefing book.

Mr. Moore suggested that there could be a connection between the bycatch work plan and the three-meeting outlook matrix used at each Council meeting. This would help integrate work plan elements into ongoing planning.

Mr. Lockhart thought this was a good idea, as long as it did not consume a lot of time at future Council meetings.

Dr. Dahl provided a brief summary of Council direction.

D.3 Groundfish Stock Assessments for 2007 (11/15/06; 8:10 am)

D.3.a Agenda Item Overview

Mr. John DeVore provided the agenda item overview.

D.3.b Agency and Tribal Comments

Tribal Comments

None.

WDFW Comments

Mr. Anderson identified three issues regarding 2007 groundfish stock assessments. The first issue concerned the planned spiny dogfish assessment. A transboundary assessment for this stock needs to be considered given the stock's distribution. In initial preparations for conducting this assessment WDFW staff encountered significant difficulties obtaining available age data and difficulty running these data in Stock Synthesis 2 (SS2), the accepted modeling platform for groundfish assessments. Given these impediments, he was recommending delaying this assessment two years until the next assessment cycle.

The second issue of concern was black rockfish. WDFW is recommending a separate stock assessment be done in the north by WDFW staff. This effort would replace that to do the spiny dogfish assessment.

The third issue was the planned updated assessment for yelloweye rockfish. He is concerned the 2006 assessment is not the best available science. There are many data issues requiring GMT and SSC deliberations as noted in the March 2006 statements from these advisory bodies. Washington recreational halibut data, which was analyzed in the 2006 assessment, but not incorporated in the final model, should be considered in the 2007 update. The SSC is recommending that sensitivity analyses using these data be brought to the SSC review next year. If these sensitivity analyses are compelling, then the SSC could recommend a full assessment be done and reviewed at the mop-up panel later in the year.

He asked Mr. Brian Culver to explain these data issues. Mr. Culver provided a brief PowerPoint presentation explaining how the 2006 assessment could be affected by inclusion of the recreational halibut CPUE time series and how lack of incorporation of these data resulted in the implausible stock distribution in the final assessment model. With only the bottomfish recreational CPUE data in the assessment to inform the abundance trend off Washington, an erroneous estimate of depletion is obtained. The decline in yelloweye CPUE in 1999 and 2000 was due to management action to reduce impacts on the stock (i.e., reduced bag limit and avoidance measures). A comparison of bottomfish and halibut data show opposite trends in the assessment.

Mr. Anderson explained these were the reasons he wanted to see the recreational halibut CPUE data analyzed in the 2007 assessment. This is a huge problem in that the "flawed" 2006 assessment will influence management through 2010. The terms of reference for updated assessments will not allow new

data sources and this procedural violation could create a management crisis in Washington that may not be resolved until 2011.

NWFSC Comments

Dr. Elizabeth Clarke and Dr. Jim Hastie provided comments on the process from the NMFS Northwest Fisheries Science Center perspective.

Dr. Clarke highlighted the recommendations from the "post-mortem" stock assessment workshop that was held in January and stated their proposed plan for the stock assessment review process (Agenda Item D.3.b, NWFSC Report) was consistent with these recommendations.

Dr. Clarke commented on the request for a full yelloweye assessment in 2007. Last year there were two full assessments done for this stock. WDFW staff cannot do a full assessment next year, which is a complicated task. The NWFSC does not have adequate staff resources to do more than an updated assessment of yelloweye. If another agency or entity can be identified to do a full assessment next year, there is available time to review it in next year's proposed STAR panel schedule. Mr. Moore said the SSC is recommending a slightly revised STAR panel schedule than the tentative one proposed by the NWFSC. Can the NWFSC accommodate this revision? Dr. Clarke said they could except for the WDFW request to switch panels 2 and 3. This will not work since Dr. John Field, the lead author on the chilipepper assessment scheduled for review during panel 3, will be on a research cruise during the scheduled time for panel 2.

CDFG Comments

Ms. Vojkovich provided CDFG comments on 2007 assessments. She referred to Agenda Item D.3.b, CDFG Report which summarized their proposal to do a blue rockfish assessment next year. They have the staff resources to do this assessment and recommend it since blue rockfish is an important species in their nearshore commercial and recreational fisheries.

ODFW Comments

Mr. Melcher did not have any comments on the 2007 assessments but he did have a question for Ms. Vojkovich. He asked her if the proposed blue rockfish was only for the portion of the stock in waters off California and Ms. Vojkovich said yes.

D.3.c Reports and Comments of Advisory Bodies

SSC

Dr. Robert Conrad provided the SSC report on 2007 groundfish stock assessments.

Dr. McIsaac stated one reason cited for rejecting the Washington recreational halibut CPUE time series in the yelloweye assessment was lack of model convergence when these data were incorporated. Did the SSC agree with this justification? Dr. Conrad said lack of model convergence was not a valid reason for rejecting these data. The SSC is recommending sensitivity analyses using these data be provided to the SSC next year when they review the update. Mr. Myer asked if these data were in the 2006 assessment and Dr. Conrad said he wasn't sure. Mr. Anderson remarked those data were in the assessment. Mr. Anderson noted cowcod data issues are recommended to be resolved in the 2007 assessment. How does this differ from the yelloweye data issues? Dr. Conrad answered the data in question was in the 2006 cowcod assessment, but is being corrected in the 2007 assessment. The SSC is encouraging yelloweye data analyses be provided next year, but formal incorporation of these data in the assessment is out of bounds in an update. Mr. Lockhart asked what happens if the yelloweye assessment goes to the

mop-up panel and Dr. Conrad said it could then go forward and be reviewed as a full assessment. Dr. Clarke asked how many full assessments the Council wants to consider next year? The other issue is staff resources. She reminded the Council that the NWFSC does not have the staff resources to do anything more than a pure update for yelloweye. The terms of reference also say updates that are recommended to go to a full assessment go to the next cycle, not the mop-up panel. The SSC recommendation for yelloweye goes against the terms of reference.

Ms. Vojkovich noted the SSC was willing to accommodate the GMT and GAP attendance at update reviews and rebuilding analysis reviews. Are both updates and rebuilding analyses scheduled for review at the mop-up panel? Dr. Conrad said no, only the rebuilding analyses are scheduled for review at the mop-up panel.

Mr. Anderson noted that Oregon staff provided a combined bottom-fish-only (BFO)/ Pacific halibut CPUE time series in the current yelloweye assessment, while Washington stratified by trip type. Can Washington provide an improved CPUE time series that combines BFO and Pacific halibut trips in the updated assessment? He added this is not different than the cowcod example and he would like a consistent approach. Dr. Conrad explained the SSC stance on this issue is contained in their statement.

GMT

Ms. Ashcraft provided Agenda Item D.3.c, Supplemental GMT Report.

GAP

Ms. Mann provided Agenda Item D.3.c, Supplemental GAP Report.

Mr. Moore asked if the GAP would be willing to meet on Sunday prior to the Council meeting when updated assessments are considered and Ms. Mann said it would be acceptable if there were no other conflicting meetings.

D.3.d Public Comment

Mr. Rhett Weber, Westport Charterboat Association, Westport, Washington

D.3.e Council Action: Adopt Final List and Schedule of 2007 Groundfish Assessments

Mr. Anderson asked Dr. Clarke if she accepted the list of proposed stock assessments and the STAR panel schedule recommended by the SSC and she said yes. He noted that WDFW staff could also accommodate this schedule.

Mr. Moore asked Dr. Clarke if she accepted the SSC recommendation to review rebuilding analyses at the mop-up panel and Dr. Clarke said yes. This was the process used last cycle and the Terms of Reference does require the SSC to review rebuilding analyses.

Dr. McIsaac asked when the yelloweye update assessment would be reviewed and Dr. Hastie said the SSC was planning to do this during the June Council meeting.

Mr. Melcher asked if there was general support for including Washington recreational Pacific halibut data in the proposed yelloweye assessment and Dr. Clarke said only if it was a full assessment. She said including these data complicates the assessment because that data had not been included previously. It would take a lot of effort to get the assessment model to converge properly with these data. Without NWFSC resources to do a full assessment, someone else would have to volunteer to do this. Dr. Hastie added a full assessment also requires a more rigorous review. Mr. Cedergreen said that we need to

consider the human element here. We have a system that encourages avoidance of a weak stock and unfortunately the resulting lack of fishery-dependent data is being used to show a stock decline. This process provides an incentive for fishermen to fish harder on a weak stock. Mr. Anderson said he is not recommending a full assessment. He simply wants to include a combined BFO/Pacific halibut CPUE time series through 1999 in the assessment. He volunteered staff support. Mr. Anderson asked if inclusion of these data was the intent of the SSC-recommended sensitivity analyses and Dr. Clarke said yes. According to SSC advice, if these sensitivity analyses compel the need for a full assessment, a plan to develop one and set up a review panel should be produced after the June Council meeting. Dr. McIsaac said the draft response from the Technical Subcommittee (of the Canada-United States Groundfish Committee), who were requested to consider a process for an international yelloweye assessment, thought it unnecessary to convene a January meeting and will discuss this at their April meeting in Santa Cruz. Dr. Clarke said if they are discussing this in April, there is zero chance that their recommendations can be included in the assessment update scheduled for a June review.

Mr. Moore moved and Mr. Anderson seconded a motion (Motion 9) to adopt the revised 2007 STAR panel schedule and the list of stock assessments recommended in Agenda Item D.3.c, Supplemental SSC Report, with the understanding that the SSC's Groundfish Subcommittee meeting will review the updated assessments around the June 2007 Council meeting at a time convenient for the GMT and GAP. Also included in the motion are the review of rebuilding analyses to occur during the "mop-up session" in October 2007; and the discussion items regarding yelloweye updates, data needs, and the agreement between the NWFSC and the state of Washington.

Motion 9 passed.

D.4 Exempted Fishing Permits for 2007 Fisheries (11/15/06; 1:41 pm)

D.4.a Agenda Item Overview

Mr. John DeVore provided the agenda item overview.

Ms. Cooney said she discussed a conflict of interest issue with Ms. Fosmark. Ms. Fosmark's husband is one of the applicants in one of the chilipepper exempted fishing permits (EFPs). Therefore, Ms. Fosmark will not be discussing or voting on this EFP. If the Council has questions of her on this EFP, she is available to respond. If the Council considers each EFP separately, she can discuss and vote on the other EFPs.

D.4.b Reports and Comments of Advisory Bodies

GMT

Ms. Ashcraft provided Agenda Item D.4.b, Supplemental GMT Report.

Mr. Melcher asked for an elaboration of the GMT recommendation to convene a federal/state/industry work group to determine the shoreside whiting EFP requirements beyond status quo. Mr. Mark Saelens stated the need for managers, fishermen, and enforcement folks to work out any new EFP requirements needed to transition into Amendment 10 rulemaking.

Mr. Moore noted the GMT and GAP have developed an extensive EFP process, which is codified in the Council Operating Procedures. He asked whether the late submission of The Nature Conservancy (TNC) EFP application compromised a full review and Ms. Ashcraft said yes. He asked whether it was her understanding TNC would follow the proper process next year and she said yes.

Ms. Vojkovich asked if the GMT discussed the concept of EFP applicants funding observers and Ms. Ashcraft said the GMT discussed this with EFP applicants, but two of the applicants have yet to commit to these costs.

Mr. Melcher asked if the GMT's scorecard projection accounts for the trawl permits bought out by TNC and Ms. Ashcraft said no. Mr. Myer noted the GMT discussed the canary impacts associated with the TNC EFP application. He asked if the other EFP bycatch caps and impacts might cause problems with OY management and Ms. Ashcraft said no.

Ms. Vojkovich asked if the conclusions in the first paragraph of the GMT statement are now incorrect given the inseason actions decided under agenda item D.5 and Ms. Ashcraft said yes.

Ms. Vojkovich asked if TNC impacts are included in the scorecard estimates for the limited entry trawl fishery and Mr. Burden said no.

Mr. Lockhart asked if the chilipepper EFPs were valid experiments and can expected results be potentially applied fleet-wide. Ms. Ashcraft said she was uncertain these EFPs are valid experiments. Mr. Burden added there is some desire to supplement available bycatch information south of 40°10' N latitude. Mr. Myer asked, if the chilipepper EFPs were implemented and eventually applied fleet-wide, would this attract more open access effort and Ms. Ashcraft said it probably would given the historical interest in targeting chilipepper prior to implementing RCAs and other more stringent management measures.

Mr. Anderson asked if new observer data was expected this winter which would change limited entry trawl impacts in the scorecard and Mr. Burden said yes.

GAP

Ms. Mann provided Agenda Item D.4.b, Supplemental GAP Report.

Mr. Moore asked if the GAP supported creation of a federal/state/industry work group for designing the shoreside whiting EFP and Ms. Mann said yes, the GAP recommendation on this is provided under their Amendment 10 statement (Agenda Item D.6).

Mr. Moore asked which version of TNC EFP application did the GAP review and Ms. Mann stated it was the initial draft. Mr. Moore said it was his understanding the GAP does not support the TNC proposal because of the late submission timing and Ms. Mann said that was correct. Ms. Vojkovich asked if the GAP recommended deciding the gear-switching (TNC) proposal in a stand-alone process or within the trawl Individual quota (TIQ) process and Ms. Mann said in the TIQ process.

Mr. Lockhart asked if the GAP was confident the chilipepper EFP applicants could fish cleanly. Ms. Mann said the applicants are confident, but the GAP is skeptical the results of this EFP can be applied fleet-wide.

D.4.c Public Comment

Mr. Michael Bell, The Nature Conservancy, Los Osos, California
Mr. Chris Kubiak, fisherman, Los Osos, California
Ms. Meghan Jeans, for NRDC and The Ocean Conservancy, San Francisco, California
Mr. Steve Bodnar, Coos Bay Trawlers Association, Coos Bay, Oregon

D.4.d Council Action: Approve Final Recommendations to NOAA Fisheries

Ms. Vojkovich voiced concern with approving the chilipepper EFPs without the applicants confirming their intent to fund observers and implement EFP activities. She is also concerned with the additional requirements to keep the gear off the bottom. She does not believe these results can be applied fleet-wide and therefore not sure she could support these EFPs. Mr. Melcher said he supports the general objectives of these EFPs, but he considered it too difficult to reallocate the additional canary impacts. Ms. Vojkovich said the chilipepper EFP impacts are captured in the bycatch scorecard and Mr. Melcher said a canary buffer will be needed to manage directed fisheries next year. Mr. Lockhart concurred and added there are additional workload costs to implement an EFP. There is a need to balance benefits and costs and the Council needs to decide if there are enough benefits to support these EFPs. He thought the costs outweighed the benefits. He was also concerned that the TNC proposal came forward too late for adequate evaluation. Therefore, he does not support the chilipepper or TNC EFPs, but he does support the shoreside whiting EFP.

Mr. Myer said Mr. Brown testified about the end game of an EFP and we don't know the end game of the chilipepper EFPs. Mr. Cedergreen agreed. Applying the bycatch rates determined by the EFP bycatch caps to the entire fleet results in a lot of bycatch. Mr. Moore said the chilipepper EFPs went through a formal review process and the applicants are willing to work with the Council. However, the bycatch concerns are potentially big costs and therefore, these EFPs could be dismissed without prejudice. He advised the applicants to design a better experiment. The TNC EFP is not urgent and did not go through a formal evaluation process. He believed we could learn the same things through the West Coast Groundfish Observer Program.

Mr. Melcher moved and Mr. Warrens seconded a motion (Motion 12) to adopt the 2007 shoreside whiting EFP as detailed in Agenda Item D.4.a, Supplemental Attachment 4; and additionally that we form a federal/state/industry working group to help in the development of that EFP to better transition into Amendment 10 implementation.

Motion 12 passed.

Ms. Vojkovich moved and Ms. Fosmark seconded a motion (Motion 13) to tentatively approve the TNC EFP pending further development and review at the March Council meeting.

Ms. Vojkovich said she values the bycatch reduction objective in the TNC proposal and this may provide some non-agency money to learn something new. The TNC proposal also has some community socioeconomic benefits which outweigh the costs. However, she does want more details of the proposal fleshed out before considering final approval in March.

Motion 13 failed.

Mr. DeVore summarized that the shoreside whiting EFP is the only one recommended for 2007.

D.5 Consideration of Inseason Adjustments (11/15/06; 9:59 am)

D.5.a Agenda Item Overview

Mr. John DeVore provided the agenda item overview.

D.5.b Report of the Groundfish Management Team

GMT

Ms. Susan Ashcraft and Mr. Merrick Burden provided Agenda Item D.5.b, Supplemental GMT Report.

Mr. Moore noted there was a similar petrale sole overfishing concern in 2004 or 2005 resolved by voluntary reductions by processors. Mr. Burden said this occurred last year and the market limits imposed by processors caused an immediate reduction of petrale sole landings. Regardless, we still experienced petrale sole overfishing in 2005, but the catch overage was more severe then. Dr. McIsaac said there is national guidance to end overfishing. Was last year's conclusion based on final observer information? Mr. Burden said no, the conclusion is based only on landings of petrale sole, which were in excess of the specified ABC. Dr. McIsaac asked if there was any probability associated with any risk of overfishing petrale sole this year and Mr. Burden said no, there was no data available to assign a probability.

Ms. Vojkovich asked for an explanation of Table 1 in the GMT report. She asked if the "Spex EIS" impacts are based on 2007 management measures and Ms. Ashcraft said yes. She asked if the canary impact problem resulted from a higher than expected research catch of canary and Ms. Ashcraft said yes. She asked where in Table 1 is the guidance on what to do. Ms. Ashcraft explained the "Nov 06" column in Table 1 represents the best current impact projections. Ms. Vojkovich asked why the estimated impacts in recreational and whiting fisheries, as shown in Table 1 footnotes, are less than what is depicted in the bycatch scorecard. Ms. Ashcraft explained the footnotes show the point estimates of 2006 impacts and the scorecard depicts the recreational harvest guidelines and the whiting fishery bycatch caps, respectively. Ms. Vojkovich asked if the canary bycatch reduction scenarios are relative to the "Spex EIS" or "Nov 06" impact projections and Ms. Ashcraft said the latter. Only non-tribal directed groundfish fisheries are affected. Mr. Lockhart asked if the GMT carried forward the 2006 research catch of canary and Ms. Ashcraft said yes. Mr. Lockhart asked if the 2007 projections represent a mix of projections, harvest guidelines, and bycatch caps and Ms. Ashcraft said yes. He asked if this mix was carried forward in all the Table 1 columns and Ms. Ashcraft said yes.

Mr. Anderson noted there were four reasons provided for the low risk of exceeding the petrale sole ABC this year. A lack of migration into the petrale fishing areas was cited by the GAP. Mr. Burden agreed with that observation, although he expects this migration will take place sometime during period 6 (November and December). The timing of this migration and weather conditions will be important factors. Mr. Anderson said additional crab tests will be done to determine the start date of the crab fishery. He asked if the GMT was assuming there would be a December 1 start to the crab fishery and Mr. Burden said yes. Mr. Anderson said there was a late start to the crab fishery last year, which is not likely to happen this year. He asked if a December petrale sole trip limit reduction would work to mitigate risk of overfishing and Mr. Burden said no.

Mr. Anderson asked about the last three years of canary rockfish research catches and Dr. Hastie said he would look that up.

Mr. Moore said the quota species management (QSM) report shows lower petrale sole landings in the last two weeks. He asked if this was due to inclement weather and Mr. Burden said yes, landings have been lower than projected due to poor weather.

Mr. Moore said the GMT is asking for guidance on how to reduce canary impacts. He asked about the work load associated with the most Draconian alternative (alternative 4). Ms. Ashcraft said there would be lots of work associated with implementing associated regulations into a final rule. Mr. Moore asked Ms. Cooney how hard it is to reduce harvest guidelines, bycatch caps, etc. now and then consider more liberal regulations next March. Ms. Cooney said we would need the regulations now to reduce projected

canary impacts. Mr. Lockhart added these changes could be incorporated into a final rule now and could be reconsidered in March.

Dr. McIsaac said that under rebuilding, canary research impacts are expected to increase. He asked if the current research projections are the highest estimates and Ms. Ashcraft said yes.

D.5.c Agency and Tribal Comments

Tribal

None.

ODFW

Mr. Melcher briefly referred to Agenda Item D.5.c, ODFW Report and stated Oregon was asking for conforming federal regulations to prohibit cabezon in the Oregon recreational fishery.

WDFW

None.

CDFG

None.

D.5.d Reports and Comments of Advisory Bodies

Ms. Mann provided Agenda Item D.5.d, Supplemental GAP Report.

Mr. Moore asked if the GAP agreed with the GMT recommendation for the 2006 daily-trip-limit (DTL) fishery and Ms. Mann said the GAP did not discuss this.

Mr. Moore remarked that Oregon trawlers are reporting slow petrale sole fishing due to lack of migration and poor weather. Is this true? Ms. Mann said this has been the case off Oregon and California. Dr. McIsaac asked if the GAP discussed the risk of petrale sole overfishing and Ms. Mann said no, there is no quantitative information, only qualitative. The GAP did discuss fishermen and processor cooperation to reduce catch if needed. Ms. Fosmark asked if the GAP discussed the socioeconomic importance of the petrale sole fishery and Ms. Mann said this is a continuing theme in the GAP. Ms. Fosmark asked if the GAP discussed rockfish bycatch in the petrale sole fishery and Ms. Mann said no.

Mr. Melcher asked if the GAP is recommending DTL decreases throughout the north and Ms. Mann said yes.

D.5.e Public Comment

Mr. Michael Okoniewski, Pacific Seafoods, Woodland, Washington
Mr. Kenyon Hensel, Hensel's, Crescent City, California
Mr. Marion Larkin, Trawler, Mt. Vernon, Washington
Mr. Daniel Waldeck, Pacific Whiting Conservation Cooperative, Portland, Oregon
Mr. Gerry Richter, Pt. Conception Groundfish Fishermen's Association, Santa Barbara, California

D.5.f Council Action: Adopt Preliminary or Final Recommendations for Adjustments to 2006 and 2007 Fisheries

Mr. Myer requested the bycatch impacts in the 2005 whiting fishery and Mr. DeVore said he would look up this information.

Mr. Lockhart requested the GMT produce new 2007 bycatch projections using a consistent methodology rather than the mix of projections, harvest guidelines, and bycatch caps provided in their report. He also asked if there were any fisheries scheduled between now and March that would cause a significant canary rockfish bycatch concern. Mr. Burden said the petrale fishery and some slope trawl fishing are expected for the remainder of this year and he could not think of any high volume fisheries in the first part of next year that would cause a canary concern.

Mr. DeVore answered Mr. Myer's question regarding the estimated bycatch by species in the whiting fishery. The total canary impacts in the whiting fishery last year, including those in the tribal sector, were 3.9 mt. Mr. DeVore went on with a sector-by-sector account of estimated canary rockfish bycatch in last year's whiting fishery.

Mr. Melcher asked Mr. Lockhart if his request to the GMT restricted the projection analysis. Mr. Lockhart said there were no constraints in his request; he simply wanted a consistent projection methodology.

Mr. Moore asked Mr. DeVore to provide the estimated canary bycatch in the 2004 whiting fishery and Mr. DeVore complied with a sector-by-sector breakdown. Mr. Moore noted there has been significant variation in canary bycatch by whiting sector and year. He asked if the same random variation of widow and darkblotched rockfish bycatch has been observed by sector and year in recent whiting fisheries and Mr. DeVore said that is true.

Mr. Anderson moved and Ms. Vojkovich seconded a motion (Motion 10) to adopt the GMT recommendations 2, 3, 4, and 5 in Agenda Item D.5.b, Supplemental GMT Report as final inseason management adjustments.

Mr. Anderson said these recommendations make perfect sense, are well thought out, and designed to keep fisheries' impacts within the OYs. Mr. Moore supported Mr. Anderson's motion and added that the GMT recommendations also prevent overfishing.

Motion 10 passed.

Mr. DeVore said there is the matter of how to resolve the petrale sole and canary issues. The GMT would appreciate guidance.

Mr. Anderson said he was comfortable that the 2006 petrale sole ABC would not be exceeded. He understands now that the 1,000 mt of petrale sole taken during one period in 2003, as referenced in the GMT report, was taken in period 1, not period 6. He asked Ms. Cooney if NMFS has the ability to close the trawl fishery if there was indication the petrale sole ABC might be exceeded. Ms. Cooney said that ability rests on the availability of timely catch information. Ms. Yvonne de Reynier said NMFS would have to monitor catch and implement a closure with a Federal Register (FR) notice. Because it is an inseason action, it would be effective the date it is published in the FR. The FR asks that items do not come in after December 15 for the 2006 calendar year. Mr. Anderson asked if it was safe to assume a two week lag in the QSM report and Ms. de Reynier said yes. Mr. Anderson said by the beginning of December catches through mid- November will be available and there is a precautionary trip limit in place for December. Therefore, by December 1, it will be easier to assess the risk of overfishing petrale sole this year. Ms. de Reynier said the Council should specify a December 1 trigger for NMFS to close

the fishery two weeks early if needed. Mr. Lockhart said Council direction would be helpful, but he needs to discuss that with his staff and decide an inseason action or mechanism on Friday under Agenda Item D.8.

Mr. Anderson thought the GMT and NMFS should attempt to determine the most reasonable research projection and wait until March to adopt new management measures to decrease the canary rockfish harvest rate. Mr. Lockhart thought the GMT should present projections for all fishing sectors and disregard specified harvest guidelines and bycatch caps. Mr. Anderson said he was uncomfortable using 2006 as the sole year for projecting 2007 impacts and Mr. Lockhart said he had no problem with Mr. Anderson's guidance. Mr. Melcher thought any impact projections would be highly uncertain and Ms. Vojkovich recommended using the impact projections from the 2007-2008 Specifications EIS.

Mr. Lockhart requested the GMT to review the whiting trip limits outside the primary season and the associated bycatch impacts and report back to the Council on Friday.

Mr. Anderson provided a recap of the issues discussed. The GMT recommended projecting the 2006 research estimate of canary rockfish (7.5 mt) for 2007 research fisheries rather than the 3.0 mt used in the EIS. The Council's challenge this week is to decide a suite of 2007 management measures that are projected to stay within the 2007 OYs by Friday.

Mr. Moore asked Ms. Cooney whether it was true that recreational harvest guidelines cannot be changed through an inseason action and that point estimates of impacts in the recreational fishery are typically less than the specified harvest guidelines. Ms. Cooney said both statements were correct. This process differs from the specification of whiting fishery bycatch caps, which can be changed in an inseason action.

Mr. Lockhart asked if the best available point estimates of sector catches are projected to be under the 2007 canary OY and Ms. Ashcraft said that is correct. Mr. Anderson and Mr. Melcher were not comfortable replacing the recreational harvest guidelines in the 2007 bycatch scorecard with impact point estimates from the EIS. Mr. Moore said the scorecard is simply a bycatch accounting document, not a regulatory document. Since harvest guidelines cannot change inseason, simply show the projected impacts associated with specified management measures and exclude the specified harvest guidelines in this exercise.

Mr. Anderson moved and Mr. Cedergreen seconded a motion (motion 11) to direct the GMT to provide a revised canary scorecard with the best estimates and projections of canary mortalities that would occur in each of the sectors listed on Table 1 of the GMT report. The revised numbers would not replace any specified harvest guidelines and the Council would revisit this issue as needed next March.

Mr. Lockhart concurred with Mr. Anderson's comments. He is comfortable the regulations in place for January 1, 2007 will not exceed the 2007 canary OY based on the best information available to us today. Mr. Anderson said this motion does not include a recalculation of the bycatch cap of the whiting fishery.

Motion 11 passed.

D.6 Shore-Based Whiting Monitoring Program

D.6.a Agenda Item Overview (11/16/06; 8:17 am)

Ms. Laura Bozzi provided the agenda item overview.

D.6.b NMFS Report

Ms. Yvonne deReynier presented Agenda Item D.6.b, Supplemental NMFS Power Point Presentation.

Responding to a comment from Ms. Vojkovich, Ms. deReynier noted that she is not sure how overages, which are retained and landed under maximized retention, would be dealt with. If the states do not still receive the overages under the new program, a federal mechanism for dealing with them needs to be established because one does not exist now.

D.6.c Agency and Tribal Comments

Mr. Melcher said ODFW feels strongly about the need to move quickly on transitioning this from a fishery operating under EFPs and into one under federal regulations. Mr. Anderson concurred with Mr. Melcher's concerns. Ms. Vojkovich stated that she wants to make sure that the state issues were dealt with in this process.

D.6.d Reports and Comments of Advisory Bodies

Ms. Ashcraft provided Agenda Item D.6.d, Supplemental GMT Report. In this report, the GMT proposes that the Council convene a workgroup to develop a hybrid alternative, and that this alternative is then included within the Environmental Assessment analysis.

Ms. Mann provided Agenda Item D.6.d, Supplemental GAP Report. Mr. Moore asked Ms. Mann for the GAP's perspective on the GMT's proposal of a hybrid alternative. Ms. Mann replied that the GAP had been discussing how a combination of cameras and observers could be more feasible than using only one of those two, as is proposed under the current alternatives.

D.6.e Public Comment

None.

D.6.f Council Action: Adopt Alternatives and Draft Regulations for Analysis and Public Review

The Council began discussion on the proposal to convene a workgroup to develop a hybrid alternative. Ms. Cooney clarified that the new alternative would have to be completed by the proposed date of January 22 to allow for its adequate analysis prior to the March meeting, when the Council is to take final action. If the analysis is not done by March, the Council can still adopt the hybrid alternative, but it would then be taken without the support of analysis. This would require NMFS to make a greater effort after the March meeting to analyze the Council's decision, which would slow down the process.

In discussion on funding of the monitoring, Ms. deReynier explained that under the federally funded alternative, the observer pool would not be expanded to accommodate the addition of the shoreside whiting fleet. So, observers would be drawn away from observing the non-whiting fleet. Mr. Anderson replied that then we would no longer meet our monitoring objectives relative to the limited entry trawl fleet, so that alternative in his opinion is not realistic to implement in 2008. Mr. Lockhart responded that the alternative also includes possibility of observers funded by industry, and that NMFS is looking to secure a budget to support the monitoring program but that the probability of getting these funds is low. Ms. Cooney agreed that the Council should not go forward planning on a federally funded observer program, given that such funding is not guaranteed. Still, she supported the analysis of this alternative. Based on this, Mr. Anderson questioned including federal funding of the program as an alternative for analysis. He does not want to mislead the public into supporting an alternative that is not realistic. Dr. Hanson was in favor of analyzing federal funding, and suggesting that the analysis would demonstrate the low probability of it being a feasible alternative. From his experience, he suggested that the analysis could also show that the federally funded alternative is more expensive.

Clarification was made by Mr. Melcher with respect to the motion passed under Agenda Item D.4 to establish a workgroup. That motion included actions on both EFPs and on the shoreside whiting monitoring program alternatives. This would be an ad hoc group. Though it is important to work on the EFP issues, in light of Ms. Cooney's comments, the workgroup's priority should be to develop the hybrid alternative. Dr. McIsaac questioned how the Council would approve for analysis the hybrid alternative, once developed. There is a quick response procedure for action between Council meetings, but this has many drawbacks. Alternatively, the Council could state at the beginning that they do not want to review the alternative before it is analyzed and delegate that decision to the workgroup. Discussion clarified that the hybrid alternative would fall within the range of alternatives 3 and 4. This alternative would be brought to the Council in March and considered when the Council takes final action.

Ms. Vojkovich moved (Motion 16) that the Council send out for analysis the range of alternatives contained in Agenda Item C.6.b, Attachment 1 and send forward the proposed workgroup to develop the specifics of an alternative that blends parts of alternative 3 and alternative 4 to be presented to the Council at the March meeting. Ms. Fosmark seconded the motion.

Speaking to her motion, Ms. Vojkovich said it includes the analysis of the alternatives, which is to be presented in March, and that the Council does not have to see the blended alternative prior to the March meeting. The workgroup should use the details from this discussion and the GAP and GMT statements to support their work.

Mr. Anderson said he wanted to be certain the range of alternatives would provide enough flexibility for the workgroup to develop a hybrid alternative that considers: a range of observer coverage levels; whether or not electronic monitoring is required; who is going to pay for the observers (Federal, industry, or a combination of the two). He also wanted the workgroup to clearly identify any state and/or Federal responsibilities associated with the hybrid alternative and for the workgroup to have the latitude to discuss electronic fish ticket versus the status quo paper fish tickets. Lastly, he said that he would like there to be flexibility for the workgroup to discuss whether the observers are Federal or state employees both at sea and at the plant. For example, there may be cost savings in using monitors other than Federal observers. Chairman Hansen responded that these considerations are encompassed within the motion.

Ms. Fosmark asked that the environmental assessment pay particular attention to specific comparative costs among alternatives.

Mr. Lockhart said that the Enforcement Committee had requested to participate in the workgroup. Chairman Hansen said they would be included.

Motion 16 passed.

The committee membership was then set on Friday under Agenda Item B.5.

D.7 Intersector Allocation for Trawl Individual Quotas and Other Management Needs

D.7.a Agenda Item Overview (11/16/06; 10:15 am)

Mr. DeVore provided the agenda item overview.

D.7.b Recommendations of the Groundfish Allocation Committee

Mr. DeVore briefed the Council on recommendations of the Groundfish Allocation Committee (GAC) from their October 18-19, 2006 meeting as captured in Agenda Item D.7.b, Attachment 1.

D.7.c Agency and Tribal Comments

There were no state or federal agency comments.

Tribal Comments

Mr. Sones said the tribes will work with NMFS to consider formal treaty: non-treaty allocations. Tribal staff will provide projected tribal catches for the intersector allocation EIS. He also stated there was an error in Table 2F (in Agenda Item D.7.a, Attachment 1) regarding the 2002 data. Mr. DeVore said he will work with Messrs. Jones and Sones to get the correct numbers.

D.7.d Reports and Comments of Advisory Bodies

GMT

Ms. Ashcraft and Mr. Burden provided Agenda Item D.7.d, Supplemental GMT Report which focused on approving the preliminary range of alternatives developed by the GAC for analysis and public review; and incorporating the exploration of a sliding scale approach into the analysis; and Agenda Item D.7.d, Supplemental GMT Report 2 which focused on a priority list for the GAC's December 2006 meeting.

Dr. Dave Hanson asked for an explanation of the sliding scale allocation scheme proposed by the GMT and Mr. Burden said the GMT was envisioning the possibility that some target species may be constraining in the future. Sliding scales provide management flexibility. Mr. Lockhart asked if the allocations might change annually under this scheme and Mr. Burden said that was possible. Mr. Anderson provided a lingcod example to illustrate the point. When the stock was overfished, the OY was limiting. Now there are abundant lingcod and a fixed allocation may not be feasible. The Council could consider a roll-over mechanism. He recommended the Council design allocations with a five-year horizon. Periodic review of allocations may take care of this issue.

Mr. Myer asked if the GMT discussed buffers or set-asides and Ms. Ashcraft said yes. If every last fish is allocated in this process, there is a risk of lost management flexibility. A yield reserve could buffer against unforeseen calamities such as catch overages in any one sector. This yield reserve would be in addition to the listed set-asides in the GAC report.

GAP

Ms. Mann provided Agenda Item D.7.d, Supplemental GAP Report.

Mr. Melcher asked if the GAP was unanimous in recommending removal of alternatives 4 and 8 and Ms. Mann said yes. Mr. Melcher asked if the justification for this recommendation is to not use the bycatch scorecard in developing an allocation scheme and Ms. Mann said yes. The GAP is philosophically opposed to using the scorecard for allocation purposes since it punishes sectors that have reduced bycatch.

Ms. Vojkovich noted current sablefish allocations are based on the OY north of 36° N latitude. She asked if the GAP discussed sablefish allocation south of 36° N latitude and Ms, Mann said she was not aware of any such GAP discussion.

D.7.e Public Comment

Mr. Peter Huhtula, PMCC, Astoria, Oregon
Mr. Bob Osborn, United Anglers of Southern California, Surfside, California

D.7.f Council Action: Adopt Preliminary Alternatives for Analysis and Further Development

Ms. Vojkovich asked about Ms. Longo-Eder's public comment letter recommending the Council consider re-allocation of sablefish. Ms. Longo-Eder had stated the GAC was not unanimous in recommending no re-allocation of sablefish and this was not consistent with Ms. Vojkovich's recollection. She asked about the make-up of the GAC and how it operates. Dr. McIsaac explained the GAC is comprised of voting members and advisors who do not vote on issues before the GAC. Mr. DeVore said the voting members of the GAC were unanimous in recommending maintaining current sablefish allocations and some of the advisors took exception to this opinion.

Mr. Myer said he believes the reserves are necessary and should be set aside so that we can maintain management flexibility for unforeseen catch overages. Mr. DeVore said the concept of reserves for providing flexibility has been widely discussed. The Council should add this to the suite of alternatives today if a specific reserve set aside should be part of the allocation scheme. However, given the extensive discussion on this concept that has occurred to date, it will be discussed in the EIS regardless of whether the Council explicitly includes this in the range of alternatives. Mr. Myer was confident this issue will be discussed.

Mr. Anderson moved and Mr. Cedergreen seconded a motion (Motion 17) to adopt the preliminary intersector allocation alternatives identified in the GAC report (Agenda Item D.7.b, Attachment 1).

Mr. Anderson said the GAC spent a lot of time working through these alternatives and this range of alternatives is a reasonable place to start. A lot of discussion took place about what base-period to base allocation percentages on. The GAC also spent considerable time discussing base periods analyzed for allocations. The 2007-2008 period (GAC alternatives 4 and 8) is important because of the overfished species' implications and current policies for rebuilding these species.

Mr. Myer moved and Ms. Vojkovich seconded an amendment to Motion 17 by inserting the word "reserves" in the set-asides category, with the definition of reserves to be determined by the GAC at a later time.

Ms. Vojkovich said this provides flexibility to provide performance-based allocations. Mr. Moore said he will reluctantly oppose the amendment given the very low OYs currently specified. There is a need to provide fishery stability and he is not sure what the reserve would be. Ms. Fosmark supported the amendment in that a reserve set-aside may keep the current open access and other small fisheries alive. Mr. Melcher thought it might be better to consider reserves in the annual specifications process.

Mr. Lockhart asked Mr. DeVore what type of analysis and associated work load would be needed to support the reserves concept and Mr. DeVore said this complicates the initial analysis a bit until reserve yields are specified.

Mr. Anderson said he was in favor of the amendment and similar situations have arisen where the entire OY was not allocated. The Council needs to flesh out this concept. Mr. Myer reminded the Council that today's task was adopting preliminary alternatives and details on the reserve concept will emerge as we go through the process. Mr. Moore said, while he is not opposed to the concept, he has a problem with the lack of specificity in Mr. Myer's proposal.

The amendment to Motion 17 passed with Mr. Moore voting in opposition. Main motion 17 passed.

Mr. DeVore said there is guidance needed for GMT work priorities in preparation for the next GAC meeting concerning trawl individual quota alternatives. The list of issues the GMT has been asked to consider are captured in Supplemental GMT Report 2.

Mr. Moore noted the Council adopted a motion in September outlining GAC priorities. He asked if the GMT and GAP reviewed these priorities. Ms. Michele Culver answered that the GMT views initial allocation as a policy issue, not a GMT matter. Mr. Moore asked if the GMT would analyze initial allocations after the Council makes a policy decision and Ms. Culver said yes. Ms. Culver added that the GMT did not wish to overload the GAC at the December meeting. The six items listed on Supplemental GMT Report 2 are the GMT's priorities. Mr. Jim Seger added there are other items on the December GAC agenda, but these are recommended GMT priorities. Dr. Hanson asked why co-ops and gear switching are on the list and Ms. Culver explained they were added to the list after the Council's decisions in September.

Mr. Anderson said he would prioritize the time series for initial allocation and the use of total catch data (issue 4 on Supplemental GMT Report 2) over gear switching (issue 3). Mr. Lockhart asked if the GMT was confident they could do everything on the list and Ms. Culver said yes. Dr. McIsaac asked how this refines the range of alternatives. Mr. Burden explained that there are different management implications with the co-op alternative. The GMT intends to provide considerations for understanding these implications. Mr. Anderson thought the co-op alternative only applied to the whiting sectors and Ms. Culver said that was correct, but the GMT was recommending considering co-ops for the non-whiting bottom trawl sector as well. Mr. Moore agreed with this recommendation and thought now was the time to consider this. He asked what was the issue with the number of trawl sectors and Mr. Burden replied there are potentially four trawl sectors or two (whiting and non-whiting).

Dr. McIsaac said we are getting into a bit of a process problem and the Council should be careful no TIQ alternatives are added or deleted now. Guidance to the GMT is the issue here. He recommended prioritizing GMT work with the alternatives that are currently in play. Mr. Anderson agreed and he noted that it has already been decided to analyze allocation for all trawl sectors combined in the intersector allocation process. The Council agreed with these comments. Since the GAC agenda is already set, they decided to let the GMT decide whatever advice they want to give the GAC.

D.8 Final Consideration of Inseason Adjustments, If Necessary (11/17/06 4 pm)

D.8.a Agenda Item Overview

Mr. DeVore provided the agenda item overview.

D.8.b Reports and Comments of Advisory Bodies

GMT

Ms. Ashcraft and Mr. Burden provided Agenda Item D.8.b, Supplemental GMT Report.

Mr. Anderson asked when whiting trip limits could be adjusted if the decision is made in March and Ms. Ashcraft answered on April 1.

Mr. Moore said he contacted various industry representatives and there was a general rejection of the proposal to decrease whiting trip limits outside the primary season, a mixed reaction to the 2007 petrale sole trip limit adjustment, and support for the limited entry DTL increase in 2007 for the area south of 36° N latitude.

Mr. Lockhart asked what is known about the bycatch implications by trawlers targeting whiting outside the primary season and Ms. Ashcraft replied not much. Mr. Moore asked if bottom trawlers can fish for whiting inside the RCA under current regulations and Ms. Ashcraft said no, the concern is targeting whiting shoreward of the RCA.

GAP

Mr. Moore read a GAP statement (oral report only) voicing concern that the GAP had not evaluated or discussed the whiting trip limit proposal or the 2007 petrale sole trip limit adjustments for periods 1 and 6.

D.8.c Public Comment

None.

D.8.d Council Action: Adopt or Confirm Final Recommendations for Adjustments to 2006 and 2007 Fisheries

Mr. Moore moved and Ms. Vojkovich seconded a motion (Motion 27) to adopt a 50,000 pounds per two-month petrale sole trip limit for periods 1 and 6 in 2007; restore the limited entry DTL limits south of 36° N latitude; and request industry to reduce petrale sole catches this year if catch rates appear too high.

Motion 27 passed.

Mr. Lockhart moved and Mr. Anderson seconded a motion (for discussion purposes) (Motion 28) to reduce the whiting per-trip limit from 20,000 pounds to 10,000 pounds for any whiting taken prior to the 2007 primary fishery in order to reduce whiting targeting incentives outside the primary season.

Mr. Anderson then spoke in opposition of the motion, even though he seconded the motion. He said it is not necessary since whiting are not generally available in the winter. He thought the Council could wait until March to do this. Mr. Lockhart said he was concerned that targeting efforts on whiting could increase canary bycatch.

Motion 28 failed on a voice vote. Messrs. Lockhart and Cedergreen voted yes. The rest of the Council voted no.

E. Habitat

E.1 Current Habitat Issues (11/15/06; 3:19 pm)

Ms. Jennifer Gilden provided the agenda item overview.

E.1.a Report of the HC

Mr. Stuart Ellis provided Agenda Item E.1.a, Supplemental HC Report.

E.1.b Reports and Comments of Advisory Bodies

None.

E.1.c Public Comment

Mr. Santi Roberts, Oceana, Monterey, California

E.1.d Council Action: Consider Habitat Committee Recommendations

Council members provided comments to Ms. Gilden regarding the proposed letter to FERC. Mr. Helvey wanted to make sure that NOAA GCs' comments would be incorporated into the letter.

Dr. McIsaac said the Council needs to specify if they want to send the letter. The Council agreed by consensus. Dr. McIsaac asked if the Council would get a chance to see the comments made by NOAA GC. Ms. Cooney said we could incorporate Mr. Feder's comments (and others) and bring the letter back on Friday. The Council concurred.

Ms. Vojkovich said since we are dealing with agenda planning on Friday, we should consider the recommendation for a joint ecosystem meeting then. If we cannot accommodate the meeting, then an informational report could be included in the briefing book so the Council will know the outcome of the November joint meeting. Mr. Anderson said he would like to consider the budget implications of the proposed (April) meeting as well.

On the Klamath report, Mr. Melcher said the outline presented by the HC was an excellent start. He thinks it reflects the structure of the last overfishing review for Klamath fall Chinook and the newer issues that have come to light. The suggestions made by Mr. Roth regarding model performance and hatchery interactions should also be included if possible.

Mr. Roth said the HC had done a good job laying out a basic outline. The report will need contributions from the states, tribes, and STT.

Dr. McIsaac said April might be preferable for receiving the report. But it seems more useful to have it in March, so any results from the process (including budget implications) would be available in March instead of April.

Mr. Melcher asked if we were obligated to have the report included in March. Dr. Coon said this is called for in our FMP. Typically in March we have an agenda item for stocks not meeting escapement goals. Dr. Coon said the overfishing requirements require you to start a report in March, and the conservation alert requests that the states/tribes provide their information to the March meeting to alert the Council.

The Council took up the draft letter on Friday, November 17, 2006. Agenda Item E.1.b, Supplemental HC Report 2.

Dr. Coon staffed this agenda item.

Mr. Mallet said we agreed to send the letter; NMFS had some changes that would strengthen it. He believes the changes do strengthen the letter. Mr. Mallet moved, and Mr. Moore seconded, a motion (Motion 22) to have the Council approve and send the letter to the Federal Energy Regulatory Commission as shown in Agenda Item E.1.b, Supplemental HC Report 2.

Mr. Roth appreciates NOAA fisheries making the changes and strengthening the letter and believes the HC would agree with these changes.

Mr. Mallet said we know we had problems coastwide, and this is our opportunty to weigh in on EFH.

Motion 22 passed.

F. Coastal Pelagic Species Management

F.1 Pacific Sardine Stock Assessment and Harvest Guideline (11/15/06; 4:06 pm)

F.1.a Agenda Item Overview

Mr. Mike Burner provided the agenda item overview.

F.1.b NMFS Report

Dr. Kevin Hill provided Agenda Item F.1.b, Supplemental NMFS PowerPoint Presentation.

F.1.c Agency and Tribal Comments

Mr. David Sones provided Agenda Item F.1.c, Supplemental Tribal Comment.

F.1.d Reports and Comments of Advisory Bodies

Dr. Conrad provided Agenda Item F.1.d, Supplemental SSC Report.

Mr. John Royal and Mr. Okoniewski provided Agenda Item F.1.d, CPSAS Report.

Mr. Anderson asked why sardine catches in the Pacific Northwest declined. Mr. Okoniewski reported that smaller fish were prevalent, there was carry-over product from 2005, and the sardines in 2006 took longer than usual to develop the high fat contents desired by buyers.

Mr. Anderson asked Mr. Royal how much of the California sardine catch goes into reduction. Mr. Royal does not know of any reduction activities in California but, he said he can't speak to how many sardines are going into Mexico for net pens or for reduction.

Dr. McIsaac asked if the carry-over fish from the 2005 season went to different markets than the fresh catch of 2006. Mr. Okoniewski stated that those carry-over fish are actually carried over by customers abroad and are even now being processed for food markets.

Mr. Melcher asked Mr. Royal if the lack of reduction in California is driven by regulation or by the markets. Mr. Royal stated that there has been some regulation of the reduction fishery in the past but, the reduction activity declined with the decline of sardine canning in California. Chairman Hansen added that in the past much of the reduction occurred in Ensenada.

Mr. Helvey asked where the CPSAS recommendation for a 45% incidental landing limit came from. Mr. Burner stated that value comes from the CPS FMP and represents the highest incidental landing allowance in the plan. Given the high HG for 2006 and the fact that 45% was used in 2006, the CPSAS is recommending 45% again in 2007.

Mr. Okoniewski noted that in his research he did come across some formulas that were used in the 1930's and 40's to determine the size of the reduction fishery and that, at that time, the fishery off Oregon and Washington was largely a reduction fishery rather than a canning operation.

Dr. Sam Herrick provided Agenda Item F.1.d, CPSMT Report.

F.1.e Public Comment

None.

F.1.f Council Action: Adopt Pacific Sardine Harvest Guideline and Management Measures for 2007

Utilizing Agenda Item F.1.d, Supplemental SSC Report, Ms. Vojkovich moved and Mr. Thomas seconded a motion (Motion 14) to adopt a harvest guideline for 2007 of 152,564 mt using the fishery management plan control rule and the biomass estimate of 1.32 million mt for the management of the Pacific sardine fishery for 2007. This harvest guideline is 28% larger than the 2006 harvest guideline of 118,937 mt. Also establish a 45 percent incidental catch rate be allowed for other CPS fisheries in the event that a seasonal allocation is taken before the end of an allocation period or the HG is projected to be taken before the end of the year. This motion includes adopting the stock assessment.

Motion 14 passed.

F.2 Stock Assessment Review (STAR) Panel Terms of Reference for 2007 (11/16/06; 8:08 am)

F.2.a Agenda Item Overview

Mr. Burner provided the agenda item overview.

F.2.b SSC Report

Dr. Conrad provided Agenda Item F.2.d, Supplemental SSC Report.

Ms. Vojkovich noted that the groundfish process terms of reference included many recommendations as to what sort of things should be reported in the assessment and the STAR report including the need for decision tables. Dr. Conrad reported that many of the reporting aspects were incorporated into the CPS document. Mr. Burner noted that the harvest control rules in the CPS FMP remove a lot of the necessity for a decision table and noted that those harvest control rules will likely be the subject of future CPS meetings but is outside the scope of the 2007 STAR process.

F.2.c Agency and Tribal Comments

None.

F.2.d Reports and Comments of Advisory Bodies

None.

F.2.e Public Comment

None.

F.2.f Council Action: Adopt Terms of Reference for Coastal Pelagic Species STAR Panels for Public Review

Ms. Vojkovich moved and Mr. Thomas seconded a motion (Motion 15) to adopt the terms of reference for the 2007 coastal pelagic species STAR Panels for public review as shown in Agenda Item F.2.b, Attachment 1.

Motion 15 passed.

G. Pacific Halibut Management

G.1 Changes to Catch Sharing Plan and 2007 Annual Regulations

Vice Chairman Dave Ortmann chaired this agenda item.

G.1.a Agenda Item Overview (11/16/06; 1:09 pm)

Mr. Chuck Tracy presented the agenda item overview.

G.1.b Agency and Tribal Recommendations and Comments

Ms. Culver presented Agenda Item G.1.b, WDFW Report.

Mr. Melcher asked why the rollover provision from the directed commercial halibut fishery to the incidental salmon troll fishery was proposed to be eliminated on page 4 of Agenda Item G.1.b, Supplemental NMFS Report 2. Ms DeReynier replied in the past the quotas were interdependent, but recently have been separated, and since both fisheries normally take their full quota, the proposal was a reflection of the separate quota and management of the fisheries.

G.1.c Reports and Comments of Advisory Bodies

Ms. Heather Mann presented Agenda Item G.1.c, Supplemental GAP Report.

G.1.d Public Comment

Mr. Doug Fricke, Washington Trollers Association, Hoquiam, Washington

G.1.e Council Action: Adopt Final Proposed Changes for 2007

Ms. Culver moved and Mr. Melcher seconded a motion, (Motion 18) to adopt the proposed changes for the 2007 Halibut Catch Sharing Plan for 2007 in Agenda Item G.1.b, WDFW Report and in Agenda Item G.1.b, Supplemental NMFS Report 2, except that the original language on page 4 of Agenda Item G.1.b, Supplemental NMFS Report 2, referring to rolling over unused quota in the directed fishery to the salmon troll incidental fishery, would be retained. Motion 18 passed.

H. Marine Protected Areas

H.1 Channel Islands National Marine Sanctuary Marine Protected Areas (11/16/06; 1:29 pm)

H.1.a Agenda Item Overview

Mr. Burner provided the agenda item overview.

H.1.b Reports and Comments of Advisory Bodies

Mr. Burner read for the record, Agenda Item H.1.b, Supplemental HC Report.

Dr. McIsaac referred to the last sentence of the HC report and asked Mr. Feder to comment on the need for legal council guidance on the "research reserve concept" under MSA. Mr. Feder stated that it is a

possibility but noted he has not seen any recent documents describing the research proposal for these closed areas and is open to reviewing such documents.

Mr. Jim Martin provided Agenda Item H.1.b, Supplemental GAP Report.

H.1.c Public Comment

None.

H.1.d Council Action: Consider the Next Steps in Implementation of Fishing Regulations through the Magnuson-Stevens Act

Dr. McIsaac spoke briefly regarding a rationale for consideration of an umbrella type ecosystem management plan. The Council has repeatedly stated a preference for managing fisheries under the authority of the MSA rather than implementing NMS Designation Document changes and NMSA regulations. The Council explored achieving the CINMS MPAs under their existing FMPs and that didn't work because the Council's four FMPs do not cover all of the necessary species for a total fishery closure. The next approach was to regulate fisheries under the rationale of groundfish EFH protection. This action was successful for regulating benthic fisheries, it failed to do so in the water column as such action had insufficient factual and scientific basis as determined by NOAA General Council. Recalling some eloquent speeches by former Council member Mr. Ralph Brown, there could be an umbrella type ecosystem plan that compliments the four existing FMPs and would allow fishing regulation in essentially all of the EEZ. Dr, McIsaac noted that other Councils have begun work on ecosystem management and perhaps the North Pacific example would be a good starting point. Dr. McIsaac cautioned that taking such action would not come without some financial resource needs and that completing a new FMP would take some time.

Ms. Vojkovich agreed with Dr. McIsaac's statements and added that she feels there is both a short-term and a long-term situation in play on this issue. The initiation of an FMP conjures thoughts of a lengthy process with many meetings, but represents a good long-term option. However, the short-term solution should not be lost in the process. The Council has repeatedly told the NMSP that the Council is the appropriate entity for regulating fisheries and she feels the Council should proceed accordingly. Ms. Vojkovich noted that the concept of establishing research reserves through existing MSA authorities has merit and deserved further development. Ms. Vojkovich stated there is a good opportunity to partner with the NMSP on these matters and noted the roundtable discussions that occurred on Monday The NMSP is part of NOAA and is interested in many of the same research projects as the Council which provides the groundwork for a collaborative approach on research as well as development of ecosystem principles.

Mr. Tim Roth supported Ms. Vojkovich's comments and noted he is serving on the HC where he sees tremendous interest from both the HC and the SSC on this matter. Mr. Roth sees this as a unique opportunity to build on actions such as the krill harvest ban and go further with ecosystem-based principles in the long term. Mr. Roth supports continuing to work on a short-term solution to the CINMS issues while building on this week's joint meeting of the HC and SSC's subcommittee to work on long-term solutions as well.

Mr. Anderson agreed with Mr. Roth and Ms. Vojkovich's comments. Mr. Anderson noted that the Council policy decision to regulate fisheries under the Magnuson-Stevens Act doesn't mean we don't want to coordinate with other entities such as NMSs in ecosystem management. However, he is not ready to give up on that effort and tell the CINMS to go forward with Designation Document changes and start managing fisheries. He agrees this appears to be a vehicle we can use to match our policy decisions with fishery management actions. Mr. Anderson stated that implementing ecosystem-based fishery management will not likely be simple and hopes the Council can build off a lot of the work done by the

NPFMC on this matter. He has questions about state-managed species and how they may be included in any new FMP, but he thinks this umbrella ecosystem management approach provides the best opportunity to build on existing work in the HC and SSC and develop a long-term solution.

Mr. Helvey noted the habitat protections at several California NMSs and the krill ban that was brought forward by the MBNMS and stated that NOAA, through its sanctuary program, has a mission of ecosystem protection. Mr. Helvey feels the Council will see future proposals beyond CINMS and an ecosystem-based plan may be the vehicle to allow the Council to participate with the sanctuaries rather than be reactionary. Regarding Mr. Anderson's comments about state managed species, he noted that California and the CINMS are working somewhat separately now to achieve MPA closures and sanctuary goals and he sees the Council and its over-arching ecosystem plan as a possible venue for bringing state and Federal efforts together to achieve ecosystem protections.

Ms. Fosmark supports an ecosystem FMP, but thinks the Council should consider continuing with the research reserve approach that is currently being reviewed. She is concerned about the Central California Coast NMSs that want to extend their boundaries and further limit fishing opportunities.

Mr. Sones stated his support for an ecosystem plan and noted he first started talking about ecosystem management in the early 1990's. He is opposed to the sanctuaries managing fisheries in areas already managed under the Magnuson-Stevens Act and this proposed action is a positive step in addressing the issue. He agreed with Mr. Anderson that ecosystem management needs to look at all the fisheries and marine resources. In the Pacific Northwest we can see fishery management in NMSs as a issue to be addressed while recognizing the valuable role NMSs can play in providing research, information, and data analysis.

Mr. Moore stated he was in support of initiating an ecosystem plan but asked if California and NMFS were moving forward with regulation of fishing in the Channel Islands through an extension of State regulations into Federal waters. Ms. Vojkovich said extending State regulations has been mentioned as has the approach to build off existing research goals in several of our FMPs and create research reserves under existing MSA authorities. She asked NMFS to speak to the status of that project.

Mr. Feder said he may not be the one to answer the question as he did not know of anything being done since the last Council meeting regarding establishment of scientific or factual bases for the extension of State regulations.

Mr. Burner stated that he does not regard the research reserves and the extension of State regulations to achieve the closures as two separate entities. The short-term approach, as he sees it, would utilize the existing MSA authority to extend State regulations as the regulatory mechanism to achieve the MPA closures. The need for research and research reserves, as called for in several Council FMPs and Council MPA documents, would provide the rationale for taking such action. This concept was first presented to the Council in March of this year and was refined in September. NOAA General Council has requested that this approach be coupled with examples of existing or proposed research activities that are specific to the closed areas in the CINMS. At the September meeting there was some discussion of a market squid research proposal in the CINMS. Mr. Burner agreed that little work on this short-term approach has occurred since September and stated Council staff felt Council direction in September was to keep this short-term approach on the table, but explore other alternatives. Mr. Burner felt the Council discussion of this short and long term approach is consistent with statements heard from the advisory bodies and he felt that the extension of State regulations to expand potential research reserves into Federal waters represents a short-term approach while initiating an ecosystem plan represents a broader long-term solution.

Ms. Fosmark added that the Council should couple this action with comments on the CINMS proposed rule recommending an automatic sunset of NMSA regulations should they be implemented and subsequently become unnecessary when MSA regulations become effective.

Mr. Helvey said there is a lot of research occurring in the CINMS and it would behoove the Council to work with the CINMS to find out what research activity is underway.

Ms. Vojkovich, Mr. Helvey, and Mr. Burner all agreed that the Council's Research and Data Needs document has a section devoted to marine reserves and ecosystem-based fishery management and should be able to serve as a research coordination document with the NMSs. Mr. Burner noted that the SSC white paper and the Council's Phase I document regarding MPA development are also supportive of this effort.

Ms. Vojkovich moved (Motion 19) that we move forward with the short-term approach to fishery regulation within the CINMS through the Magnuson-Stevens Act to develop research reserves by extending State regulations into Federal waters. Mr. Thomas seconded the motion.

Mr. Anderson asked for clarification on what exactly it means to extend state jurisdiction and he noted that the State already has jurisdiction over vessels landing in California.

Mr. Helvey stated there are provisions in the Magnuson-Stevens Act for using State authorities. In this case, California has water column closures in place within State waters and these regulations would be extended into the proposed areas in Federal waters.

Mr. Burner clarified that the Magnuson-Stevens Act provisions do not extend State authority into Federal waters, they simply implant existing State regulation in Federal water under Federal authority.

Mr. Anderson stated that Washington currently adopts State regulations that mirror the Federal regulations so that Washington enforcement entities can enforce fishery regulations on Washington registered vessels in Federal waters and asked if there is something additional that the Council would need to do in the case of the CINMS or do the authorities already exist. There has been no authority deferred or delegated to the State, rather the State has conformed to Federal regulations.

Mr. Feder stated that Ms. Vojkovich is describing MSA discretionary provisions for FMPs that allow for incorporation into FMPs the relevant conservation and management measures of the coastal states. He continued that this is different from the States' authority to regulate their own registered vessels in State and Federal waters so long as State regulations are not inconsistent with MSA regulations. Mr. Anderson said that the state authority can be inconsistent so long as the regulations are more conservative than Federal regulations.

Motion 19 passed.

Ms. Vojkovich moved (Motion 20) to have the Council begin the process of exploring an ecosystem FMP and using the work already conducted elsewhere to frame how we might approach this FMP. The motion is not to intended to adopt any FMP at this time but rather used existing committees and expertise to begin looking at what is involved in developing and crafting such an FMP. Mr. Thomas seconded the motion.

Mr. Anderson suspected that the ecosystem plan in the NPFMC is as close a model for us to work with as possible. The HC and the SSC would be the two bodies along with Council staff would take a look at existing documents and report to the Council what concepts would be compatible with the West Coast. Mr. Burner said the discussion paper on the Aleutian Islands prepared by the NPFMC is a good starting point. However, that plan defers all management activities to the existing FMPs and on the West Coast there has been some discussion about the need to regulate fishing activities for species not contained in the four FMPs and this may be a area where the Councils ecosystem plan may differ from the NPFMC example.

Motion 20 passed.

Ms. Vojkovich said this long-term effort is going to take money to do this and suggested the Council start a dialogue with the West Coast NMSs regarding the coordination of goals and objectives so that the resulting plan can help to meet both the needs of the Council and the NMSs. This coordination would allow participation in the process by the NMS with the possibility of a broader funding base for the project. She also suggested that if it is legal, Council staff could look for outside grants from organizations such as PEW foundation.

Mr. Roth said the topic of funding was discussed in the HC including the potential to partner with the NMSs on both the identification of shared research needs and opportunities for funding partnerships.

Mr. Feder stated there are potential problems with accepting funds from outside sources. The general rule is that Federal entities are appropriated their operating funds by Congress and are not allowed to accept funds from outside sources.

Ms. Vojkovich clarified that funds cannot be sent directly to the Council, but it may be appropriate for an outside organization to fund a workshop or meeting without the Council receiving funds directly. Mr. Feder agreed that looking into those types of arrangements would be worthwhile.

Mr. Roth said the discussion was not having the Council receive funds, but rather have the Council develop planning projects and research activities for other entities to fund.

Dr. Hanson said the PSMFC could also help with the coordination of funds and projects.

Mr. Burner asked that the Council discuss scheduling of the next steps in this long-term approach under Agenda Item B.6. when future agenda planning occurs.

I. Salmon Management

Vice Chairman Dave Ortmann chaired the salmon agenda items.

I.1 Preseason Salmon Management Schedule for 2007 (11/17/06 ; 8:10 am)

I.1.a Agenda Item Overview

Mr. Chuck Tracy presented the agenda item overview.

I.1.b Agency and Tribal Comments

Ms. Vojkovich presented Agenda Item I.1.b, Supplemental CDFG Report.

Mr. Melcher asked if the invitee list was the previous KRTAT members or was expanded. Ms. Vojkovich replied it is a subset of the KRTAT necessary to produce the two reports for preseason management.

Mr. Melcher asked who the contact person was. Ms. Vojkovich said Mr. Larry Hanson would probably be the contact person.

Ms. Vojkovich noted CDFG would assure former KFMC participants would be kept informed of relevant developments.

Mr. Anderson noted the early February meeting of the Salmon Technical Team puts a lot of pressure on WDFW and tribal negotiations to complete their tasks in time for Preseason Report I. Mr. Tracy replied the meeting was moved up to avoid a conflict with the PSC meeting that STT members participate in.

I.1.c Reports and Comments of Advisory Bodies

None.

I.1.d Public Comment

Mr. David Bitts, PCFFA, Eureka, California.

I.1.e Council Action: Approve 2007 Preseason Management Schedule and Hearing Sites

Ms. Vojkovich asked if there was an opportunity at the March 2007 meeting to convene a quasi advisory group of the past KFMC members. Dr. McIsaac replied it was a possibility pending any legal or budgetary issues, although Council staff time would be limited.

Mr. Anderson noted the similarity to the North of Falcon process, which the Council has provided space for at the March and April Council meetings; perhaps a space could be provided in a similar manner for Klamath issues.

Mr. Roth said USFWS supports the KFMC process, but was unsure what flexibility USFWS had in funding those activities, and advised Dr. McIsaac to work with Mr. Phil Dietrich on funding issues.

The Council agreed to provide a meeting room for the forum.

Mr. Melcher recommended an informal work group meeting for Klamath issues prior to the March 2007 Council meeting, similar to the North of Falcon meeting, which he would attend.

Ms. Vojkovich said she could coordinate and facilitate such a meeting.

Mr. Anderson moved (Motion 23) that the Council sponsor the public hearings as shown in Agenda Item I.1.a, Attachment 1. Mr. Cedergreen seconded the motion. Motion 23 passed.

Mr. Anderson moved (Motion 24) to adopt the proposed process for developing 2007 ocean salmon measures as shown in Agenda Item I.1.a, Attachment 1. Mr. Cedergreen seconded the motion. Motion 24 passed.

Dr. McIsaac asked if the early season openings south of Cape Falcon could be addressed the week prior to the March 2007 Council meeting to facilitate the option development process.

Mr. Melcher recommended against that because it was difficult to have all the guidance and model development in place by then.

I.2 Salmon Methodology Review

I.2.a Agenda Item Overview (11/17/06; 8:48 am)

Mr. Tracy presented the agenda item overview.

I.2.b Report of the Scientific and Statistical Committee

Mr. Bob Conrad presented Agenda Item I.2.b, Supplemental SSC Report.

Dr. McIsaac asked if the SSC had any suggestions to the experimental design of the proposed genetic stock identification (GSI) study. Mr. Conrad replied the SSC provided more detailed comments to the project leaders, but he was unsure of how those comments would be addressed.

Dr. McIsaac asked if and when there would be an experimental design provided for SSC review. Mr. Lockhart replied the design would be dependent on the structure of 2007 ocean salmon fisheries, and could be provided as soon after the March Council meeting as possible.

I.2.c Agency and Tribal Comments

Mr. Sones noted the tribes concern over expanding mark selective fisheries, especially for Chinook, given the state of the Fishery Regulation Assessment Model (FRAM) to deal with selective fisheries impacting multiple broods over several years. The base data expansion process should be completed to include 1986-2003 for calibration of the FRAM.

Mr. Anderson noted WDFW felt the Chinook FRAM had been adequately modified to assess the effects of mark selective fisheries on Chinook stocks..

I.2.d Reports and Comments of Advisory Bodies

Mr. Larrie LaVoy presented Agenda Item I.2.d, Supplemental MEW Report.

Mr. Melcher asked if there were place holder stocks in the Coho FRAM for lower Columbia River natural coho. Mr. LaVoy replied there were three place holder stocks: Clackamas early, Clackamas late, and Sandy late wild stocks; CWT representation was the associated early and late hatchery stocks. The MEW recommended developing a weighted average of early and late CWT groups to represent the aggregate lower Columbia River natural coho stock.

Mr. Alan Grover summarized Agenda Item I.2.d, STT Report.

Mr. Melcher asked if the STT felt the FRAM documentation was sufficient to evaluate both mark selective and non-mark selective fisheries. Mr. Grover replied it was sufficient to understand the modeling exercises for both.

Mr. Jeff Feldner presented Agenda Item I.2.d, Supplemental SAS Report.

I.2.e Public Comment

Mr. Scott Boley, troller, Gold Beach, Oregon.

Mr. Melcher asked how the contact rate review for the Klamath Ocean Harvest Model should be conducted. Mr. Boley replied it should include a review of fleet capacity.

Mr. Rod Fujita, Environmental Defense, San Francisco, California.
Mr. Dean Estepp, troller, Ft. Bragg, California.
Ms. Ellen Faulkner, North Coast Consumers Alliance, Redwood Valley, California.
Ms. Ann Maurice, Ad Hoc Committee, Occidental, California.

I.2.f Council Action: Adopt Final Salmon Methodology Changes for 2007

Mr. Anderson moved (Motion 25) to adopt the FRAM documentation for final editing and general distribution. Mr. Melcher seconded the motion. Motion 25 passed.

Ms. Vojkovich recommended an interagency group headed by NMFS be formed to discuss use of the GSI study data. Mr. Lockhart replied NOAA fisheries was committed to exploring the use of this data and would lead the group.

Mr. Williams noted those issues were being discussed in the PSC forum and they will be contacting the Council.

Dr. McIsaac asked if the workgroup would put together a more detailed study design. Mr. Lockhart replied yes, depending on the work group composition and associated FACA concerns.

Dr. McIsaac noted a stand-alone study design may facilitate funding.

Mr. Tracy noted an EFP would require a detailed study design for review by the SSC and other advisory bodies at the March 2007 Council meeting.

Mr. Melcher noted the Council requested PSMFC to help with the Klamath fall Chinook (KRFC) brood year birthdate issue. Dr. McIsaac suggested a progress report on the issue at the March 2007 Council meeting

I.3 FMP Amendment 15 (de minimis fisheries) (11/17/06: 10:51 am)

I.3.a Agenda Item Overview

Mr. Tracy presented the agenda item overview.

I.3.b Salmon Amendment Committee Report

Mr. LB Boydstun and Ms. Corinne Pinkerton presented a PowerPoint overview of Agenda Item I.3.a, Attachment 1; Preliminary Draft Environmental Assessment for Pacific Coast Salmon Plan Amendment 15 (attached to Agenda Item I.3).

Mr. Melcher asked if the analysis was based on the maximum allowed ocean impact rate for each of the cap alternatives and if there was an error structure built around the cap. Mr. Boydstun replied yes to both questions; variability was included in both the stock projections and the ocean fishery projections.

Mr. Anderson noted the presentation referred to the management area for KRFC as being from Cape Falcon, Oregon to Point Sur, California, and asked if it would be appropriate to include some specific language to that effect in Chapter 6. Mr. Tracy replied the intent of the amendment was to limit management response to that area and that appropriate verbiage should be incorporated into the proposed FMP language in Chapter 6.

Mr. Anderson asked if the alternatives could result in impact rates up to the cap regardless of forecast stock size. Mr. Boydstun replied the modeling operated under that assumption.

Mr. Boydstun then presented Agenda Item I.3.b, Supplemental SAC Report.

Mr. Melcher asked for clarification on the statement that the 2006 KOHM resulted in lower effort estimates than observed in previous years. Mr. Boydstun replied that statement was in the context of a given impact rate, and that it would take less effort to reach that impact rate under the 2006 KOHM.

Mr. Lockhart asked for interpretation of the economic effects of reduced opportunity associated with the 2006 KOHM versus earlier years. Ms. Pinkerton replied the long term historical range still encompasses the projected range, but the projected values are generally lower, both because of *de minimis* fishing effects and because of the updated KOHM parameters.

Mr. Lockhart asked if the consideration for reduced impacts during *de minimis* fishing years included critically low natural spawning abundance for sub-populations as well as the aggregate natural spawning population. Mr. Boydstun replied yes, and that the two were closely linked in the analysis.

I.3.c Agency and Tribal Comments (11/17/06; 1:14 pm)

Mssrs. Mike Orcutt and Danny Jordan presented Agenda Item I.3.c, Supplemental Comments of Hoopa Valley Tribe. Mr. Jordan also noted that a tribal harvest at a level below 12,000 represented an emergency situation for the tribes. The tribal commercial fishery was eliminated in 1978 due to conservation concerns; although there was subsequent effort to bolster ocean fisheries, and agriculture interests in the Klamath Basin receive government subsidies, no money has been spent on developing or adding value to the tribal fisheries. The figure of $1.5 million assumed value of the tribal fishery is a disservice to the tribal community as the value in commercial, social and religious terms is much greater. The 1987 allocation agreement and associated conservation objectives allowed the tribes to focus on habitat restoration issues. Reopening the allocation and conservation debate would detract from those efforts.

Mr. David Hillemeier presented Agenda Item I.3.c, Supplemental Yurok Tribal Comments.

Mr. Melcher asked if the Klamath Basin communities supported the emergency rule to allow fishing in 2006. Mr. Hillemeier replied the communities did support that action because it represented *de minimis* impacts, as opposed to the Amendment 15 proposal of about 25% to 33% spawner reduction rate.

Mr. Lockhart asked for an explanation of the statement regarding the substantially higher risk to Klamath Basin sub-stocks with the 10% Cap and 13% Cap Alternatives. Mr. Hillemeier replied it was based on the graph in Agenda Item I.3.b, Supplemental SAC Report and table ES-2 in Agenda Item I.3.a, Attachment 1 depicting the relative differences among alternatives compared to the Status Quo Alternative.

Ms. Vojkovich noted CDFG's primary objective was maintaining the productivity of Klamath Basin stocks and they were concerned about the interpretation of the term *de minimis*.

Mr. Lockhart noted NOAA Fisheries believes the Council has sufficient information to reach an informed decision on *de minimis* fisheries, which would be supported by Agenda Item I.3.d, Supplemental SSC Report. However, it may be necessary to specify some qualifications on how fisheries would be adjusted based on annual circumstances.

I.3.d Reports and Comments of Advisory Bodies (11/17/06; 1:05 pm)

Dr. Bob Conrad presented Agenda Item I.3.d, Supplemental SSC Report. Mr. Dave Bitts provided Agenda Item I.3.d, Supplemental SAS Report.

Ms. Fosmark asked for an explanation of the sliding scale feature recommended by the some of the SAS members. Mr. Bitts replied it would decrease the allowable impacts as stock size decreased, thus

reducing overall risk to the stock from *de minimis* fisheries. The initial and terminal points could be selected at any stock size below the threshold *de minimis* level.

Ms. Fosmark asked for a relative comparison between commercial fishing mortality and freshwater mortality factors. Mr. Bitts replied the difference between an 80%-90% mortality from disease outbreaks and a spawner reduction rate from fishing of 33% was approximately half an order of magnitude.

Mr. Tracy read into the record Agenda Item I.3.d, Supplemental HC Report. Mr. Tracy read into the record Agenda Item I.3.d, Supplemental STT Report.

I.3.e Public Comment (11/17/06; 1:54 pm)

Public hearing reports 1 through 3 were referenced by Mr. Tracy.

Mr. Dave Bitts, PCFFA, Eureka, California
Mr. Dan Wolford, Coastside Fishing Club, Los Gatos, California
Ms. Ellen Faulkner, North Coast Consumers Alliance, Redwood Valley, California
Ms. Ann Maurice, Ad Hoc Committee, Occidental, California
Mr. Dean Estepp, salmon troller, Fort Bragg, California
Ms. Barbara Emley, PCFFA, San Francisco, California
Mr. Scott Boley, salmon troller, Gold Beach, Oregon
Mr. Ray Monroe, Oregon Salmon Commission, Pacific City, Oregon
Mr. Daniel Platt, troller, Fort Bragg, California
Mr. Bob Osborn, United Anglers of Southern California, Surfside, California

I.3.f Council Action: Adopt Final Preferred Alternative for Implementation in 2007

Mr. Melcher felt that the result of events since 2005, including consideration of an emergency rule in 2005, use of an emergency rule in 2006, input from fishing communities, development of the alternatives for Amendment 15, analysis of the biological and economic impacts of those alternatives, and scientific review of the analyses, has led to the conclusion that adopting a *de minimis* fishery alternative for Amendment 15 is the correct course of action. The choice of which alternative is a policy decision based on balancing the risk and benefits of the various alternatives. The risk associated with the alternatives, in both absolute and relative terms, appears to increase linearly. The 5% Cap Alternative appears the most risk averse, but the benefits appear to accrue primarily in the recreational fishery sector outside the KMZ. The 13% Cap Alternative has risks similar to those accepted in 2006, however, additional precaution is warranted for a longer term policy. The 10% Cap provides significant increase in economic benefits over the 5% Cap Alternative for commercial fisheries in California and Oregon, as well as KMZ recreational fisheries. However, based on the agency, tribal, advisory body, and public testimony, he believes some additional level of conservation is appropriate.

Mr. Melcher moved (Motion 26) to adopt the salmon FMP amendment language with the changes contained in Agenda Item I.3.f, Supplemental ODFW Motion, resulting in the following language in numbered paragraph 3 under section 3.2.2.2:

> In the case of Klamath River fall Chinook, the Council may allow *de minimis* fisheries, which: permit an ocean impact rate of no more than 10% on age-4 Klamath River fall Chinook if the projected natural spawning escapement associated with a 10% age-4 ocean impact rate, including river recreational and tribal impacts, is between 22,000 and 35,000. Ocean fishery impacts to the returning brood incurred during the previous fall will be counted against the allowable 10% age-4 ocean impact rate. Implementation of *de minimis* fisheries will depend on year specific estimates of ocean abundance and age composition, and will be determined by the STT prior to the March Council meeting. If the projected natural escapement associated with a 10% age-4 ocean impact rate is less

than 22,000, the Council shall further reduce the allowable age-4 ocean impact rate to reflect the status of the stock.

Mr. Warrens seconded the motion.

Mr. Melcher noted the 22,000 spawning level was based on the 2006 process and analysis, which forecast an escapement of 21,100 natural spawning adults.

Mr. Lockhart moved to amend Motion 26 to insert at the end of numbered paragraph 3, in section 3.2.2.2 the following language:

The Ocean Impact rate is the maximum rate each year. In determining the actual rate, the Council shall consider at least the following items:

1. Critically low natural spawner abundance, including the risk of substocks dropping below crucial genetic thresholds
2. A series of low spawner abundance in recent years.
3. Status of co-mingled stocks.
4. *El Niño* or other adverse environmental conditions.
5. ESA considerations.
6. Other considerations as appropriate.

When considering these items, the Council shall determine that the final ocean impact rate will not jeopardize the capacity of the fishery to produce the maximum sustainable yield on a continuing basis.

The intent of the amendment to Motion 26 was to specify the considerations for year specific circumstances to set an annual *de minimis* level less than the cap level.

Mr. Moore seconded the amendment to Motion 26.

Mr. Roth noted some concerns, including the possibility of over optimistic results from the biological analysis, the characterization of the 10% Cap alternative as *de minimis* when it resulted in a total spawner reduction rate of about 25%, the contribution of sub-stocks to overall Klamath Basin productivity, the high probability of an Overfishing Concern being exacerbated by *de minimis* fisheries, and tribal trust responsibilities. It would be difficult to support a 10% or 13% Cap Alternative without additional safeguards, and a commitment to continue with habitat restoration efforts.

Mr. Lockhart's amendment passed.

Mr. Anderson moved to amend Motion 26 to adopt the following language to the beginning of numbered paragraph 3;

In the case of Klamath River fall Chinook, the harvest management area is defined as that between Cape Falcon, Oregon and Point Sur, California, the Council may allow …

Mr. Cedergreen seconded the amendment to Motion 26.

Mr. Anderson indicated that the analyses in the amendment were based on the KOHM and economic models, which assume management actions and economic benefits occur between Cape Falcon and Point Sur, and therefore the amendment should specify the intended management area.

Ms. Vojkovich asked if the proposed amendment to Motion 26 would preclude action to reduce Klamath impacts in areas north of Cape Falcon if they were to be found at higher levels in the future, perhaps

because of a change in fishing patterns. Mr. Anderson replied that it would not preclude action, but that the action would have to take the form of an emergency rule or another FMP amendment.

Mr. Lockhart felt the amendment to Motion 26 was consistent with the intent of FMP Amendment 15.

The amendment to Motion 26 passed.

Ms. Vojkovich moved to adopt a substitute motion that the Council take no action to amend the salmon FMP. Mr. Sones seconded the motion.
Ms. Vojkovich noted that Mr. Roth expressed many of her concerns and the rationale for not amending the FMP. The risks of all the alternatives increase over the Status Quo Alternative. The sub-stock issue poses the greatest risk according to the analysis, and the risk is probably greater than characterized because of other and smaller sub-stock populations within the basin. The SSC also observed that *de minimis* fisheries would exacerbate the problem of Overfishing Concerns and declining stock productivity. If treated as a target, the 35,000 spawning escapement floor would be met at least 50% of the time, but it would not be prudent to plan to miss that target. The STT reported the accuracy of spawning return predictions are declining. None of the alternatives have an equitable distribution of benefits and costs because of the difference in contact rates between recreational and commercial fisheries. For those reasons she supported the Status Quo Alternative.

Mr. Melcher noted the concern over increasing risk of record low spawning abundance should be considered both in relative and absolute terms. The absolute probability of the 13% Cap Alternative is only 3%. A similar argument could be made for the risk of a substock falling below a spawning escapement of 720.

Ms. Vojkovich noted the SSC report stated that the absolute scale was uncertain.

Mr. Roth noted that while the probabilities of sub-stock spawning escapements less than 720 were low, recent historical data showed a more serious problem, and both the Scott and Salmon rivers were below 720 in 2004 and 2005.

Mr. Lockhart clarified that by approving Motion 26, as twice amended, a spawning escapement floor less than 35,000 would not be established. A cap for *de minimis* fisheries, to be implemented on a limited basis would be set; however the actual level in any year would be evaluated based on the specific circumstances of that year, and could be substantially less than the cap level. In discussions with NMFS Science Center personnel and NWR staff weighing the risk to the population against the severe economic consequences, the 10% ocean impact rate Cap was considered an acceptable balance.

The substitute motion failed; Ms. Vojkovich and Mr. Sones voted in favor of the substitute motion.

Mr. Anderson agreed with SAC recommendation 6 to delay selection of a preferred alternative until March 2007 and rely on the analysis to support an emergency rule if necessary for 2007 salmon management measures. He felt a 10% age-4 ocean impact rate was acceptable for spawning escapements above about 33,000, but not necessarily at escapements less than that. He suggested a sliding scale approach may add structure and stability to the process of determining an appropriate impact rate in any given year.

Mr. Lockhart asked if Mr. Anderson was making a specific proposal or just supporting the concept of a sliding scale. Mr. Boydstun replied a subcommittee of the SAC put together simplified sliding scale alternatives similar to the KFMC proposal, which started at the cap level and had intercepts at zero spawners and at 12,000 spawners. The alternatives were developed in anticipation of additional discussion of sliding scale or other structured alternatives, but were not vetted with the STT, SSC, or the full SAC.

Mr. Melcher observed that Motion 26 as amended was directly analogous to the FMP language in section 3.2.2.2 paragraph 2 regarding stocks in the North of Cape Falcon area, and to the way ESA listed stocks were treated. He recognized the concern surrounding the stability of the preseason planning process, but felt the motion was very similar to, if not more specific, than how similar situations are currently handled elsewhere.

Mr. Lockhart said NOAA Northwest Region discussed and confirmed that the current analysis would support the adoption of a sliding scale alternative. The range of impacts contained in the current analyses encompasses what would be expected in a sliding scale alternative. The Council could chose a sliding scale preferred alternative at this time as long as it was within the range of alternatives analyzed; however, it would require some additional model runs, which could possibly delay implementation until after May 1. The analysis would increase the likelihood of passing an emergency rule in 2007 if necessary, however, the substantive issues of overfishing and risk to the population would be more important than the procedural questions of process stability.

Motion 26 as twice amended passed. Ms. Vojkovich and Mr. Anderson voted against the motion; Mr. Myer abstained.

OPEN PUBLIC COMMENT FOR NON-AGENDA ITEMS

Public comments on fishery issues not on the agenda are accepted at this time.

Mr. Ray Monroe, salmon troller, Pacific City, Oregon provided the Council members with a DVD entitled "Home of the Dory Fleet, A Film About the Rugged Dorymen at Pacific City, Oregon". Copies of this DVD may be purchased on location at: Pacific City Sporting Goods, Pacific City, Oregon, or by contacting: The Dorymen's Association, Inc., PO Box 728, Pacific City, Oregon 97135.

Mr. Steve Bodnar, provided details of an outreach program working with Oregon schools to educate them about the trawl fleet, formed through a partnership with Oregon Trawl Commission. He showed a DVD with video from the school program. There always seems to be doom and gloom in the industry, he wants to show that the trawlers are providing education to students, showing positives of the Oregon trawl industry. They want to expand the program. He also passed out a brochure outlining the program.

ADJOURN

The 186th meeting of the Pacific Fishery Management Council meeting was adjourned on Friday, November 17, 2006, at 5:30 pm.

DRAFT	**DRAFT**
Council Chairman	**Date**

DRAFT VOTING LOG
Pacific Fishery Management Council
November, 2006

Motion 1: Approve the agenda as shown in Agenda Item A.4, Council Meeting Agenda.

Moved by: Rod Moore Seconded by: Frank Warrens
Motion 1 passed.

Motion 2: With regard to the vessel marking requirements, to choose Option 2 from Agenda Item C.2.a, Attachment 1, which exempts commercial passenger fishing vessels from current federal vessel marking requirements.

Moved by: Frank Warrens Seconded by: Roger Thomas
Motion 2 passed.

Motion 3: Adopt albacore Option 3 and bluefin Option 2 with a 10 fish daily bag limit from Agenda Item C.2.a, Attachment 2. Albacore Option 3 implements a daily bag limit of 25 fish per angler per day north of Point Conception to the California/Oregon border and a daily bag limit of 10 fish per day south of Point Conception to the U.S./Mexican border. Bluefin Option 2 establishes a daily bag limit for bluefin tuna with the Council setting the bag limit amount to 10 fish.

Moved by: Roger Thomas Seconded by: Frank Warrens
Motion 3 passed.

Motion 4: Recommend that NOAA Fisheries grant the EFP for the drift gillnet fishery for the year 2007 under the same terms and conditions including all of the marine mammal take restrictions recommended in March 2006, and that the results of the EFP be reviewed at the end of the 2007 fishery by our SSC and advisory bodies, and a report be made to the Council before any action taken in 2008.

Moved by: Rod Moore Seconded by: Frank Warrens
Motion 4 passed. Messrs. Myer, Cedergreen, and Sones voted no.

Motion 5: Adopt as preliminary alternatives for a shallow-set longline EFP for 2007 alternatives 1, 2, and 3 shown in Agenda Item C.3.b, Supplemental HMSMT Report; with the friendly amendment to change alternative 2, item # 5 to allow the use of lightsticks to reflect the intent of the motion.

Moved by: Rod Moore Seconded by: Curt Melcher
Motion 5 passed. Messrs. Thomas, Mallet, Cedergreen, and Ms. Vojkovich voted no. Mr. Myer abstained.

Motion 6: Use International Alternative 2, "end overfishing immediately," on page 7 of Agenda Item C.4.a, Supplemental Attachment 3 as an amendment to the Pacific Council's HMS FMP.

Moved by: Marija Vojkovich Seconded by: Phil Anderson
Motion 6 passed.

Motion 7: Use Agenda Item C.4.a, Supplemental Attachment 3 as a standalone document so that the Council could change it more frequently than an FMP amendment and it would be on a different track than the FMP amendment.

Moved by: Marija Vojkovich Seconded by: Rod Moore
Motion 7 passed.

Motion 8: Adopt the housecleaning and language changes as identified in Agenda Item C.4.a, Attachment 2: Proposed Non-substantive Reorganization of the HMS FMP.

Moved by: Curt Melcher Seconded by: Rod Moore
Motion 8 passed.

Motion 9: Adopt the revised 2007 STAR panel schedule, and list of stocks in Supplemental SSC Report D.3.c, with the understanding that the groundfish subcommittee meeting to review the updated assessments will be scheduled around the June 2007 Council meeting; the review of rebuilding analyses conducted during the "mop-up session" in October 2007; and the long discussion regarding yelloweye updates and data needs and the agreement between NWFSC and the state of Washington be included in this schedule.

Moved by: Rod Moore Seconded by: Phil Anderson
Motion 9 passed.

Motion 10: Working from Agenda Item D.5.b, Supplemental GMT Report, page 4, move that the Council adopt for final inseason management recommendations consistent with #2, 3, 4, and 5.

Moved by: Phil Anderson Seconded by: Marija Vojkovich
Motion 10 passed.

Motion 11: Direct direct the GMT to provide a revised canary scorecard with the best estimates and projections of canary mortalities that would occur in each of the sectors listed on Table 1 of the GMT report. The revised numbers would not replace any specified harvest guidelines and the Council would revisit this issue as needed next March.

Moved by: Phil Anderson Seconded by: Mark Cedergreen
Motion 11 passed.

Motion 12: Adopt the 2007 shoreside whiting EFP as detailed in Agenda Item D.4.a, Supplemental Attachment 4; and additionally that we form a federal/state/industry working group to help

in the development of that EFP as it relates to the future agenda item (shoreside whiting amendment 10).

Moved by: Curt Melcher Seconded by: Frank Warrens
Motion 12 passed.

Motion 13: Tentatively approve the Nature Conservancy EFP pending further development and review at the March Council meeting.

Moved by: Marija Vojkovich Seconded by: Kathy Fosmark
Motion 13 failed.

Motion 14: Utilizing Agenda Item F.1.d, Supplemental SSC Report, adopt a harvest guideline for 2007 of 152,564 mt using the fishery management plan control rule and the biomass estimate of 1.32 million mt for the management of the Pacific sardine fishery for 2007. This harvest guideline is 28% larger than the 2006 harvest guideline of 118,937 mt. Also establish a 45% incidental catch rate be allowed for other CPS fisheries in the event that a seasonal allocation is taken before the end of an allocation period or the HG is taken before the end of the year. This motion includes adopting the stock assessment.

Moved by: Marija Vojkovich Seconded by: Roger Thomas
Motion 14 passed.

Motion 15: Adopt the terms of reference for coastal pelagic species STAR Panels for public review as shown in Agenda Item F.2.b, Attachment 1.

Moved by: Marija Vojkovich Seconded by: Roger Thomas
Motion 15 passed.

Motion 16: Send out for analysis the range of alternatives contained in Agenda Item C.6.b, Attachment 1 and send forward the proposed workgroup to develop the specifics of an alternative that blends parts of alternative 3 and alternative 4 to be presented to the Council at the March meeting. includes the analysis of the alternatives, which is to be presented in March, and that the Council does not have to see the blended alternative prior to the March meeting. The workgroup should use the details from this discussion and the GAP and GMT statements to support their work.

Moved by: Marija Vojkovich Seconded by: Kathy Fosmark
Motion 16 passed.

Motion 17: Adopt the preliminary alternatives as identified in the GAC Report (Attachment 1).

Moved by: Phil Anderson Seconded by: Mark Cedergreen

Amdnt: Insert the word "reserves" in the set-asides category, with the definition of reserves to be determined by the GAC at a later time.

Moved by: Dale Myer Seconded by: Kathy Fosmark
Amendment passed.
Main Motion 17 passed as amended. Mr. Rod Moore voted no.

Motion 18: Adopt the proposed changes for the 2007 Halibut Catch Sharing Plan for 2007 as found in Agenda Item G.1.b, WDFW Report and in Agenda Item G.1.b, Supplemental NMFS Report 2, except that the original language on page 4 of Agenda Item G.1.b, Supplemental NMFS Report 2, referring to rolling over unused quota in the directed fishery to the salmon troll incidental fishery, would be retained.

Moved by: Michele Culver Seconded by: Curt Melcher
Motion 18 passed.

Motion 19: Move forward with the short term solution to apply Magnuson-Stevens Act to the marine protected areas to develop research reserves and extending state authorities into federal waters, including the discussion that went into this as background material.

Moved by: Marija Vojkovich Seconded by: Roger Thomas
Motion 19 passed.

Motion 20: Begin the process of exploring an ecosystem FMP and to use the work already conducted elsewhere along this line to frame how we might approach this FMP. Not saying launch into one, but start the process of what is available, how it would be described, and use the current committees on how we might explore this.

Moved by: Marija Vojkovich Seconded by: Roger Thomas
Motion 20 passed.

Motion 21: Adopt the public review draft Agenda Item B.2.a, Attachment 1: Research and Data Needs, 2006-2008 as a final document subject to the following change: incorporate the bullet points except for bullet point #3 on the Supplemental SSC Report; and include comments provided by the GMT, GAP, CPSAS, CPSMT, HC, and any that may be forthcoming from the Salmon Advisory Subpanel and Salmon Technical Team, and the comments from Mr. Williams.

Moved by: Rod Moore Seconded by: Curt Melcher
Motion 21 passed.

Motion 22: Approve and send the letter to the Federal Energy Regulatory Commission as shown in Agenda Item E.1.b, Supplemental HC Report 2.

Moved by: Jerry Mallet Seconded by: Rod Moore
Motion 22 passed.

Motion 23: Adopt and sponsor the public hearings as shown in Agenda Item I.1.a, Attachment 1: Pacific Fishery Management Council Schedule and Process for Developing 2007 Ocean Salmon Fishery Management Measures.

Moved by: Phil Anderson Seconded by: Mark Cedergreen
Motion 23 passed.

Motion 24: Adopt the proposed process for developing 2007 ocean salmon measures as shown in Agenda Item I.1.a, Attachment 1: Pacific Fishery Management Council Schedule and Process for Developing 2007 Ocean Salmon Fishery Management Measures.

Moved by: Phil Anderson Seconded by: Mark Cedergreen
Motion 24 passed.

Motion 25: Adopt the FRAM documentation for final editing and general distribution.

Moved by: Phil Anderson Seconded by: Curt Melcher
Motion 25.

Motion 26: Adopt the salmon FMP amendment language with the changes contained in Agenda Item I.3.f, Supplemental ODFW Motion, resulting in the following language in numbered paragraph 3 under section 3.2.2.2:

In the case of Klamath River fall Chinook, the Council may allow *de minimis* fisheries, which: permit an ocean impact rate of no more than 10% on age-4 Klamath River fall Chinook if the projected natural spawning escapement associated with a 10% age-4 ocean impact rate, including river recreational and tribal impacts, is between 22,000 and 35,000. Ocean fishery impacts to the returning brood incurred during the previous fall will be counted against the allowable 10% age-4 ocean impact rate. Implementation of *de minimis* fisheries will depend on year specific estimates of ocean abundance and age composition, and will be determined by the STT prior to the March Council meeting. If the projected natural escapement associated with a 10% age-4 ocean impact rate is less than 22,000, the Council shall further reduce the allowable age-4 ocean impact rate to reflect the status of the stock.

Moved by: Curt Melcher Seconded by: Frank Warrens

Amdt: Insert at the end of numbered paragraph 3, in section 3.2.2.2 the following language:

The Ocean Impact rate is the maximum rate each year. In determining the actual rate, the Council shall consider at least the following items:
Critically low natural spawner abundance, including the risk of substocks dropping below crucial genetic thresholds
A series of low spawner abundance in recent years.
Status of co-mingled stocks.
El Niño or other adverse environmental conditions.
ESA considerations.
Other considerations as appropriate.
When considering these items, the Council shall determine that the final ocean impact rate will not jeopardize the capacity of the fishery to produce the maximum sustainable yield on a continuing basis.

Moved by: Frank Lockhart Seconded by: Rod Moore
Amendment passed.

Amdt: Adopt the following language to the beginning of numbered paragraph 3;

In the case of Klamath River fall Chinook, the harvest management area is defined as that between Cape Falcon, Oregon and Point Sur, California, the Council may allow ...

Moved by: Phil Anderson Seconded by: Mark Cedergreen
Amendment passed.

Subs Mot: Adopt that the Council take no action and not amend the Salmon FMP.

Moved by: Marija Vojkovich Seconded by: David Sones
Substitute motion failed. Ms. Vojkovich and Mr. Sones voted yes for the substitute motion.

Main Motion 26 as twice amended passed. Ms. Vojkovich and Mr. Anderson voted no. Mr. Myer abstained.

Motion 27: Approve the final recommendations to inseason adjustments to 2006 and 2007 fisheries as shown in Agenda Item D.8.b, Supplemental GMT Report – Item #2, Item #3, and ask NMFS to request voluntary action from the industry. Motion 27 passed.

Moved by: Rod Moore Seconded by: Marija Vojkovich
Motion 27 passed.

Motion 28: Reduce the whiting per-trip limit from 20,000 pounds to 10,000 pounds for any whiting taken prior to the primary fishery, to reduce whiting targeting incentives outside the primary season.

Moved by: Frank Lockhart Seconded by: Phil Anderson
Motion 28 failed. Messrs. Lockhart and Cedergreen voted yes.

Motion 29: Approve the report of the Budget Committee as shown in Agenda Item B.4.b, Supplemental Budget Committee Report.

Moved by: Frank Warrens Seconded by: Dave Ortmann
Motion 29 passed.

Motion 30: Suspend COP 1 for one year only (2007), and elect as Council Chair Mr. Donald Hansen and Vice Chair Dave Ortmann for the 2007 calendar year.

Moved by: Phil Anderson Seconded by: Mark Cedergreen
Motion 30 passed.

Motion 31: Appoint Mr. Keith Lutz to the vacant Tribal Government Position on the STT.

Moved by: Phil Anderson
Seconded by: Marija Vojkovich
Motion 31 passed.

Motion 32: Appoint to the Groundfish Allocation Committee, nonvoting positions, Mr. Tom Ghio (Open Access Fishery) and Mr. Daniel Waldeck (Pacific Whiting Fishery).

Moved by: Frank Warrens
Seconded by: Curt Melcher
Motion 32 passed.

Motion 33: Make an interim appointment of Mr. Steve Barrager to the vacant Conservation Position on the Groundfish Allocation Committee and direct the Council staff to solicit nominations to fill the position with a permanant appointee at the March Council meeting.

Moved by: Frank Warrens
Seconded by: Curt Melcher
Motion 33 passed.

Motion 34: Mr. Melcher moved and Mr. Warrens seconded a motion (Motion 34) to appoint the following persons to the 2007-2009 advisory body term for the Coastal Pelagic Species Advisory Subpanel:

California Commercial
Mr. Neil Gugielmo
Ms. Terry Hoinsky
Mr. John Royal

Oregon Commercial
Mr. Eugene Law

Washington Commercial
Mr. Robert Zuanich

California Processor
Ms. Diane Pleschner-Steele

Oregon Processor
Mr. Mike Okoniewski

Washington Processor
Mr. A. Pierre Marchand

California Sport/Charter
CPT Paul Strasser

Conservation
Mr. Ben Enticknap

Moved by: Curt Melcher
Seconded by: Frank Warrens
Motion 34 passed.

Motion 35: Appoint to the 2007-2009 advisory body term for the Groundfish Advisory Subpanel the following people:

Fixed Gear
Mr. Robert Alverson
Mr. Tom Ghio
Mr. Gerry Richter

California Trawl
Mr. Tommy Ancona

Oregon Trawl
Mr. Kelly Smotherman

Washington Trawl
Mr. Marion Larkin

Open Access South of Cape Mendocino
Mr. Daniel Platt

Open Acess North of Cape Mencino

Mr. Kenyon Hensel

Processors
Mr. Barry Cohen
Ms. Heather Mann

At-Sea Processor
Mr. Daniel A. Waldeck

Calfornia Charter South of Point Conception
Mr. Mike Hansen

Calfornia Charter North of Point Conception
Mr. Robert Ingles

Oregon Charter
Mr. Wayne Butler

Washington Charter
Mr. Rhett Weber

Sport Fisheries
Mr. John Holloway
Mr. James Martin
Mr. David Seiler

Conservation
Mr. Steve Barrager

Active Tribal Fisher
Mr. Gordon M. Smith

Moved by: Dale Myer
Seconded by: Mark Cedergreen
Motion 35 passed.

Motion 36: Appoint to the 2007-2009 advisory body term for the Highly Migratory Species Advisory Subpanel the following persons:

Commercial Troll
Mr. Wayne Heikkila

Commercial Purse Seine
Mr. August Felando

Commercial Gillnet
Mr. Steve Fosmark

Commercial Fisheries
Mr. Pete Dupuy
Mr. Douglas Fricke
Mr. William Sutton

Processor South of Cape Mendocino
None-Council to leave vacant until interest is expressed.

Processor North of Cape Mendocino
Ms. Gayle Parker

California Charter Boat
Mr. Robert Fletcher

Washington/Oregon Charter Boat
Ms. Linda Buell

Private Sport
Mr. Bob Osborne

Conservation
Ms. Meghan Jeans

Public At-Large
Ms. Pamela Tom

Moved by: Phil Anderson
Seconded by: Curt Melcher
Motion 36 passed.

Motion 37: Appoint the following persons to the 2007-2009 advisory body term for the Salmon Advisory Subpanel:

California Troller
Mr. Duncan MacLean

Oregon Troller
Mr. Paul Heikkila

Washington Troller
Mr. Jim Olson

Commercial Gillnet Fishery
Mr. Kent Martin

Processor
Mr. Gerald Reinholdt

California Charter Boat
Mr. Craig Stone

Oregon Charter Boat
Mr. Mike Sorenson

Washington Charter Boat
Mr. Butch Smith

California Sport Fisher
Mr. Dan Wolford

Oregon Sport Fisher
Mr. Richard Heap

Washington Sport Fisher
Mr. Steve Watrous

Idaho Sport Fisher
Dr. Tom Welsh

Washington Active Tribal Fisher
Mr. Calvin Frank

California Tribal
Mr. Dave Hillemeier

Conservation
Mr. Jim Hie

Moved by: Marija Vojkovich
Motion 37 passed.

Seconded by: Curt Melcher

Motion 38: Appoint the following persons to the 2007-2009 advisory body term for the Habitat Committee:

Commercial Fishing Industry
Mr. Joel Kawahara

Sport Fishing Industry
Ms. Liz Hamilton

Conservation
Mr. Mike Osmond

Northwest or Columbia River Tribal Representative
Mr. Stuart Ellis

California Tribal
Mr. Mike Orcutt

Public At-Large
Mr. Sean White

Moved by: Frank Warrens
Motion 38 passed

Seconded by: Curt Melcher

Motion 39: Appoint the following persons to the 2007-2009 advisory body term for the Council's Scientific and Statistical Committee:

Scientists
Mr. Steve Berkeley
Dr. Thomas Helser
Dr. Stuart Todd Lee
Dr. Lyman McDonald
Dr. Andre E. Punt
Dr. Steve Ralston

Moved by: Dave Ortmann Seconded by: Phil Anderson
Motion 39 passed.

OUTSTANDING TRAWL RATIONALIZATION ISSUES

This document contains notes on the decisions needed at the June Council meeting. Most of these decisions are covered in the Groundfish Allocation Committee's (GAC) report to the Council.

Matters requiring council attention that are not covered in the GAC report or that are covered in the GAC report but require some additional follow up are highlighted in ***bold italics.*** There are a few additional items listed under "clean-up".

Individual Fishing Quota (IFQ) Alternative 1
Bycatch Management in the Whiting Fishery (A-1.1 Scope for IFQ Management and A-1.5 Management of Whiting Trips) 1
Area Management (A-1.2 IFQ Management Units) 2
Challenges and Alternatives to IFQs (A-1.6 Special Overfished Species Management Provisions, Placeholder) [No GAC Recommendation] 3
Quota Share Allocation Formulas (A-2.1.3 Allocation Formula) 4
Review Initial Quantitative Analysis 4
Proxy Species-Based Formulas for Overfished Species 4
Reallocation once a Species is Rebuilt or Declared Overfished 5
Eligible to Own Rules (A-2.2.3.a Eligible to Own/Hold) 7
Split Loads and Monitoring Program (A-2.3.1 Tracking and Monitoring) 7
Processor Compensation in Trawl Rationalization (A-2.4 Additional Measures for Processors) 7
Adaptive Management/Holdback Options (A-3 Adaptive Management) 8
Pacific Halibut Individual Bycatch Quota (A-4 Pacific Halibut Individual Bycatch Quotas) 9
IFQ Alternative Clean-up [No Recommendations in the GAC Report] 9
Whiting Trip Limits in the Nonwhiting Fishery (A-1.4 Management of Nonwhiting Trips) 9
Minimum Quota Pound (QP) Holding Requirement (A-2.2.1 Permit/IFQ Holding Requirements) 9
Elimination of Section on Liens (A-2.2.3.x Liens) 10

Co-op Alternative (B. Whiting Sector Co-op Alternative) 10

Decision Process for Allocating Among Trawl Sectors 10

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Appendix B: Draft Language for "Eligible to Own or Hold" 13
Appendix C: Draft Language for "Own or Control" Definition for Accumulation Limit 16
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Rationale against an Initial Allocation of Quota Shares to Processors 20
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Individual Fishing Quota (IFQ) Alternative

Bycatch Management in the Whiting Fishery *(A-1.1 Scope for IFQ Management and A-1.5 Management of Whiting Trips)*

In their reports, the GAC and Trawl Individual Quota Commitee (TIQC) recommend consideration of an option under which IFQ would be required only for whiting sector deliveries. Bycatch species would be managed as a pool. There are two suboptions for how the bycatch

species pools would be managed, either as a pool accessible by all whiting sectors or as a pool for each whiting sector. Under the co-op alternatives, there are options for different approaches to managing bycatch pools. ***The Council may want to look at those as options to incorporate as part of the IFQ option for pools of whiting bycatch species.***

If there are only three trawl sectors some additional interpretation is required for what constitutes the "whiting sector." The staff has incorporated the following approach into the alternative (Agenda Item E.9.a, Attachment 2): if there are three trawl sectors and whiting bycatch is managed as a pool(s), the shoreside whiting directed deliveries would not be counted as whiting sector and IFQ would be required for bycatch (i.e. the only whiting sectors would be the two at-sea delivery sectors). Alternatively, an interpretation could be given that would not require a vessel to have IFQ for nonwhiting species when making a shoreside whiting delivery. However, under this interpretation there would be little difference between the three and four sector option.

The TIQC report also provides a recommendation for intersector allocations that might be implemented in association with the option to manage bycatch in the whiting fishery as pools. These recommendations are included below in the section on "Decision Process for Allocating Among Trawl Sectors."

Area Management ***(A-1.2 IFQ Management Units)***

The main task for the Council on this topic is to decide on the process that should be followed in considering area management. The GAC recommends that the EIS state that existing area management tools will be used, including latitudinal areas needed to management for OY/ABCs. Additionally, the GAC has recommended that staff complete an option which would facilitate movement of management lines after the IFQ program is implemented. The TIQC has addressed area management previously and, in general, recommended that additional area management only be implemented based on biological need.

It is likely that the trawl rationalization EIS will find that creation of an IFQ program will increase the likelihood of geographic shifts in harvest. An excerpt of a preliminary analysis on the potential for geographic shifts under an IFQ taken from the Council's June 2005 scoping document, is provided as Appendix A to this document. This analysis indicates a greater likelihood of geographic shifts in response to geographic differentials in catch per unit effort, cost structures, and market prices, due to the divisibility and transferability of quota shares independent of the permit and vessel. Given this analysis there are a number of policy options open for the Council including (partial list):

1. Adopt IFQs acknowledging the possibility of geographic shifts but making no other adjustments
2. Adopt IFQs acknowledging the possibility of geographic shifts and including provisions that facilitate the implementation of area management at a later time, as the need develops.
3. Same as 2, but fully develop an area management system for the trawl fishery as part of the trawl rationalization decision

4. Same as 2 but commit to fully developing an area management system for all appropriate sectors
    a. as part of an intersector allocation decision OR
    b. as part of a subsequent decision process on area management

The Council could also reject IFQs on the basis of concerns about area management.

The Groundfish Management Team (GMT) report on area management (Agenda Item E.9.a, GMT Report) recommends that the trawl individual quota program incorporate area management tools currently in use (existing latitudinal division or optimum yields and depth based gear restrictions/closures) and continue to pursue data and research informing spatial management. Further, the GMT recommends that depending on the results of the data compilation and review, the Council should determine whether and how spatial management concepts could be used in developing fishery management measures for the 2009-2010 biennium as well as the development of an Ecosystem Fishery Management Plan.

With respect to area management concerns, the Scientific and Statistical Committee's groundfish subcommittee has offered to hold a meeting prior to the September Council meeting to discuss different ways of defining localized depletion and identification of data sources that would be useful in describing spatial and temporal patterns in the distribution and abundance of trawl-caught groundfish stocks.

Area management may require that existing areas be subdivided and/or existing boundaries be moved. Moving area lines would be achieved by subdivision and recombination. The IFQ alternative includes a method to be followed for subdivision of quota shares (QS) by area after the initial allocation. Currently, the alternative leaves area recombination for development at a later time, on an as needed basis. The GAC has recommended that it be included as part of the current alternative.

Challenges and Alternatives to IFQs ***(A-1.6 Special Overfished Species Management Provisions, Placeholder) [No GAC Recommendation]***

Agenda Item E.9.a, Attachment 5 explains some of the difficulties the fleet may encounter with overfished species under an IFQ program. The paper is presented to facilitate discussion about whether or not there are other provisions that should be included in anticipation of these potential challenges.

Currently, the trawl sector catch of overfished species is constrained based on target species trip limits, depth-based management, and average bycatch rates developed from prior years' observer data. The percentage of observed trips is far less than 100%, and data from a trip is not available until after the season. Under an IFQ program it is anticipated that there will be 100% at-sea catch monitoring and catch data will be available quickly. Under any system with 100% at-sea coverage and rapid catch reporting, it is likely that inseason management of the fleet would present significant challenges. Additionally, under an IFQ program, vessels would be held individually accountable for their catch and the vessel could incur substantial costs if it

accidentally catches too many overfished species or does not harvest its IFQ before, as a result of the overages of other vessels, the fleet takes its limit of overfished species and portions of the fishery are closed. Challenges such as these are discussed in Attachment 5.

Section A-6 is reserved as a temporary placeholder for additional provisions to address overfished species concerns. Currently, special provisions for overfished species are included as part of the initial allocation formula (A-2.1.3). Additionally, carryover provisions are proposed, in part, to address issues concerning overfished species (A-2.2.2.b).

Quota Share Allocation Formulas ***(A-2.1.3 Allocation Formula)***

Review Initial Quantitative Analysis

The purpose of presenting the preliminary analysis provided in Agenda Item E.9.a Attachments 3 and Supplemental Attachment 4, is to ensure that the quota share allocation options are performing as expected. No specific action is required by the Council, however, on the basis of their review of some preliminary analysis both the GAC and TIQC have recommended some changes.

The GAC concurred with the TIQC report recommendations that (1) recent participation requirements for permits (including those for catcher processors) not be included as part of the program, (2) the recent participation requirement for motherships be 1,000 mt processed in each of any two years from 1998 – 2004, and (3) Option 1 for allocation to catcher processors ("Schedule developed by unanimous consent of catcher processors") be eliminated. Additionally, the GAC agreed with the TIQC that an option be analyzed in which there would <u>not</u> be equal sharing of the quota share pool associated with buyback permits, but the GAC recommends that this option be a replacement for the existing option, which includes such an equal sharing element. The TIQC recommended that both options go forward as part of the alternatives.

Preliminary analysis of the following are included in Attachment 3: the recent participation requirements and allocation formula for catcher vessel permits, recent participation requirements for motherships and catcher-processors, co-op endorsement and permit qualifying requirements, and history for catcher vessel permits under the co-op alternative. Supplemental Attachment 4 provides information on a quota share allocation formula that does not include equal sharing of the buyback permits' QS pool. The shoreside processor allocation analysis is pending the development of data sets on processing companies that operate under multiple buyer codes and those processors which also own limited entry permits.

Proxy Species-Based Formulas for Overfished Species

The Council task is to recommend an approach for the allocation of QS for certain species using a proxy. For the nonwhiting fishery there are two options for allocating overfished species. Under one option, overfished species would be allocated using the same formula as for all other species. Under the other option, overfished species would be allocated based on some other

species, a proxy species, through the application of a bycatch rate. For the whiting sectors, there are two similar options, only the options apply to all bycatch species rather than just to overfished species. If IFQ are allocated for bycatch in the whiting fishery, whiting would serve as the proxy species and all bycatch species (including overfished species) would be allocated in proportion to the whiting QS allocation, on a pro rata basis.

To proceed with the analysis, a proxy-species based method needs to be selected for the nonwhiting fishery. The TIQC has recommended an approach based on fleet average bycatch rates for overfished species (2003-2006 observer data), fleet average distribution of catch of target species by depth and latitude (2003-2006 logbook data), and each permit's QS allocation for target species (determined based on landings data). The approach recommended by the TIQC (Option 3 in the following table) differs from other methods considered in that it uses fleet aggregate logbook information rather than permit-specific logbook information. The GAC concurred with the TIQC recommendation and requested SSC and GMT review.

Table. Summary of the proxy species based allocation options for overfished species.

Proxy Species/ Bycatch Rate Based Allocation Options for the Nonwhiting Fishery	Bycatch Rate	Target Species Strata	Harvest Level
Option 1	Fleet 2003-2006 Observer Data	**Permit** 2003-2006 Logbook Records	Permit 2003-2006 Target Species **Landings**
Option 2	Fleet 2003-2006 Observer Data	**Permit** 2003-2006 Logbook Records	Permit's 1994-2003 Target Species **Landings**
Option 3 (GAC & TIQC recommended)	Fleet 2003-2006 Observer Data	**Fleet** 2003-2006 Logbook Records	Permit's **QS** for Target Species

Options 1 and 2, considered by the Council at its March 2007 meeting would have relied on 2003-2006 fleet bycatch rates from the observer program and 2003-2006 permit specific logbook information. Using this approach, two different periods were considered for scaling the absolute amount of overfished QS allocated to a permit: (1) the permit's 2003-2006 landings and (2) the permit's 1994-2003 landings history (or other period used for QS allocation). The approach recommended by the TIQC does not rely on permit specific logbook information and ties the overfished species allocation to the permit's target species QS rather than either 2003-2006 or 1994-2003.

Reallocation once a Species is Rebuilt or Declared Overfished

The Council should consider the GAC guidance provided to staff. The TIQC discussed the possible need to reallocate QS once a species is rebuilt. The GAC discussed this issue and directed the staff to develop options for reallocation of QS under these scenarios. The GAC recommended that such options reallocate QS while maintaining status quo sector allocations, until such time that the Council takes specific action to reallocate the OY.

Carryovers (A-2.2.2.b Carryover (Surplus and Deficit)) [No GAC Recommendation]

The Council should consider other policy adjustments that will be needed to make carryover provisions a feasible option. If quota pounds are issued for the entire trawl allocation each year, with an overage carryover the trawl fleet would exceed its annual allocation in the current year, or, with an underage carryover, the trawl fleet could exceed its annual allocation the following year. In either case, this could result in the fishery exceeding its ABC or OY. The adjustments needed may be a part of the IFQ alternative (e.g. a sector specific buffer), a part of the intersector allocation considerations (e.g. a buffer to protect all sectors from one another), or a part of the development of national policy (e.g. provisions to allow multiyear/rolling ABCs/OYs).[1]

Carryover provisions allow a vessel to carry over to the following year an overage (cover current year catch with quota pounds it receives from the following year, when those quota pounds are issued) or an underage (carry over to the following year quota pounds issued for the current year). While a carryover provision would apply to all groundfish species, it is anticipated that the provision may be most important for the management of constraining overfished species. The multispecies nature of the fishery and difficulty of fully utilizing all of the quota pounds a vessel has available on its final trip lead to consideration of a carryover provision. Without a carryover provision, more lively trading in the quota pound (QP) market would be likely as vessels seek to acquire the mix of QP needed to for their last trips. With a carryover provision a vessel might finish off its season with overages of some species and underages of others, without losing fishing opportunity or incurring penalties (as long as overages are covered within proscribed time limits).

Carryover provision will likely affect market prices for quota pounds. On the one hand, a carryover provision could exert a downward pressure on QP prices as it increases the supply of QP that could be used in the current year. However, the additional supply of QP for the current year would come from the following year's QPs, diminishing supply in the following year. On the other hand, a carryover provision might also exert an upward influence on price. Those owning QP for a scarce species might hold on to their end-of-year surpluses to reduce their own risk for the following year. If there were not a carryover provision, surplus quota pounds left at the end of the year would have no utility in the following year. Someone owning scarce QP in the current year would be able to generate additional income from putting it on the market and would likely derive no utility from holding the QP past the end of the year.

[1] Another possibility to consider might be to allow a carryover but use inseason management to close areas with high bycatch rates, thereby reducing the likelihood of fleet overages while still allowing individual vessel overages/underages.

Eligible to Own Rules (A-2.2.3.a Eligible to Own/Hold)

The Council task is to review the draft language developed to specify who is eligible to own quota shares and quota pounds and provide guidance if it believes any adjustments need to be recommended at this time.

At its March 2007 meeting, the Council directed that language on "eligible to own" be developed based on that used in the north Pacific. Draft language has been provided in Appendix B which is believed to generally reflect the Council intent. Exact language will be drafted when regulations for the IFQ program are developed, if such a program is adopted by the Council.

Control Rules for Accumulation Cap (A-2.2.3.e Accumulation Limits (Permit and Own or Control))

The Council task is to review the draft language developed to specify how "control" will be defined for the purpose of assessing limits on the amount of IFQ owned or controlled by a particular entity and provide guidance if it believes any adjustments are needed at this time. ***Additionally, the Council may wish to consider proposals for revising the percentage limits that are part of the current accumulation limit options.***

At its March 2007 meeting, the Council directed that language on "control" be developed based on that used in the North Pacific. Draft language has been provided in Appendix C. The TIQC reviewed this language and noted that they may want to recommend changes to the examples provided with the draft language, to make them more specific and applicable to this fishery. While GAC members had some concern about how the provision might be interpreted and applied, the GAC did not have any comments about the specific proposed language.

On a related matter, the TIQC has recommended some additional specific options for limits on control in the whiting catcher-processor sector: 50%, 55%, or 60%. Additionally, for the catcher-processor permit accumulation limit the TIQC has recommended the following options: 65%, 70%, or 75%. The GAC asked that each representative consult with members of their sector and bring forward their proposed changes.

Split Loads and Monitoring Program (A-2.3.1 Tracking and Monitoring)

The GAC did not concur with the TIQC recommendation for an option to allow an off-load to be split between different locations nor with recommendations that an option be added to require electronic logbooks.

Processor Compensation in Trawl Rationalization (A-2.4 Additional Measures for Processors)

The Council needs to decide whether additional options should be considered for compensating processors for potential impacts of an IFQ program. The GAC has recommended some options for Council consideration. ***Guidance should also be provided on moving forward with the Council's previous direction that a separate white paper on the options be developed.***

The Council tasked the GAC with considering whether measures other than an initial allocation of IFQ to processors should be considered to address impacts on processors. The allocation of IFQs to processors has been proposed as a method of compensating processors for impacts such as that which might occur from stranded capital. There may be other impacts of concern as well. To assist in the consideration of the issue, a draft paper has been developed summarizing the rationale for and against allocating IFQ to processors, as it has been expressed to date (Appendix D). Staff gathered comments for potential inclusion in the paper during the May TIQC and GAC meetings and will continue to do so at the June Council meeting. Council members, advisory body members, and the public have commented that compensation for impacts may not be the only reason for considering the allocation of IFQ to processors and that there should be evaluation of the reasons for allocating or not allocating to every group considered for an initial allocation.

In addition to the tasks assigned to the GAC, at its March 2007 meeting, the Council directed that a white paper be developed on mechanisms to compensate for impacts on processors as a result of stranded capital and other impact mechanisms. However, the Council also directed that development of such a paper not proceed until after GAC consideration of the issue. New options that the Council decides to incorporate into the alternatives will be analyzed in the EIS. The Council should provide direction if it would like this analysis pulled out and incorporated into a separate white paper for its consideration.

Adaptive Management/Holdback Options (A-3 Adaptive Management)

The Council needs to decide whether or not to include for analysis an option for adaptive management. Under such a program, some portion of the trawl allocation would be held back each year and allocated based on criteria that help address certain management objectives.

Earlier in this process, the TIQC recommended consideration of a holdback provision as part of a community stability program. The provision was patterned after a similar provision in the BC groundfish trawl IFQ program. In that program, 10% of the QP are held back from each QS holder's allocation and then allocated back to those who bring forward proposals for using the QP in ways that meet criteria pertaining to community stability and other objectives. While the TIQC recommended such a provision be considered, it asked that evaluation criteria for the proposals be quantifiable and objectives, in order to control administrative costs and reduce appeals. The development of such criteria was delegated to committee members advocating for this proposal and a request was made to the Council for assistance. At its December 2006 meeting, the GAC rejected the community stability program, based in part on complexity, anticipated administrative costs, and the possibility that community needs might be addressed through area management. At the May 2007 TIQC and GAC meetings, TIQC member Dorothy Lowman introduced a presentation that was developed by members of the environmental community on a range of options that could use a allocation holdback as an adaptive management tool to address community and other concerns. The TIQC received the presentation by Stu Nelson at its May meeting but did not develop a recommendation because, at that time, the specific details of the proposal had not been fleshed out. The GAC reviewed a more fully developed proposal and is recommending Council consideration of such a provision.

Pacific Halibut Individual Bycatch Quota (A-4 Pacific Halibut Individual Bycatch Quotas)

The Council task under this item is determine whether or not individual bycatch quota (IBQ) for Pacific halibut should be included as part of the IFQ alternative. IBQ for Pacific halibut were recommended by the TIQC in its June 2005 report to the Council. Some of the options in that report would have allowed for the retention of Pacific halibut. When the Council adopted options for analysis, it did not include any options halibut IBQ. At its March meeting, the GMT recommended consideration of halibut IBQ in the context of "sideboards" for the trawl fishery, the TIQC disagreed with the GMT rationale but concurred with the recommendation. During discussion, the Council members indicated their desire to have an opportunity to discuss the issue further. The issue was addressed at the may GAC meeting and the GAC is recommending Council consideration of an option that would provide IBQ for halibut (the option would not allow for retention). Excerpts from the March 2007 reports to the Council and June 2005 scoping document are provided as Appendix E to this document.

IFQ Alternative Clean-up [No Recommendations in the GAC Report]

Whiting Trip Limits in the Nonwhiting Fishery (A-1.4 Management of Nonwhiting Trips)
For the nonwhiting fishery, there is a potential that a vessel might make a targeted whiting trip by accumulating whiting QPs provided to cover whiting bycatch in the nonwhiting fishery. This could create a problem if it occurred during a time when the whiting fishery is closed to control for impacts on ESA listed salmon. Other than that, whiting targeted trips using whiting QP intended for whiting bycatch in the nonwhiting fishery might not create much of a problem. Previously, language was included in the IFQ alternative specifying that, for the nonwhiting fishery, whiting trip limits would be used to prevent whiting targeted trips. ***The GAC suggested to staff that the provision be simplified by removing trip limit language and noting that restrictions might be imposed as needed to address ESA concerns.***

Minimum Quota Pound (QP) Holding Requirement (A-2.2.1 Permit/IFQ Holding Requirements)
The IFQ alternative includes an option for a minimum amount of QP a vessel would be required to have prior to departing on a fishing trip. The amount has yet to be specified. Both species specific (e.g. for an overfished species) and general holding requirements (e.g. minimum pounds of nonwhiting groundfish in any combination of species) have been discussed. In December 2006, the GAC asked the Enforcement Consultants (EC) to specify a minimum holding requirement option. The EC has reviewed some trip data and discussed a minimum holding requirement in the range of 500 to 1,000 QP of any groundfish species. However, based on the strength of the tracking and monitoring system needed to ensure individual vessel accountability under IFQs, neither the TIQC nor the EC believe that such a requirement is necessary. During its discussions EC members noted that there is no enforcement basis for determining the appropriate level for such a requirement.

The Council may wish to consider eliminating the option of requiring a vessel hold some minimum number of QP prior to departure, proceeding with a general minimum holding requirement as an option until it receives a preliminary analysis, or directing that an

additional species specific requirement be developed and included for consideration in the preliminary analysis.

Elimination of Section on Liens (A-2.2.3.x Liens)
The section on liens (previously A-2.2.3.e) has been eliminated based on discussion with the GAC. This section was residual from early deliberations in the process. It simply stated that liens could be placed on QP and QS but that this was a private matter. The section provided no program provisions related to the issue. The issue of whether or not there will be a central lien registry is covered under Section A-2.3.1, Option 3.

Co-op Alternative (B. Whiting Sector Co-op Alternative)

The Council task is to specify a co-op alternative for analysis. The co-op alternative, as recommended by the GAC, is provided in Agenda Item E.9.a, Attachment 2. The alternative includes some general provisions pertaining to all sectors of the whiting fishery as well as a distinct co-op program for each whiting sector. It is hoped that after the June Council meeting, the only provisions that will be subject to revision are those pertaining to the permit and endorsement qualifying requirements and the initial attribution of catch history to vessel permits. Agenda Item E.9.a, Attachment 6 provides a general explanation of how co-ops work to rationalize the fishery and address bycatch concerns. The document also contains a summary of the reasons that have been presented for provisions that link harvesters and processors.

Decision Process for Allocating Among Trawl Sectors

The GAC has recommended that allocation among trawl sectors be handled under the intersector allocation EIS. This recommendation was based on a staff report that inclusion of options for allocating among trawl sectors as part of the intersector allocation analysis would result in more efficient, less complex analytical documents than including such options as part of the IFQ analysis.

The following are various recommendations on allocation among trawl sectors that are currently contained in the trawl rationalization document or are part of the TIQC report at this meeting.

> Leave whiting trawl allocations intact between shoreside whiting sector (42%), mothership delivery sector (24%) and catcher-processor sector (34%) *[from the Co-op Alternative]*.
>
> Divide the allocation among trawl sectors based on the fleet history over the same time periods used to allocate QS. If different periods are used for different trawl sectors, either (1) calculate the share for each sector based on its IFQ allocation period, then adjust all percentages proportionately such that they sum to 100%; OR (2) use the shortest period common to the allocation formula for all sectors. *[From the IFQ Alternative]*
>
> If bycatch in the whiting sectors is not managed with IFQs and is pooled at the or sector level, or if the co-op alternative is selected and there is a separate pool of bycatch for

each whiting sector, allocate between the whiting sectors:

Option 1: pro rata in proportion to the whiting allocation to each sector, or

Option 2: based on a weighted historical catch formula (for example, in projecting bycatch in the whiting fisheries prior to the start of the season, the GMT uses a four-year weighted average starting with the most recent year: 40%, 30%, 20%, 10%).

[From both alternatives]

Appendix A: Area Management: Excerpt From June 2005 Scoping Document

Potential for Geographic Shifts Under an IFQ Program

The potential for geographic shifts may be evaluated by looking at likely effects of changes in the management system on factors affecting the existing distribution of harvest and past tendencies for harvest to shift between regions.

Influence of Management System Changes on Distribution of Fishing

The ability to divide and transfer quota shares under an IFQ system will increase the likelihood that fishing activities will be responsive to influences in the natural and socioeconomic environment. . . . Effects of factors influencing the distribution of harvest activity are muted and harvest distribution may be geographically smoothed out under the current management system with its indivisible permits and trip limits. IFQ programs can provide relief from the "all or nothing" choice constraint presented by the license limitation system. Relief from regulatory constraints under a revised management program may also result in a redistribution of catch. . . . While the degree and direction of shift is not predictable, the likelihood of changes in the geographic distribution of fishing activity is greater under IFQs than under the current system.

Numerous factors influence the distribution of harvest, including relative profit opportunities (affected by factors such as catch per unit effort (CPUE), port costs, exvessel prices, local labor costs etc.). . . . Opportunities to improve efficiency under IFQs is likely to vary between ports. Social and climatological factors also influence participation decisions. . . . .

Interviews with stock assessment scientists indicated that current management has not directly limited concentrations of fishing effort. Some felt that designing an IFQ system without area allocation of OY may not be a significant issue as effort does shift around anyway, and declining CPUE would lead to compensatory fishing behavior that would result in changes in fishing location. However, as discussed above, factors other than the CPUE for a particular species also affect distribution of harvest, for example, port costs, grounds familiarity, CPUE for a complex (as distinct from that for an individual stock), exvessel prices, and social connections to a particular port.

Appendix B: Draft Language for "Eligible to Own or Hold"

The issue in this section is "Who is allowed to acquire IFQ in the future?" The Trawl Individual Quota Committee's (TIQC) intent is that those eligible to own quota shares or quota pounds should include any person eligible to own or control a US documented fishery and, additionally, persons who are not otherwise allowed to own US documented vessels but are allowed to do so pursuant to the American Fisheries Act (AFA). Based on this intent, and on Council direction that language be developed based on that used in the North Pacific, the following draft language has been developed for consideration.

> Those eligible to own QS will be restricted to
> i. any person or entity eligible to own and control a US fishing vessel with a fishery endorsement pursuant to 46 USC 12108 (general fishery endorsement requirements) and 12102(c) (75% citizenship requirement for entities) and
> ii. any person or entity eligible to own or control a US fishing vessel with a fishery endorsement pursuant to sections 203(g) and 213(g) of the AFA

In addition, the reauthorized Magnuson-Stevens Fishery Management and Conservation Act (MSA) provides slightly more restrictive language on who is allowed to own a limited access privilege (LAP). Under the MSA LAP program language, entities other than US citizens and permanent resident aliens must be established under either Federal or state law.

The new LAP program provisions of MSA section 303A prohibit

> "any person other than a United States citizen, **a corporation, partnership or other entity established under the laws of the United States or any State,** or a permanent resident alien...from acquiring a privilege to harvest fish, including any person that acquires a limited access privilege solely for the purpose of perfecting or realizing on a security interest in such privilege."

The MSA definition of "person"[2] does not require that the entity be organized under Federal or state laws. This difference **may not** affect any current entities in the trawl fishery (corporations and partnerships likely are established under state law).

[2] The definition of "person" under the MSA means

> any individual (whether or not a citizen or national of the United States), any corporation, partnership, association, or other entity (whether or not organized or existing under the laws of any State), and any Federal, State, local, or foreign government or any entity of any such government.

Underlining highlights the most relevant text.

Sec. 12108. Fishery endorsements

(a) A certificate of documentation may be endorsed with a fishery endorsement for a vessel that -

(1) is eligible for documentation;

(2) was built in the United States;

(3) if rebuilt, was rebuilt in the United States;

(4) was not forfeited to the United States Government after July 1, 2001, for a breach of the laws of the United States; and

(5) otherwise qualifies under the laws of the United States to be employed in the fisheries.

(b) Subject to the laws of the United States regulating the fisheries, only a vessel for which a certificate of documentation with a fishery endorsement is issued may be employed in the fisheries.

(c) A fishery endorsement to engage in fishing in the territorial sea and fishery conservation zone adjacent to Guam, American Samoa, and the Northern Mariana Islands . . . .

(d) A vessel purchased by the Secretary of Commerce through a fishing capacity reduction program under the Magnuson-Stevens Fishery Conservation and Management Act (16 U.S.C. 1801 et seq.) or section 308 of the Interjurisdictional Fisheries Act (!1) (16 U.S.C. 4107) is not eligible for a fishery endorsement, and any fishery endorsement issued for that vessel is invalid.

Sec. 12102. Vessels eligible for documentation

(a) A vessel of at least 5 net tons that is not registered under the laws of a foreign country is eligible for documentation if the vessel is owned by -

(1) an individual who is a citizen of the United States;

(2) an association, trust, joint venture, or other entity -

(A) all of whose members are citizens of the United States; and

(B) that is capable of holding title to a vessel under the laws of the United States or of a State;

(3) a partnership whose general partners are citizens of the United States, and the controlling interest in the partnership is owned by citizens of the United States;

(4) a corporation established under the laws of the United States or of a State, whose chief executive officer, by whatever title, and chairman of its board of directors are citizens of the United States and no more of its directors are noncitizens than a minority of the number necessary to constitute a quorum;

(5) the United States Government; or

(6) the government of a State.

(b) A vessel is eligible for documentation only if it has been measured under part J of this subtitle. However, the Secretary of Transportation may issue a temporary certificate of documentation for a vessel before it is measured.

(c)(1) A vessel owned by a corporation, partnership, association, trust, joint venture, limited liability company, limited liability partnership, or any other entity is not eligible for a fishery endorsement under section 12108 of this title unless at least 75 per centum of the interest in such entity, at each tier of ownership of such entity and in the aggregate, is owned and controlled by citizens of the United States.

AMERICAN FISHERIES ACT

SEC. 203. Enforcement of Standard.

(g) CERTAIN VESSELS.—The vessels EXCELLENCE(United States official number 967502), GOLDEN ALASKA (United States official number 651041), OCEAN PHOENIX (United States official number 296779),NORTHERN TRAVELER (United States official number 635986), and NORTHERN VOYAGER (United States official number 637398) (or a replacement vessel for the NORTHERN VOYAGER that complies with paragraphs (2), (5), and (6) of section 208(g) of this Act) shall be exempt from section 12102(c), as amended by this Act, until such time after October 1, 2001 as more than 50 percent of the interest owned and controlled in the vessel changes, provided that the vessel maintains eligibility for a fishery endorsement under the federal law that was in effect the day before the date of the enactment of this Act, and unless, in the case of the NORTHERN TRAVELER or the NORTHERN VOYAGER (or such replacement), the vessel is used in any fishery under the authority of a regional fishery management council other than the New England Fishery Management Council or Mid-Atlantic Fishery Management Council established, respectively, under subparagraphs (A) and (B) of section 302(a)(1) of the Magnuson-Stevens Fishery Conservation and Management Act (16 U.S.C. 1852(a)(1)(A) and (B)), or in the case of the EXCELLENCE, GOLDEN ALASKA, or OCEAN PHOENIX,the vessel is used to harvest any fish.

SEC. 213. DURATION.

(g) INTERNATIONAL AGREEMENTS.—In the event that any provision of section 12102(c) or section 31322(a) of title 46, United States Code, as amended by this Act, is determined to be inconsistent with an existing international agreement relating to foreign investment to which the United States is a party with respect to the owner or mortgagee on October 1, 2001 of a vessel with a fishery endorsement, such provision shall not apply to that owner or mortgagee with respect to such vessel to the extent of any such inconsistency. The provisions of section 12102(c) and section 31322(a) of title 46, United States Code, as amended by this Act, shall apply to all subsequent owners and mortgagees of such vessel, and shall apply, notwithstanding the preceding sentence, to the owner on October 1, 2001 of such vessel if any ownership interest in that owner is transferred to or otherwise acquired by a foreign individual or entity after such date.

Appendix C: Draft Language for "Own or Control" Definition for Accumulation Limit

The reauthorized Magnuson-Stevens Act requires that accumulation limits be established within a limited access privilege program. Until the March Council meeting, the trawl individual quota (TIQ) program contained three different accumulation limits: an ownership limit, a control limit, and a use limit. The Council then decided that *own* and *control* should be combined into a single accumulation limit (i.e. be treated the same),[3] and the "use" limit was better specified as a permit accumulation limit[4].

A definition needs to be established for "own or control" with respect to the IFQ alternative accumulation limits. In March, the Council made the decision to use the North Pacific Fishery Management Council's (NPFMC) definition. This document provides a draft definition based on that used for the NPFMC crab rationalization program, modified as necessary for this application.

Proposed Definition:

The "own or control" accumulation limit restricts the acquisition of excessive shares, including acquisition by means other than through purchase of QS or QP. "Ownership" and potential violation of such limits would be tracked on an ongoing basis in a National Marine Fisheries Service (NMFS) database. NMFS might require that additional information be submitted to assist in assessing levels of control, however, investigation and prosecution of potential violations of control limits would likely require information beyond that contained in the regular submissions to NMFS. Such investigations would likely be instigated based on citizen complaints or other sources of information. While a control limit may be difficult to enforce, without the inclusion of such a limit in the program, anti-trust law would provide the next level of protection against excessive control. Anti-trust laws are also difficult to enforce and would likely apply only at greater levels of concentration than are in the control options currently being contemplated by the Council.

Own or control accumulation limit: **A person, individually or collectively, may not control QS or QP in excess of the specified limit (unless exempted by the grandfather clause). QS or QP controlled by a person shall include those registered to that person, plus those controlled by other entities in which the person has a direct or indirect ownership interest, as well as shares that the person controls through other means. The calculation of QS or QP controlled by a person will follow the "individual and collective" rule.**

> **"Individual and collective" rule: The amount of QS or QP that is computed as applying to a person is equal to the sum of the QS or QP registered to that person and an amount equal to the percentage of holdings by that person in any entity in which that person has an interest.**
>
> *Example calculation: if an individual had QS registered to him and had a 20 percent interest in another entity to which QS were registered, the QS registered to that individual and 20 percent of the QS registered to the other entity would be summed to represent the amount of QS controlled by that individual. The same method would be used for calculating the QP controlled by that person.*

[3] In general, *control* includes both the control exerted through ownership of the QS/QP, as well as the control exerted by the ability to direct the use of QS/QP. The term "owner" means the QS/QP is registered to the person through NMFS.

[4] "Use" is a vague term that could be interpreted in a number of ways (e.g. who uses QP – a permit owner, an operator, a crewmember?). In addition, permits can be transferred between vessels and stacked, so a vessel accumulation limit would leave open ways to circumvent the limits. The term "permit accumulation limit" is consistent with the TIQC's recommendation that the limit should be applied to the permit and that permit stacking should be prohibited.

When NMFS implements the own or control accumulation limit, it will provide a regulatory definition of the Council's intent. With respect to the interpretation of "otherwise controls," the following is the regulatory interpretation that was provided for similar policy language for the North Pacific crab rationalization program.[5] *(Note: minor revisions have been made to these examples so that they can be better understood in the context of the TIQ program.)*

a) The person has the right to direct, or does direct, the business of the entity to which the QS or QP are registered;
b) The person has the right to direct, or does direct, the delivery of groundfish harvested under a permit registered to a different person/entity;
c) The person has the right in the ordinary course of business to limit the actions of or replace, or does limit or replace, the chief executive officer, a majority of the board of directors, any general partner or any person serving in a management capacity of the entity to which the QS or QP is registered;
d) The person has the right to direct, or does direct, the transfer of QS or QP;
e) The person, through loan covenants, has the right to restrict, or does restrict, the day-to-day business activities and management policies of the entity to which the QS or QP is registered;
f) The person has the right to control, or does control. the management of, or to be a controlling factor in, the entity to which the QS or QP is registered;
g) The person has the right to cause, or does cause, the sale of QS or QP;
h) The person absorbs all of the costs and normal business risks associated with ownership and operation of the entity to which the QS or QP is registered.
i) The person has the ability through any other means whatsoever to control the entity to which the QS or QP is registered.

Possible Interpretation of the Definition

The catch-all phrase at the end of the definition, "shares that the person controls through other means" restricts ways to circumvent the accumulation limit but also presents questions as to how the definition should be interpreted in its implementation. For example:

- *If someone is a crew member of a vessel or a cutting line employee for a processor, should the shares owned by that person be considered within the control of the harvesting/processing company?*
- *If someone is a vessel captain or a plant manager, should the shares owned by that person be considered within the control of the harvesting/processing company?*
- *If someone leases the vessel/facility to the harvesting/processing business, should the harvesting/processing business be considered under that person's control?*
- *If there is only one processor in the port, should that processor be considered to control the harvesting operations (and use of quota) of vessels in that port?*

Ultimately the evaluation of a possible accumulation limit violation ultimately would be based on specific situational facts.

[5] NMFS based its examples on the indices used for determining impermissible control by a non-citizen of a United States fishing vessel under MARAD regulations at (46 CFR 356.11)

Appendix D: DRAFT Rationale For and Against the Initial Allocation of Quota Shares to Processors

Rationale for and against an initial allocation of quota shares (QS) to processors has been voiced by numerous participants within the trawl rationalization process, as well as in related fisheries rationalization policy discussions. Council staff has collected and summarized the primary rationale put forth thus far in order to facilitate discussion at Groundfish Allocation Committee (GAC) and Council meetings, including discussion on how analysis of the initial allocation should be conducted, as well as to facilitate final action decision-making. This paper incorporates comments provided by Trawl Individual Quota Committee members, GAC members, and members of the public. Rationale on allocation decisions relating to other groups of fishery participants will be provided in the trawl rationalization program EIS.

Rationale in favor of an Initial Allocation of Quota Shares to Processors

Rationale 1: **Some say processors should receive initial allocations in order to prevent the occurrence of stranded capital and other adverse impacts that an IFQ program may have on the value of their assets.** It is likely that creating IFQs, a new type of asset, will influence the value of existing assets. If compensation to owners of harvester assets – permits in particular – is an intention of the Council's initial allocation, processors have argued that such consideration should also extend to owners of processor assets, such as processing plants. The increased efficiency and flexibility of a rationalization program suggests that both consolidation and geographic shifting of the fishery could lead within the processing sector to stranded capital (capital that has no alternative productive use as a result of a change in regulations).

It can be argued that the history of fishery regulations has brought about harvesting and processing overcapacity, a characteristic noted as a precondition to stranded capital. For example, the shoreside whiting fishery operates as a derby that yields large volumes of product that must be processed during highly compacted seasons. For example, an industry member estimates that a rationalization program could extend the shoreside whiting season from three weeks to six months, so that the industry would need only one-eighth the current amount of harvesting and processing capacity to efficiently operate the sector.

To the extent that such excess capacity is non-malleable (i.e. cannot be switched to a different use) and therefore "stranded," processors propose that both processing and harvesting sectors should be compensated when the fishery is rationalized in order to mitigate the investments' devaluation from regulatory changes. Processors have cited similarities between the processing sector and the harvesting sector with respect to each sector's potential for stranded capital; therefore, some advocate that the analysis of stranded capital should expand to also encompass vessel owners, and not just processing plant owners.

Rationale 2: **Some say initial allocation to processors and harvesters allows for maintenance of the market power balance between the two groups, so that economic gain from the fishery is not shifted disproportionately to the harvesting sector.** The Council has already identified in the trawl rationalization program Goals and Objectives its intention to "[avoid] provisions where the primary intent is a change in marketing power balance between harvesting and processing sectors." Processors have identified two outfalls of the trawl rationalization program that could lead to the shift of a portion of the rents from processors to harvesters. If this shift occurs because of the

reasons explained below, some point to a danger that the smaller processors will be forced to sell out to their competitors, hastening the consolidation in the processing sector. This could lead unintended impacts on smaller ports and a decrease in competition in the marketplace.

The first way that a trawl rationalization program may lead to a shift in market power could be that without the bargaining power of their own quota to offer for use on a harvester's vessel, processors could be at a disadvantage in setting ex-vessel prices. On the other hand, if processors also held quota, it has been stated that they also would strive for higher ex-vessel prices. This is because the ex-vessel price and the value of quota have been demonstrated to be linked in other quota programs, and so, the argument continues, it is the interest of the common stakeholders to increase the value of quota. Second, processors state that the capacity of the processing sector may no longer match the rationalized fishery, in which seasons may be elongated. This argument continues that processors would attempt to fill their existing daily processing capacity by bidding up the ex-vessel price paid to harvesters. With the protection of their own initial allocation of quota, however, it is contended that the processors would have a better guarantee of product for their plant, which again would allow for a more equitable bargaining platform between the two sectors.

Rationale 3: **Some say economic theory suggests that the conservation benefit of a rationalization program is achieved regardless of to whom the quota is allocated.** One of the primary drivers in the development of the trawl rationalization program is its ability to provide for better conservation of the resource through its accountability and monitoring requirements. Processors have noted that these elements are innate to the system as a whole, and are not tied to who holds the quota. Therefore, it is argued that the issue of conservation favors neither processors nor harvesters with respect to initial allocation.

Also related to conservation issues, it has been argued that shoreside processors, in particular, are dependent upon a healthy West Coast groundfish stock for the economic viability of their sector, and so they have a greater incentive to be careful stewards of the resource. This is because unlike other capital investments, a shoreside processing facility cannot be moved to another region if, for example, the trawl fishery is closed prematurely due to a bycatch overage.

Rationale 4: **Some say that processors should be considered for an initial allocation because they qualify as fishery participants with "investments in, and dependence upon, the fishery," as described in the Magnuson-Stevens Act.** Processors state that, like permit holders, their sector has made longstanding and significant investment in the groundfish industry that earn them a vested interest in the future of the fishery. Processors have made significant contributions to product development and market development for the West Coast groundfish fishery, in addition to their capital investments in processing capabilities. Therefore, some processors have advocated that initial quota allocation should consider the contribution a sector has made to a product's value. This stance is substantiated, it is contented, by the Magnuson-Stevens Act which states that "a Council or the Secretary shall—establish procedures to ensure fair and equitable initial allocations, including consideration of current and historical harvests; employment in the harvesting and processing sectors; investments in, and dependence upon, the fishery; and the current and historical participation of fishing communities." This Congressional direction may be interpreted to suggest that processors should be considered for the long-term compensation that is derived from initial allocation of QS.

Rationale 5: **Some say initial allocation to processors will lead to maximum efficiency in the fishery, and thus allow for maximized net benefit to the nation.** Processors have contended that by receiving an initial allocation, they would have the same incentive as permit holders to maximize

the value and efficiency of the fishery through sustainable and effective quota management. They say communication and business planning between harvesters and processors, both greatly aided when each group holds quota, could likewise allow for greater efficiency. One way that this could take place is through the processors' participation – enabled by their initial allocation – in collective (or "co-op") management of the quota among groups of harvesters and processors. The vertical integration brought about by this cooperation is suggested to increase the efficient management and economic utilization of the resource.

Rationale 6: **Some say that initial allocation to processors will maintain diversity in the processing sector, and that the resulting competition between participants will encourage benefits such as product innovation.** In general, it is found that the larger the pool of participants in an industry, the greater the potential for innovation and improvements in productivity due to competition between the participants. It is argued that in order to achieve these benefits in the rationalized trawl fishery, processors should receive an initial allocation of QS. The argument is based on the assertion that most of the larger processors are vertically integrated (because they own many of their catcher vessels or are a catcher-processor), and so would not be significantly adversely affected by a harvester only allocation. Further, some of the larger processors participate in multiple trawl sectors (for example shoreside and mothership). On the other hand, the argument continues, the segment of the processing sector with neither vertical integration nor extensive levels of cross-sector participation would be at a greater risk of going out of business soon after implementation of the rationalization program because of the relative disadvantages. By making an initial allocation to all qualified processors, it is contended that these more vulnerable companies will have a more viable chance at remaining in the fishery.

Rationale 7: **Some say that if the initial allocation is perceived to redistribute status quo wealth, and processors are excluded from the system, comprehensive support would be lost and could impede adoption of the trawl rationalization program.** It has been put forth that if a given sector or interest group is opposed to the proposed rationalization program, depending upon their political strength they could impede adoption of the program. This argument could be extended to posit that not compensating processors through an initial allocation could threaten the success of adopting the trawl rationalization program. This, in turn, could compromise the achievement of efficiency, conservation, and other goals of the program.

Rationale against an Initial Allocation of Quota Shares to Processors

Rationale 1: **Some disagree with the contention that stranded processor capital would occur under the trawl rationalization program, that stranded capital deserves to be protected as a matter of national policy, and/or that such compensation should occur through long-term allocation of quota shares.** The concept of stranded capital was introduced during the North Pacific's rationalization processes. Some have argued that characteristics of the North Pacific fisheries – an overcapitalized processing sector that is capital intensive, focused on one or two species over short season, and is often located in a remote area – is not the case for West Coast groundfish fisheries. Rather, some point to trip limit management, and other efforts to maintain a year-round non-whiting groundfish industry, as a reason why stranded capital in the processing sector would not occur from rationalization. Similarly, it has been argued that the processing sector has already undergone substantial consolidation in recent years, and thus much additional

consolidation is unlikely to take place following rationalization.

Even if stranded capital were to be identified within the trawl fishery's processing sector, some question whether compensation would be justified. The following summarizes part of that argument's rationale. First, it is argued that stranded capital reflects inefficiency under a rationalized fishery, and so protecting stranded capital becomes a public policy issue in which efficiency goals are traded off against other social goals, such as innovation and consumer benefits. Second, some say that processors should have made their investments in the fishery with knowledge of its risks and rewards. Changes to fishery regulations that decrease the profits a processor had been receiving should not justify compensating processors. This argument concludes that capital that has been fully depreciated, or has returned a profit many times its cost, is not stranded by a change to fishing regulations.

If the Council's intention is to compensate for lost capital assets, short-term compensation mechanisms have been suggested to be more appropriate than the long-term allocation of QS. The following theoretical scenario has been posited to support this suggestion. If processors are not included in the initial allocation, then in the short-term some processors may lose part of the value of their capital. However once this transition period is over, remaining processors might be better in the long-term than they were prior to the introduction of the IFQ program.

Rationale 2: **Some say that as the amount initially allocated to processors increases, an imbalance of power between harvesters and processors will be created.** A guiding principle for the trawl rationalization program states that provisions should be avoided "where the primary intent is a change in marketing power balance between harvesting and processing sectors." There is a perception among some that there is a current power imbalance in favor of the processors and that a 100 percent initial allocation to permit owners would not create an imbalance in favor of harvesters. Conversely, it is contended that issuing fishing QS for processing history would guarantee that certain processors would have access to product, above and beyond the QS they may also receive as permit owners. This increased access to product could reduce a processor's need to compete in the marketplace for an independent harvester's fish. In sum, it is contended that this change in market power would skew price negotiations and reduce ex-vessel prices.

Rationale 3: **Some argue that as the distance between the quota owner and the vessel operator increases, the conservation benefit is degraded.** Bycatch reduction – particularly of overfished species – is a primary driver in the development of the trawl rationalization program. Meanwhile, it is recognized that the very low levels of quota for constraining overfished species present the possibility of overages due to disaster tows. These overages could lead to early closures of the trawl fishery, or potentially the entire groundfish fishery. Amid this discussion, it has been posited that a vessel fishing quota pounds (QP) provided by processors might not have the same incentive to minimize bycatch as it would for its own quota. This less precautionary behavior could lead both to such overages and to shortages of available QP for constraining overfished species. These shortages, in turn, could restrict opportunities to access target species QP, particularly for those with lesser purchasing power.

Rationale 4: **Some say that processors should not be given QS because this would take away QS from permit owners.** Permit owners are deserving of QS because the limited entry permit would be the one asset in the system for which the market value is directly reduced as the result of the creation of QS. Additionally, there is no alternative use for a surplus groundfish trawl permit. It is argued that decreasing the QS allocated to permit owners could lead to bankruptcy for some permit owners

if the value of their permit declines and results in debt that is greater than their remaining equity.

Rationale 5: **Some point to legislation and precedence as indication that fishing privileges should not be allocated to the processing sector.** National Standard 4 has been used to indicate a Congressional intention that fishing privileges should be allocated to those who have been granted the right to fish (as a permit owner): "If it becomes necessary to allocate or assign fishing privileges among various United States fishermen, such allocation shall be fair and equitable to all such fishermen…" In addition, it has been noted that fishing shares have not been issued to processors thus far under any implemented IFQ program.

Rationale 6: **Some suggest that an allocation to processors would bring about increased consolidation among permit owners not affiliated with processors, due to the smaller portion of QS each would receive.** If fishing QS are allocated to processors in this program, it is contended that permit owners would have to acquire additional quota (on top of their initial allocation) in order to prosecute a viable fishing operation. In this scenario, it is expected that one of the main sources of this additional quota would be processor-owned QP. Some believe, however, that processor-owned quota would be accessible primarily to processor-affiliated vessels, and thus this argument concludes that permit owners not affiliated with a processor could find continued participation difficult, particularly given their competitive disadvantage relative to those who are given that access.

Rationale 7: **Some say that initial allocation to processors will consolidate the processing sector and/ or make new entry more difficult, and that this will reduce competition and lead to less innovation and fewer buyers.** It is generally anticipated under a rationalization program that consolidation will occur. Some argue that if processors are included in the initial allocation of QS, the processing sector will likewise consolidate as the least efficient companies exit the fishery. Furthermore, it is argued that if current processors receive the advantages associated with an initial allocation, it will be difficult for a new processor to enter into the fishery. Fishermen have stated that processors currently will not buy the amount of product that regulations allow to be harvested, and that if instead there were more processors then more fish could be made available to consumers. Under this argument, it has been asserted that the fishery would best be served by a greater number of processors, and that the rationalization program could encourage new entrants best by not allocating to processors.

Rationale 8: **Some say that an initial allocation to processors does not take into account appropriately the loan repayment fees that have been levied on fishermen from the trawl buyback program.** Under the buyback program, fishermen agreed to assume debt responsibilities for a loan in anticipation that they would receive access to more fish. It is argued that the more QS allocated to processors, the greater likelihood that permit owners would have to pay for that increased access to fish both through the already agreed upon loan repayment fees and through payments or concessions to gain access to processor-owned QP. (This assumes that vessel responsible for paying the loan fees and the permit are owned by the same individual.)

Consulted Sources:

Bornstein, J. and P. Leipzig. TIQ information session on initial allocation to processors, September 2006 Pacific Council Meeting. 2006. Pacific Fishery Management Council.

Matulich, S. C. and M. Sever. 1999. Considering the initial allocation of ITQs: the search for a pareto-safe allocation between fishing and processing sectors. *Land Economics* 75(2):203-219.

Northern Economics Inc. Draft Trawl Individual Quota Analysis: Workshop Report, May 2006. Prepared for the Pacific Fishery Management Council. Unpublished.

NRC. 1999. *Sharing the Fish: Toward a National Policy on Individual Fishing Quotas.* Committee to Review Individual Fishing Quotas, Ocean Studies Board, Commission on Geosciences, Environment, and Resources, National Research Council. Washington D.C.: National Academy Press.

PFMC. Formal scoping period comments on dedicated access privileges (individual quotas) for the Pacific Coast limited entry trawl groundfish fishery. PFMC meeting briefing book November 2004, Agenda Item E.6.a[Attachment 6]. 2004.

PFMC. Groundfish Allocation Committee Report on Trawl Rationalization, December 2006. March 2007 PFMC Meeting briefing book.

Seafood Processor Quotas Hearing. 2004. United States Senate Committee on Commerce, Science, and Transportation, Full Committee Hearing. February 25, 2004. Available online: http://commerce.senate.gov/hearings/witnesslist.cfm?id=1066.

Wilen, J. E. Stranded Capital in Fisheries. Presentation to the Pacific Fishery Management Council March 2007 meeting. Accessed online at: http://www.trawl.org/Jim%20Wilen/StrandedCapitalPFMC.ppt. 2007.

Appendix E: Halibut Individual Bycatch Quota

The following are excerpts and notes from previous reports to the Council and discussion pertaining to halibut individual bycatch quota (IBQ), also known as transferable prohibited species caps (TPSC).

Groundfish Management Team (GMT)
Report To The Council: March 2007

1. Sideboards

A rationalized trawl fishery may have an effect on other West Coast fisheries. For example, bycatch of Pacific halibut is likely to increase and so negatively impact Pacific halibut fisheries; disaster tows can lead to exceeding the trawl allocation, which could lead to a closure of all sectors to avoid exceeding the ABC. Therefore, the GMT suggests the following protection measures. The GMT does not recommend, however, that the Council adopt sideboards to address the possibility of effort spill-over into other fisheries.

Sideboards to protect fisheries that target Pacific halibut

GMT recommends that transferable prohibited species caps (TPSC) be developed for Pacific halibut bycatch in the LE trawl fishery. Fishing opportunities are likely to increase under rationalization which would likely lead to increased incidental catch of Pacific halibut. Unless there are controls on the incidental catch of Pacific halibut, other sectors will have fishing opportunities taken away by the likely increase in Pacific halibut catch in the trawl fishery. Pacific halibut TPSC could be developed based on a proxy, or bycatch rate.

Trawl Individual Quota Committee (TIQC)
Report To The Council: March 2007

Sideboards. The TIQC disagrees with the GMT premise that halibut bycatch will increase under a TIQ program; however, the TIQC concurs with the GMT recommendations for trawl-prohibited species caps (TPSCs) for halibut. While at present there is no pressure on the trawl fishery to reduce bycatch, if the halibut biomass or trawl allocations decline, there may be a need to provide incentives to individuals to reduce their halibut bycatch.

Additional Notes From Discussions

1. The recently proposed stock assessment model from the International Pacific Halibut Commission (IPHC) would result in an allowable catch for area 2A that is roughly equivalent to the amount of Pacific halibut caught in the LE trawl fishery (landings, discard mortality, and alive discards).
2. Trawl fishery bycatch of Pacific halibut used to be a lot higher. According to Northwest Fisheries Science Center, the 1998 mortality of Pacific halibut in the trawl fishery was 1.04 million pounds. In 2005, it was 357,000 pounds.
3. The GMT believed that the directed halibut fishery could have fishing opportunity taken away if trawl effort increased under a rationalization program and this resulted in more halibut bycatch.
4. The initial allocation could be done on a bycatch rate (proxy)

From The Council's June 2005 Scoping Results Document
On Trawl Rationalization

When the Council originally rejected IBQ for halibut, under consideration were various options that would have allowed for some retention, as well as a nonretention option. In the British Columbia (BC) IFQ system, IBQ is provided for trawl caught halibut but retention is not allowed. Excerpt:

IBQ Options - Halibut

> Creation of IBQ for Pacific halibut would require prior consultation with the IPHC. In the BC IFQ system, IBQ for trawl caught halibut has substantially reduced halibut bycatch. The IFQ program being considered here [in the June 2005 scoping document] includes an option that would allow the retention of halibut when covered with IBQ [issued for the trawl fishery, but] . . .caught with legal halibut gear. . .

If the system were designed such that IBQ for halibut were converted to IFQ for the trawl fishery (i.e., trawl vessels would be allowed to retain halibut caught with trawl gear), the halibut catch sharing plan would need to be modified and approval would be required by the IPHC. A June 30, 2004 letter to the Council from IPHC Executive Director Bruce Leaman observed "Recent proposals to the Commission requesting trawl retention of halibut have not been approved, so it is unlikely that the Commission would adopt this proposal."

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Trawl Rationalization Alternatives (REV 05/23/07)

NOTE. Changes since the April 12, 2007 version are:

1. ***Section A of the IFQ alternative has been renumbered as A-1 and Section B has been renumbered A-2***
2. ***Changes recommended by the GAC at their May 2007 meeting have been inserted in bold + underline.***

Trawl Rationalization Alternatives

Status Quo Management Regime Approach

If this alternative is chosen, **status quo** will continue, including vessel cumulative landing limits for nonwhiting and season management for whiting.

IFQ-Based Management

If this alternative is chosen, **IFQs** will be used to manage the catch of groundfish caught by trawl vessels operating under a limited entry trawl permit except catch in fisheries in which groundfish is harvested incidentally and catch taken under a limited entry fixed gear permit (applies to limited entry trawl vessels that also have a limited entry permit endorsed for longline or fishpot gear).

Whiting Sector Cooperative Based Management

If this alternative is chosen, **co-ops** will be established for one or more of the three whiting sectors. Options are provided for the possible rollover of whiting among sectors and the possible allocation and rollover of bycatch species among sectors.

Mothership Sector Co-ops	Catcher vessel co-ops for the mothership fishery and limited entry for motherships.
Shoreside Sector Co-ops	Catcher vessel co-ops for the whiting shoreside fishery (option development pending).
Catcher-Processor Sector Co-ops	Vessel co-ops for the catcher-processor sector and endorsement to close the class of catcher processor permits.

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IFQ = Individual Fishing Quota, in general (encompasses both QS and QP)
QS = Quota Shares (issued at the start of the program)
QP = Quota Pounds (issued each year based on quota shares held)

Summary of PFMC Trawl Rationalization Program Alternatives

(Note: The majority of this section summarizes the alternatives as adopted for analysis by the Council in March 2007. Portions noted as "pending June 2007 Council action" are those that were recommended by the Groundfish Allocation Committee.)

The Pacific Fishery Management Council (Council) is currently considering alternatives that would rationalize the West Coast trawl fishery and provide incentive to reduce bycatch, either through an individual fishing quota program for all trawl sectors or through co-ops for the whiting sectors. Under either alternative, allocations would be made to eligible fishery participants as a privilege to harvest a portion of fish, and not as a property right. Though structurally different, both the IFQ and co-op alternatives have been designed by the Council to fulfill the goal of the program:

> *Create and implement a capacity rationalization plan that increases net economic benefits, creates individual economic stability, provides for full utilization of the trawl sector allocation, considers environmental impacts, and achieves individual accountability of catch and bycatch.* [1]

Objectives

The above goal is supported by the following objectives

1. Provide a mechanism for total catch accounting.
2. Provide for a viable, profitable, and efficient groundfish fishery.
3. Promote practices that reduce bycatch and discard mortality and minimize ecological impacts.
4. Increase operational flexibility.
5. Minimize adverse effects from an IFQ program on fishing communities and other fisheries to the extent practical.
6. Promote measurable economic and employment benefits through the seafood catching, processing, distribution elements, and support sectors of the industry.
7. Provide quality product for the consumer.
8. Increase safety in the fishery.

Constraints and Guiding Principles

The above goals and objectives should be achieved while:

1. Taking into account the biological structure of the stocks including, but not limited to, populations and genetics.

[1] "Bycatch" is defined in the Magnuson-Stevens Act as: "species of fish which are harvested in a fishery, but which are not sold or kept for personal use, and includes economic discards and regulatory discards. Such term does not include fish released alive under a recreational catch and release fishery management program."

IFQ = Individual Fishing Quota, in general (encompasses QS and QP)
QS = Quota Shares, a share of the total trawl allocation (issued at the start of the program)
QP = Quota Pounds (issued each year based on quota shares held)

2. Taking into account the need to ensure that the total OYs and Allowable Biological Catch (ABC) are not exceeded.
3. Minimizing negative impacts resulting from localized concentrations of fishing effort.
4. Accounting for total groundfish mortality.
5. Avoiding provisions where the primary intent is a change in marketing power balance between harvesting and processing sectors.
6. Avoiding excessive quota concentration.
7. Providing efficient and effective monitoring and enforcement.
8. Designing a responsive review evaluation and modification mechanism.
9. Taking into account the management and administrative costs of implementing and overseeing the IFQ or co-op program and complementary catch monitoring programs and the limited state and federal resources available.

Quick Comparison of the Alternatives

Flexible vessel catch limits and individual accountability for catch are key components expected to result in achievement of most elements of the program goal. In comparison, under status quo management vessels are individually accountable only for landings (not discards), and fishing is restricted by cumulative trip limits that are the same for all vessels.

Under the co-op alternative there is a separate co-op program for each whiting sector. The alternative comparison table (page 5) gives an overview of major elements differentiating the IFQ alternative from the co-op alternative and the co-op programs for each sector within the co-op alternative.

Neither the IFQ alternative nor the co-op alternative will change the allocation among sectors. The general management approach for the IFQ alternative provides freely transferable and highly divisible individual quota which a vessel would have to acquire to cover its catch. NMFS would track the transfers of individual quota and check it against vessel catch. Processors may be given an initial allocation of quota or there may be a compensation opportunity as part of an adaptive management provision.

Under the catcher vessel co-op programs (mothership and shoreside), vessels with permits that meet the minimum requirements to qualify for a whiting co-op endorsement choose between participating in a co-op or fishing in the non-co-op fishery. NMFS allocates to the co-op or the non-co-op fishery based on the catch history associated with each permit (determined for each permit at the start of the program and not changed thereafter). The permit's catch history might be thought of as a permit quota share. NMFS monitors the sector as a whole, closing the non-co-op fishery and the sector as needed to keep catch within the allocation. Each co-op is responsible for managing the fishing of its members through private agreements. It is only through these private agreements that the harvest opportunity a vessel brings to the co-op can be transferred to a different vessel. Vessels participating in the non-co-op fishery have no exclusive claim to the allocation they contribute to the non-co-op fishery and therefore there is no transfer opportunity.

IFQ = Individual Fishing Quota, in general (encompasses QS and QP)
QS = Quota Shares, a share of the total trawl allocation (issued at the start of the program)
QP = Quota Pounds (issued each year based on quota shares held)

The mothership co-op program would provide a limited entry system for mothership processors and allow catcher vessel co-op permits to move between processors but only by fishing in the non-co-op fishery for one year (there is an option that would allow permits to move without going through a year in the non-co-op fishery). The shoreside co-op program would limit the shoreside processors eligible to receive from shoreside co-ops for the first two years for the program. During those two years, any shoreside processor could still buy whiting from a vessel fishing in the shoreside non-co-op fishery. As with the mothership program participation in the non-co-op fishery would be required for a permit to move between processors. For the shoreside co-op program, the required duration of this participation in the non-co-op fishery might exceed one year. After a shoreside co-op endorsed permit breaks its link with a processor, that permit can move between processors from year-to-year without participating in the non-co-op fishery.

The CP sector is already organized as a co-op through private agreement. The co-op alternative would provide some additional stability to the co-op by capping the number of permits eligible to participate in the CP sector. Currently, new permits may be moved into the CP sector though the combination of smaller trawl permits into a permit large enough for a catcher-processor vessel.

IFQ = Individual Fishing Quota, in general (encompasses QS and QP)
QS = Quota Shares, a share of the total trawl allocation (issued at the start of the program)
QP = Quota Pounds (issued each year based on quota shares held)

Table. Comparison overview of the alternatives to status quo.

		Co-op Alternative		
	IFQ Alternative	Mothership Program	Shoreside Program	Catcher-Processor (CP) Program
Sector Allocation	No Change	No Change	No Change	No Change
Vessel LE Permit Requirement	LE Permit (Trawl) (no change)	New LE Permit Endorsement Required for Mothership Deliveries	New LE Permit Endorsement Required for Shoreside Deliveries	New LE Permit Endorsement Required for CPs
General Management Approach	A vessel will have to acquire QP to cover its catch.	Permits choose between participation in a co-op or fishing in a non-co-op fishery. NMFS allocates to the co-ops and non-co-op fishery based on catch history of the permits participating in each. Co-ops control catch of their members.	Same as for Motherships	The fishery is currently managed under a private co-op agreement. The co-op will be offered some additional protection by preventing an increase in the number of permits used in the CP sector.
NMFS Monitoring	Vessel Level Including At-sea Catch and QS/QP Transfers	Sector And Co-Op Level. No Monitoring Of Transfers.	Sector And Co-Op Level No Monitoring Of Transfers.	Sector Level
Harvest Allocation Among Participants **Whiting**	QS Issued Initially to Permits and Possibly Processors. Each year QP will be issued to holders of QS.	To a Co-op Based on a Permit's Whiting History (Permit Quota)	To a Co-op Based on a Permit's Whiting History (Permit Quota)	None (Allocation among participants currently achieved through private co-op agreement among participants)
Nonwhiting	Same As For Whiting. (Option: No IFQ for Whiting Deliveries, Bycatch Managed as a Pool)	Allocation Based On A Permit's Whiting History	Allocation Based On A Permit's Whiting History .	Same as above.
Allocation Transferable Separate from Permit?	Yes. QS/QP divisible & transferable to a wide class of persons, including anyone eligible to own a US fishing vessel.	Temporarily Among Permits Within the Co-op Structures (including between co-ops). Permit History Does not Change. Non endorsed permits may join co-op and fish the allocation of other permits (upon mutual agreement).	Temporarily Among Permits Within the Co-op Structures (including between co-ops). Permit History Does not Change. Non endorsed permits may join co-op and fish the allocation of other permits (upon mutual agreement).	N/A
Processor Participation Restriction	None	Limited Entry for Motherships	2 Year Restriction on Those Eligible to Receive From Co-ops (Co-op Eligible Processors)	New Endorsement for Participation as a CP
Other Processor Provisions	Example Options: Allocation of IFQ to Processors; Possible Adaptive Management Compensation	Processor Tie (Permits opting to participate in a co-op are tied to the mothership until the permit participates for a year in the non-co-op fishery) There is an option under which there would be no processor tie.	Processor Tie (Permits opting to participate in a co-op are tied to co-op eligible processors until the permit participates the required time in the non-co-op fishery. Permits that move into, or back into, a co-op after the first two years are not tied to a processor.)	None

IFQ = Individual Fishing Quota, in general (encompasses QS and QP)
QS = Quota Shares, a share of the total trawl allocation (issued at the start of the program)
QP = Quota Pounds (issued each year based on quota shares held)

Summary of the IFQ Alternative

Under this alternative, an individual fishing quota (IFQ) will grant an entity the privilege to catch a specified portion of the trawl sector's allocation. Vessels will be permitted to use any legal groundfish gear within this program, which will thus allow for "gear switching." For the shoreside non-whiting sector, IFQs will be created for all species of groundfish under the Groundfish Fishery Management Plan (although some will still be managed collectively at the complex level). For the whiting sectors, IFQ will either be created for all species of groundfish, or (***pending June 2007 Council action*** to include this second option in the alternative) IFQ might be created only for the target species, Pacific whiting. Under the second option, the overall allocation of bycatch to the whiting fishery (or specific sectors) will be pooled and shared by all participants. If the bycatch limit were reached, this will trigger closure of the whiting fishery (or specific sector). This strategy for managing bycatch is similar to that currently used in the whiting fishery.

Initial Allocation

The program will initially allocate IFQ as quota shares (QS) to a number of fishery participants, based on their historical involvement in the fishery. Following the initial allocation, transfers – as generally described below – will allow for others to also participate in the fishery as quota holders. The initial allocation is easiest understood in two segments. First, the Council is considering what groups should be included in the initial allocation and then what proportional split should be made among groups. Options specified are (1) to allocate 100 percent of QS to permit owners, or (2) for nonwhiting groundfish to allocate 75 percent to permit owners and 25 percent to processors, and for whiting to allocate 50 percent to permit owners and 50 percent to processors.

Second, the Council is considering specific allocation formulas that will determine the amount of QS each eligible entity will receive. These calculations are based on the catch history associated with a vessel permit or delivery history for a processing company, summed over a set number of years. For catcher vessels and shoreside processors, a special calculation is being considered for overfished species to allocate these species based on a QS recipient's need to cover incidental catch under current fishing practices. As explained above, pooling may be used instead of IFQs to manage bycatch species in the whiting fishery. For this scenario, only whiting will be allocated to individuals.

Management Structure. In structuring the management regime for the IFQ program, the Council is balancing the benefits of flexibility and individual accountability with the constraints of the very low allowable catch levels of overfished species. Prior to the start of each fishing year, NMFS will issue quota pounds (QP) to entities based on the amount of QS they held, in proportion to each species' OY. When a vessel goes fishing under the IFQ program, all catch must be recorded and must be matched by an equal amount of QP from the vessel's QP account. If there is not enough QP to cover the catch from a trip, there is a 30 day grace period during which time adequate QP must be transferred into the vessel's account; that vessel cannot be used to fish, and cannot be sold, until the overage is covered. Under limited circumstances, a carryover provision will allow for an overage in one year to be covered by up to 10 percent of the following year's QP; likewise, the provision also will allow QP that were not used in one year to be carried over into the following year, up to 10 percent.

Bycatch reduction and greater efficiency are expected to occur in the groundfish fishery under the IFQ program because of the transferability of QS and QP. As these units are transferred (bought and sold, and "leased" through formal private contract), it is

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anticipated that those best able to avoid catching overfished species and those that are most efficient entities will increase the amount registered to them, while those that regularly incur high bycatch rates or operate less efficiently might choose to sell their quota shares and leave the fishery. Generally, anyone eligible to own a US documented fishing vessel could also acquire QS and QP, and the QS and QP could be acquired in very small increments. These provisions will allow for new entrants into the fishery; for example a crew member could slowly purchase amounts of quota.

Rewarding bycatch avoidance and efficiency are a desired outcome from the program, however in order to protect against unintended consequences, two provisions limit transferability. The Council is considering whether to divide the trawl fishery into three or four sectors within the IFQ alternative (under three sectors, the fishery will divide into catcher-processor whiting, mothership whiting, and shoreside; while under four sectors the shoreside sector will divide additionally into shoreside whiting and shoreside non-whiting). QS or QP could not be transferred between the different sectors, and so there will be stability in the relative amount of fish caught within each sector. The second provision is to establish accumulation limits on the amount of QS or QP that can be owned or controlled by an entity, and accumulation limits on the amount of QP registered to a vessel. The Council is still considering the specific percentages, which will be established for each species for the non-whiting shoreside sector, and for whiting for the whiting sectors. The intent of these limits is to prevent excessive control of quota by a participant. A grandfather clause will allow a person initially allocated QS in amounts in excess of the cap to maintain ownership of those QS.

Monitoring and Tracking. The specific monitoring and tracking program necessary and feasible to assure that all catch (including discards) is documented and matched against QP is under development. Currently, 100 percent coverage by at-sea compliance monitors/observers is prescribed in the IFQ alternative (though it may be possible in certain situations to use cameras to assure compliance). Compared to status quo monitoring, this will be a significant increase for a major portion of the trawl fleet, particularly non-whiting shoreside vessels. Discarding may be allowed, though all fish discarded will also have to be covered by QP. A number of other elements of the monitoring program are still being resolved, including: the level of shoreside monitoring; whether to limit landing ports or landing hours; the expansion of the state fish ticket system into an electronic Federal system to track trawl landings; and a small vessel exception, if feasible.

Costs and Fee Structure. Program costs are of concern and are under assessment. Fee structures will be proposed to recover program costs and consideration will be made to aligning the fee structure with usage level. Another issue under consideration is the extent to which privatization of management system elements will take place under the program. Work on the cost and fee structure will proceed over the summer.

Summary of the Whiting Sector Co-op Alternative

This alternative considers another form of a dedicated access privilege – co-ops – for the whiting fishery. If the co-op alternative is adopted, the Council still also could consider adopting the IFQ alternative for the non-whiting shoreside sector only, or maintain the non-whiting shoreside sector under status quo. Similarly, the Council could adopt co-ops for all or any combination of whiting sectors. There are provisions that will apply to the whiting fishery in general under this alternative, and then specific provisions for the mothership sector, the shoreside sector, and the catcher-processor sector.

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As described below, all qualified catcher vessels (delivering shoreside or to motherships) will have a choice whether to participate in a co-op or in the non-coop portion of the fishery. For catcher-processors (CP), no formal co-op fishery will be established; instead, participation in the fishery will be capped by granting CP permits only to participants meeting specified qualification criteria, and a co-op will be formed on a voluntary basis among these permit owners.

Rather than each permit being issued a privilege to harvest a proportion of the allowable catch (as with QS in the IFQ alternative), the co-op alternative allocates a permit's whiting catch history to the permit's co-op (or to the non-coop portion of the fishery). The contribution by that permit is combined with the contributed allowable catch of the co-op's other members to form the pool of fish that is allocated to the co-op for that year.

Whiting Sector Management under Co-ops

The existing allocation of whiting between the shoreside whiting, mothership, and CP sectors will not change under this alternative (42%, 24%, and 34%, respectively). Whiting from one sector could not be transferred to another sector, except possibly through a rollover. Within each sector, this allowable catch will be assigned each year to co-ops or to the non-coop portion of the fishery. Co-ops will then be responsible for monitoring and enforcing the catch of the organization and of co-op members, and NMFS will monitor the catch of each sector and of the non-coop fisheries, as well as the overall catch by all three sectors. NMFS will make the following closures if limits are reached: close a co-op fishery if co-ops have collectively reached their limit; close the non-coop fishery if it reaches its limit; and/or close the combined co-op and non-coop fishery if that whiting sector reaches its limit.

Provisions also address the bycatch in the whiting fishery (particularly that of certain overfished species and ESA-listed salmon). For limits (hard caps) on incidental groundfish species, the Council is considering whether or not to make these sector-specific. If the latter is chosen, allocating these species between whiting sectors will be done either in proportion to the amount of whiting allocated to the sector, or (***pending June 2007 Council action*** to include this second option in the alternative) based on a sector's historical catch of the incidental species. NMFS will close the whiting fishery, or particular sectors, if a bycatch limit were reached.

Given the high levels of monitoring already in place in the whiting fishery, only moderate changes are expected to be required to implement this alternative for the at-sea whiting fishery. For the shoreside whiting fishery, at-sea monitoring will be increased to 100 percent to enforce catch accounting requirements. For the at-sea fishery, 100 percent coverage aboard mothership and catcher-processors will continue. For some coverage, it may be possible for cameras to be used in place of monitors.

Co-ops for Catcher Vessels Delivering to Motherships

Under this alternative, catcher vessels with a co-op endorsement for the mothership sector will make the choice each year whether to be part of a co-op or whether to register to fish in the non-coop portion of the fishery. Each co-op will be made up of catcher vessels, and the class of motherships will be closed by creating a LE permit for mothership vessels. Based on their catch history, catcher vessel permit holders will be designated a share of the mothership sector allocation; this share will be designated for delivery to the mothership that that permit owner had delivered the majority of its catch to in the prior year. Each year, NMFS will distribute a catch allocation to a co-op based on the sum of catch history for the permits registered to that co-op. NMFS will also distribute a catch allocation each year to the non-coop portion of the fishery, based on the collective share of permit holders registered to that mode.

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The co-op organization will coordinate the harvest by its members. (***Pending June 2007 Council action)***, though co-op agreements will include a mandatory clause that the catch allocation made to a member must equal the amount that the member brings into the co-op ("The Golden Rule"), co-op members could then agree to transfer catch allocations amongst themselves. Similarly, if there were multiple co-ops in the sector, one co-op will be allowed to transfer catch allocation to another co-op, though that catch will still be obligated for delivery to the original mothership unless a mutual exception were made. NMFS will not track these transfers between co-ops or those among co-op members.

It will be possible for a catcher vessel permit owner to join a different co-op or deliver to a mothership other than the one it will be assigned to as explained above. Under one option in the alternative, it will be required that the permit owner first enter into the non-coop portion of the fishery for one year. Under another option, a permit owner could move between motherships without participation in the non-coop fishery in a previous year. (If the latter option is selected, this would require changes to be made to all other sections of the mothership co-op alternative.)

Like in the IFQ alternative, accumulation limits will be imposed to prevent excessive concentration of catch allocations. These limits have been proposed and are ***pending June 2007 Council action*** to include them in the alternative. They will cap the proportion of whiting that an individual or entity could process and will cap the proportion of whiting an individual or entity could have registered to his catcher vessel permit(s).

Co-ops for Catcher Vessels Delivering to Shoreside

(The shoreside whiting co-op proposal described below has been significantly revised since the March Council meeting. This revised proposal is ***pending June 2007 Council action****.)*

Similar to the structure of the mothership sector co-op, catcher vessels with a shoreside endorsement will make the choice each year whether to be part of a co-op or whether to fish independently in the non-coop portion of the fishery. Based on their catch history, catcher vessel permit holders will be designated a share of the shoreside sector allocation, and this will be distributed each year by NMFS to the co-op to which they registered. NMFS will also distribute a catch allocation each year to the non-coop portion of the fishery based on the catch history of the permit holders fishing in the non-coop mode; only these vessels in the non-coop portion of the fishery will be allowed to access this pool of allowable catch.

The co-op organization will coordinate the harvest by its members. Though co-op agreements will be required to stipulate that the catch allocation made to a member equal the amount that the member brings into the co-op, transfers could be made among co-op members. Transfers could also occur between co-ops. NMFS will not track transfers either between co-ops or among members of a single co-op.

For the first two years of the program, only processors that qualified for a shoreside processor permit will be eligible to receive fish from a co-op. Qualification will be based on having processed a specified amount of whiting during a set of qualifying years. In turn, for the first two years a permit owner that is in the non-coop portion could deliver only to processors that did not have a shoreside whiting processing permit; a permit owner in a co-op will be required to deliver its whiting to the co-op qualified processors that were the basis of his catch history. If a permit owner wanted to deliver to a different processor than the one(s) he was assigned to, he will have to enter the non-coop portion of the fishery for a given number of years, after which he will released from obligations and could deliver to any shoreside processor.

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Like in the IFQ alternative, accumulation limits will be imposed to prevent excessive concentration. These limits, which are still under development, will cap the proportion of whiting that an individual or entity could process and will cap the proportion of whiting an individual or entity could have registered to his catcher vessel permit(s).

Co-ops for Catcher-Processors

Under this alternative, the main change from the current CP sector management will be the creation of a CP endorsement to close the CP fishery to new entrants. This endorsement will be granted to limited entry permits registered to CP vessels if they met specified qualification criteria. Only vessels with a CP limited entry permit will be allowed to harvest fish from the sector's allocation. Limited entry permits with CP endorsements will continue to be transferable.

Catch by the CP sector will be controlled primarily by closing the fishery when a constraining allocation was reached. As under status quo, co-op(s) will be voluntarily formed among CP permit holders. If a co-op were formed, the sector will be managed as a private voluntary cooperative and governed by a private contract that will include division of the sector allocation among eligible vessels according to an agreed harvest schedule; NMFS will not establish an allocation of catch or catch history among permits. Therefore, if any permit holder decided not to join the cooperative, a race for fish could ensue. Similarly, if more than one co-op were formed, a race for fish could ensue absent an inter co-op agreement.

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IFQ Alternative

The IFQ alternative is discribed in the following three tables. Table 1 provides an overview of the sections of the alternative. Table 2 provides a summary of the provisions in each section. Table 3 provides a full description of the IFQ alternative.

Table 1 Overview the IFQ alternative.

IFQ Alternative	
A-1	***Trawl Sector Management Under IFQs***
A-1.1	Scope for IFQ Management (includes gear switching)
A-1.2	IFQ Management Units (includes latitudinal area management)
A-1.3	General Management and Trawl Sectors[n]
A-1.4	Management of NonWhiting Trips
A-1.5	Management of Whiting Trips
A-1.6	Special Overfished Species Management Provisions
A-2	***IFQ System Details***
A-2.1	Initial Allocation
A-2.2	Permit/IFQ Holding Requirements and Acquisition (Includes Annual Issuance and Transfer Rules)
A-2.3	Program Administration (Includes Tracking, Data Collection, Costs, Duration)
A-2.4	Additional Measures for Processors
A-3	***Adaptive Management***
A-4	***Pacific Halibut Individual Bycatch Quota (IBQ) – non-retention***

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Table 2. Summary of IFQ alternatives (continued)

Table 2. Summary of the IFQ Alternatives

	Element	SubElement	IFQ Alternative
A. ***Trawl Sector Management Under IFQs***			**Same for All Alternatives**
A-1.1	Scope for IFQ Management, Including Gear Switching		Catch based system: quota pounds (QP) required to cover: **Option 1:** All groundfish species catch (including all discards). **Option 2:** For the non-whiting sector, all groundfish species catch (including all discards). **For whiting sectors, all whiting catch (including all whiting discards), but not bycatch.** *This implies gear switching is allowed (vessels with limited entry trawl permits can use directed groundfish gears (including open access, longline and fishpot) to harvest their QP).*
A-1.2	IFQ Management Units, Including Latitudinal Area Management		QS/QP will be species, area and sector specific. QP will not be used in a trawl sector other than that for which it was issued, unless specifically allowed, and will not be used in a nontrawl sector. QP will not be transferred between areas. Species and areas will be as specified in the ABC/OY table. The Council may subdivide QS after initial allocation. Option: Provide for area subdivision **and recombination (option to be developed)** in addition to those provided in the ABC/OY table. ~~**(Process Option**: Initiate a group to address area management)~~
A-1.3	General Management and Trawl Sectors "		Unless otherwise specified, status quo regulations, other than trip limits, will remain in place, including season closures, as necessary. For trawl vessels fishing IFQ with longline gear, RCAs might need to be more conservative. There will be **Option 1:** three trawl sectors: shoreside, mothership, and catcher-processors. **Option 2**: four trawl sectors: shoreside nonwhiting, shoreside whiting, mothership, and catcher-processors. *Allocation among trawl sectors to be determined.*[a]
A-1.4	Management of NonWhiting Trips		**Nonwhiting trips are those with less than 50% whiting. No management measures other than those identified in Section A-1.3 have been identified at this time.** [b] ~~Trip limits will apply to whiting incidental catch in the nonwhiting fishery (in addition to the requirement that catch be covered with for whiting QP).~~

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Table 2. Summary of IFQ alternatives (continued)

	Element	SubElement	IFQ Alternative
A-1.5	Management of Whiting Trips		Whiting seasons will not be changed under the TIQ program, and so the current spring openings will be maintained to control impacts on ESA-listed salmon. Outside of the whiting season, • If 3 sectors: for shoreside deliveries, sector specific QP required plus cumulative whiting catch limits apply. Deliveries prohibited for at-sea sectors. • If 4 sectors: whiting sectors are prohibited from delivering. **Under Option 2 in A.1-1, bycatch species will not be managed with IFQ but will be pooled:** **Option 1**: **for the total whiting fishery** **Option 2**: **at the whiting sector level.** **If voluntary whiting co-ops form under the IFQ program, at a future time the Council might decide to allocate bycatch species at the co-op level.**[c]
A-1.6	Special Overfished Species Management Provisions	(placeholder)	No special provisions (except with respect to initial allocation and carryovers (see below)) have thus far been developed. This section will be deleted at a later point if no other special provisions are developed.
A-2. ***IFQ System Details***			
A-2.1	**Initial Allocation**		
A-2.1.1	Eligible Groups	Groups and Initial Split of QS	**Option 1:** 100% to permit owners **Option 2:** 75% to permit owners and 25% to processors for nonwhiting groundfish. 50% to permit owners and 50% to processors for whiting.
		Permit History	Landings/deliveries history goes with the permit.
		Processing Definition	For the purpose of applying the initial allocation formula, only the first processing counts as processing. A special definition of processors and processing is provided to meet this intent.
		Attributing and Accruing Processing History	Attribute to the first receiver, but for shoreside **Option 1:** Attribute to the receiver reported on the landing receipt. **Option 2:** Attribute processing history to the receiver if that entity meets the definition of processor. **Option 3:** Same as Option 1, except history may be reassigned to an entity not on the landings receipt, if parties agree or thru an adjudication process.
A-2.1.2	Recent Participation	Permits	**Options:** No minimum. ~~, or at least 5 or 10 landings/deliveries from 1998 through 2003 are required to qualify for an initial allocation of QS.~~
		Processors (motherships)	Recent participation is required to qualify for QS: **1,000 mt in each of any two years** from 1998-~~2003~~ **2004**.
		Processors (shoreside)	Recent participation is required to qualify for QS: [level of activity to be determined] from 1999-2004

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Table 2. Summary of IFQ alternatives (continued)

	Element	SubElement	IFQ Alternative
A-2.1.3	Allocation Formula	Permits with catcher vessel history	For all species: ~~**Option 1:**~~ **all QS allocated based on permit history.** ~~**Option 2**: An equal division of the buy-back permits' pool of QS among all qualifying permits plus allocation of the remaining QS based on each permit's history. (The QS pool associated with the buyback permits will be the buyback permit history as a percent of the total fleet history for the allocation period. The calculation will be based on total absolute pounds with no other adjustments.)~~ **Permit history based allocation suboptions** **For non-whiting trips,** permit history used for QS allocation will be calculated **For non-overfished species**: using an allocation period of 1994-2003. Within that period use relative history and drop the three worst years.[d] **For overfished species taken incidentally:** **Overfished Species Option 1:** as it is calculated for non-overfished species. **Overfished Species Option 2: a proxy species based on following approach: Apply fleet average bycatch rates and depth and seasonal distributions to each permit's target species QS allocations. Fleet average bycatch rates will be developed from West Coast Observer Program data for 2003-2006 and the depth distributions and seasonal distributions will derived from logbook information for 2003-2006.** ~~The permit's 2003-2006 catch or landings/delivery data will be used to determine the average distribution of that permit's catch by depth, area, and season (strata). Fleet bycatch rates for each depth, area, and season combination (strata) will then be applied to the permit's target species for the strata in order to determine the permit's allocation of overfished species. . [Approach to be reviewed]~~ **For whiting trips,** permit history used for QS allocation will be calculated: **For whiting**, using an allocation period of 1994-2003. Within that period, use relative history and drop the two worst years.[e] **For bycatch species** (if IFQ is used for bycatch species): **Bycatch Option 1:** using history for that species, as it is calculated for whiting **Bycatch Option 2:** using the whiting history as a proxy (i.e. allocation will be pro rata based on the whiting allocation). **Relative history (%).** The permit history for each year is measured as a percent of the fleet total for the year.
		Permits with catcher-processor history	~~**Option 1:** Schedule developed by unanimous consent of catcher processors.~~ **Option 2:** Permit history for 1994-2003 (no option to drop years)[f] and using relative pounds.
		Processors (motherships)	Calculate QS based on the entity's history for the allocation period of 1998-2003 (no option to drop years), and use relative pounds.

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Table 2. Summary of IFQ alternatives (continued)

	Element	SubElement	IFQ Alternative
		Processors (shoreside)	**For most species**, calculate QS based on the entity's history for the allocation period of 1994-2004 (drop two worst years) and use relative pounds. **For selected species**, calculate QS based on the entity's **Selected Species Option 1:** history for that species. **Selected Species Option 2:** history of a proxy species, using separate calculations for non-whiting deliveries and whiting deliveries. The method described for the Overfished Species Option 2 for permits will be applied to each non-whiting delivery as indicated. A weighted average for all of the deliveries will be used to determine an overfished to target species ratio for the processor. [Approach to be reviewed] For whiting deliveries, allocation of bycatch species will pro rata based on the allocation of whiting. *Note: "selected species" means overfished species for non-whiting deliveries and means bycatch species for whiting deliveries.* **If under A-1.1 there is not IFQ for all species, calculation of QS from non-whiting deliveries will be the same as explained above. For whiting deliveries, only whiting QS will be allocated, using the calculation above.**
A-2.1.4	History for Combined Permits and Other Exceptional Situations		Permit history for combined permits include the history for all the permits that have been combined. When trawl permits were stacked split the history evenly between the stacked permits. EFPs landings in excess of cumulative limits for the non-EFP fishery will not count. Compensation fish will not count.[g]
A-2.1.5	Initial Issuance Appeals		No Council appeals process. NMFS will develop a proposal for an internal appeals process.
A-2.1.6	**Reallocation After Initial Issuance**		**Option: When a species that is overfished at the time of the initial allocation is rebuilt, the QS for the species will be reallocated within a sector. Staff has been directed to develop options for Council consideration.**
A-2.2	**Permit/IFQ Holding Requirements and Acquisition**		
A-2.2.1	Permit/IFQ Holding Requirement		1. Limited entry trawl permit required. 2. 30 days to cover catch with QP 3. For a vessel to use QP, they must be in the vessel's QP account. 4. For a vessel that does not have QP to cover its catch, no fishing until the overage is covered. 5. A vessel with a deficit could not transfer its LE permit. **6. Option:** XXX QP must be held prior to departure from port.
A-2.2.2	IFQ Annual Issuance	Start-of-Year QP Issuance	QP will be issued annually to QS holders.
		Carryover (Surplus or Deficit)	**Non-overfished Species:** 10% carryover for each species **Overfished Species:** 10% carryover for each species
		Quota Share Use-or-Lose Provisions	None. The need for this provision will be evaluated as part of program review process, and the provision could be added later, if necessary.
		Entry Level Opportunities	No special provisions. QS are infinitely divisible, new entrants may buy-in slowly.

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Table 2. Summary of IFQ alternatives (continued)

	Element	SubElement	IFQ Alternative
A-2.2.3	IFQ Transfer Rules	Eligible to Own or Hold	Those eligible to own QS will be restricted to those eligible to own and control a US fishing vessel and any person or entity eligible to own or control a US fishing vessel pursuant to sections 203(g) and 213(g) of the AFA (see Table 3 for additional language).
		Transfers and Leasing	QP/QS will be transferable and transfers must be registered with NMFS. QS leasing will not be facilitated by NMFS.
		Temporary Transfer Prohibition	Temporary prohibitions on QS transfers, as necessary for program administration (to be determined by NMFS).
		Divisibility	Unrestricted for QS. Whole pound units for QP.
		~~Liens~~	~~Liens could be placed on QS and QP.~~
		Accumulation Limits (Permit and Own or Control)	There will be a limit on the amount of QP that may be used with a permit and a limit on the amount of QS or QP a person may own or control. **The own or control limit will be based on the individual and collective rule.** A grandfather clause will apply to permit and own or control accumulation limits. Note: The Council might limit accumulation of total groundfish QS/QP or QS/QP for a complex, in addition to the species/species group limits.
A-2.3	**Program Administration**		
A-2.3.1	Tracking and Monitoring NMFS will explore the possibility of less than 100% at-sea monitoring and report back on the possibility.		**Option 1:** 100% at-sea compliance monitors/observers (small vessel exception, if feasible). Discarding will be allowed. Allowing discarding will require that the timeliness of discard reporting be improved to match that for landings reporting. Such timeliness will be necessary to track QP usage. VMS will be required. Electronic landings tracking, advance notice of landings, unlimited landing hours. Some shoreside monitoring. Some costs will be controlled through a requirement that delivery sites be licensed. Site licenses will ensure that certain standards will be met that will facilitate monitoring and will aid work force planning. Any landing not made at a licensed site will be illegal. QP account information for vessels will be available in the field. A central lien registry system will include only essential ownership information. **Option 2:** Same as Option 1 except as follows. No small vessel exception. There will be full retention and 100% shoreside monitoring, so the discard reporting system will not need to be upgraded. The site licensing program will be replaced by a limitation on the ports to which deliveries could be made. Costs will be further controlled by limiting landing hours. A central lien registry system will contain expanded ownership information. **Option 3:** Same as Option 1 except as follows. No small vessel exception. Cameras might be provided as an option for vessels to use in place of compliance observers (feasibility to be determined). Discards will be allowed (except when cameras are used). Instead of creating an electronic state fish ticket system, a Federal system will be created to track trawl landings. A central lien registry system will contain expanded ownership information.

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Table 2. Summary of IFQ alternatives (continued)

	Element	SubElement	IFQ Alternative
A-2.3.2	Socio-Economic Data Collection		Expanded data collection, mandatory compliance. Include transaction prices in a central QS ownership registry.
A-2.3.3	Program Costs Some cleanup is needed so that the options all cover the same issues.	Cost Transfer and Recovery	**Option 1:** Recover IFQ program costs but not enforcement or science costs A maximum of 3% of ex-vessel value. **Option 2:** Full cost recovery through landing fees plus privatization of certain elements of the management system.
		Fee Structure	To be determined. TIQC recommends a fee structure that reflects usage. Option (to be developed) that allows for equitable sharing of observer costs for smaller vessels.
A-2.3.4	Program Duration and Modification		Four-year review process to start four years after implementation. Community advisory committee to review IFQ program performance.
A-2.4	Additional Measures for Processors		**1. <u>Any QS received for processing history as part of the initial allocation will expire after a certain period of time (to be determined prior to final Council action). At that time all remaining QS will be adjusted proportionally so that the total is 100%.</u>** **2. <u>The accumulation limit grandfather clause of Section A-2.2.3.e will not apply for processing history. Regardless of the percent of the total QS designated for processors, processing history will not entitle a person to receive additional total allocation in excess of the accumulation limits.</u>** **3. <u>As needed, a fee will be established to provide financial compensation to processors for demonstrated harm. A process will be established for the demonstration of harm.</u>** *<u>Congressional action might be necessary to establish a fee dedicated to this purpose.</u>* **4. <u>The Adaptive Management allocation and process designated in Section A-3 will be used to compensate processors for demonstrated harm by: auctioning QP to generate funds to provide financial compensation, or providing QP to be directed in a fashion that increases benefits for affected processors.</u>**
A-3	***<u>Adaptive Management</u>***		In each of the first 10 years of the program, up to 10% of the trawl allocation will be distributed as quota pounds (QP) to create incentives or to compensate in response to unforeseen outcomes from implementing the IFQ program. Examples of unforeseen outcomes include, but are not limited to, unexpected geographic shifts in the distribution of catch or landings, unexpected effects on certain segments of the industry (e.g. processors), or an unexpected barrier to new entry into the fishery. This provision will apply to the overall trawl sector (whiting and non-whiting). When the Council determines that an adjustment is needed, it will establish criteria for the distribution of up to 10% of the QP in a manner that will encourage those receiving the QP to undertake the desired activities or otherwise compensate for unexpected effects. Note: This approach does not change the option for splits of quota share (QS) that will go to eligible groups.

IFQ = Individual Fishing Quota, in general (encompasses QS and QP)
QS = Quota Shares, a share of the total trawl allocation (issued at the start of the program)
QP = Quota Pounds (issued each year based on quota shares held)

Table 2. Summary of IFQ alternatives (continued)

	Element	SubElement	IFQ Alternative
A-4	***Pacific Halibut Individual Bycatch Quota (IBQ) – non-retention***		**Option: IBQ for Pacific halibut bycatch in the trawl fishery will be established. Such IBQ will be issued on the basis of a bycatch rate applied to the target species quota shares an entity receives. Area specific bycatch rates might be used for allocation but, if so, the halibut IBQ will be divided by area only as necessary to comply with catch sharing plans.**

[a] The allocation among trawl sectors may be determined as through the trawl rationalization EIS or as part of the intersector allocation process. The TIQC recommended a number of options for determining the allocation among trawl sectors. One of these would have based the allocation on fleet history but not have included in the fleet history the history of any vessel not meeting the recent participation requirement. The Council rejected this application of a recent participation requirement to a determination of fleet history. The remaining TIQC options recommend that the division of allocation among trawl sectors be based on the fleet history over the same time periods used to allocate QS. The TIQC further recommends that if different periods are used for different trawl sectors, either (1) calculate the share for each sector based on its IFQ allocation period, then adjust all percentages proportionately such that they sum to 100%; OR (2) use the shortest period common to the allocation formula for all sectors.

If bycatch in the whiting sectors is not managed with IFQs and is pooled at the overall whiting fishery or sector level, allocations of bycatch will be determined through the intersector allocation process. Allocate between the whiting sectors based on: Option 1: pro rata in proportion to the whiting allocation, or Option 2: weighted historical catch formula (for example, in projecting bycatch in the whiting fisheries prior to the start of the season, the GMT uses a four-year weighted average starting with the most recent year: 40%, 30%, 20%, 10%).

[b] For the nonwhiting fishery there is a potential that a vessel might make a targeted whiting trip by accumulating whiting QPs provided to cover whiting bycatch in the nonwhiting fishery. This could create a problem if it occurred during a time when the whiting fishery is closed to control for impacts on ESA listed salmon. Other than that, while not intended, whiting targeted trips using whiting QP intended for whiting bycatch in the nonwhiting fishery might not create a problem. Restrictions might be imposed on the nonwhiting fishery as needed to address concerns ESA concerns.

[c] **In the original TIQC recommendation (May 2007), a third option is to allocate bycatch species at the co-op. However, the IFQ alternative does not include consideration of co-ops. In order to have an internally consistent option, the TIQC recommendation has been interpreted as described in the table.**

[d] State landings receipts (fish tickets) will be used to assess landings history for shoreside deliveries and observer data will be used for deliveries to motherships.

[e] State landings receipts (fish tickets) will be used to assess landings history for shoreside deliveries and observer data will be used for deliveries to motherships.

IFQ = Individual Fishing Quota, in general (encompasses QS and QP)
QS = Quota Shares, a share of the total trawl allocation (issued at the start of the program)
QP = Quota Pounds (issued each year based on quota shares held)

Table 2. Summary of IFQ alternatives (continued)

[f] Based on observer data

[g] Illegal landings/deliveries do not count toward history for QS allocation.

IFQ = Individual Fishing Quota, in general (encompasses QS and QP)
QS = Quota Shares, a share of the total trawl allocation (issued at the start of the program)
QP = Quota Pounds (issued each year based on quota shares held)

Table 3. Full description of the IFQ Alternatives

	Element	SubElement	
A. ***Trawl Sector Management***			
A-1.1	Scope for IFQ Management, Including Gear Switching		QP will be required to cover: **Option 1:** All groundfish species catch (including all discards), or **Option 2:** For the non-whiting sector, all groundfish species catch (including all discards). **For whiting sectors, all whiting catch (including all whiting discards), but not bycatch,** of limited entry trawl vessels using any directed groundfish gear, EXCEPT when such vessels also have a limited entry permit endorsed for fixed gear (longline or fishpot) AND have declared that they are fishing in the limited entry fixed gear fishery. *This definition of the scope allows a limited entry trawl vessel to switch to nontrawl groundfish gears, including fixed gear, for the purpose of catching their QP.* *It also will allow a nontrawl vessel to acquire a trawl permit, and thereby use trawl QP to catch the LE trawl allocation using nontrawl gear*.
A-1.2	IFQ Management Units, Including Latitudinal Area Management		QS will be species, area and sector specific. The QP issued on the basis of the QS will have the same species, area and sector designations. QP will not be used in a trawl sector other than that for which it was issued, unless specifically allowed, and will not be used in a nontrawl sector. QP will not be used in a catch area other than that for which it is designated. Species and areas will be as specified in the ABC/OY table... The species, species groupings and area subdivisions will be those that are specified in ABC/OY table that is part of the groundfish biennial specifications. ~~**Option:** The IFQ management units will be further subdivided into latitudinal areas smaller than those reflected in the ABC/OY table (areas and objectives for the subdivision to be specified).~~ ~~**(Process Option**: Initiate a group to address area management)~~ Future subdivision: If at any time after the initial allocation an IFQ management unit is further subdivided, those holding QS for the unit being subdivided will receive equal amounts of shares for each of the IFQ management units being subdivided.[a] **Future recombination: Option to be provided. Together, the options for subdivision and recombination allow for movement of a management line.**

IFQ = Individual Fishing Quota, in general (encompasses both QS and QP)
QS = Quota Shares (issued at the start of the program)
QP = Quota Pounds (issued each year based on quota shares held)

Table 3. Full description of the IFQ Alternatives (continued)

	Element	SubElement	
A-1.3	General Management and Trawl Sectors		Unless otherwise specified, status quo regulations, other than trip limits, will remain in place.[b] If individual vessel overages (catch not covered by QP) make it necessary, season closures will be used to prevent the trawl sector or sector from going over its allocation. The IFQ fishery may also be closed as a result of overages in other sectors. For trawl vessels fishing IFQ with longline gear, RCAs might need to be more conservative.[c] There will be: **Option 1:** three trawl sectors: shoreside, mothership, and catcher-processors. **Option 2**: four trawl sectors: shoreside nonwhiting, shoreside whiting, mothership, and catcher-processors. *Allocation among trawl sectors to be determined.*[d]
A-1.4	Management of NonWhiting Trips		**Nonwhiting trips are those with less than 50% whiting. No management measures other than those identified in Section A-1.3 have been identified at this time.**[e] ~~Trip limits will apply to whiting incidental catch in the nonwhiting fishery (in addition to the requirement that catch be covered with for whiting QP).~~
A-1.5	Management of Whiting Trips[f]		Whiting seasons will not be changed under the TIQ program, and so the current spring openings will be maintained to control impacts on ESA-listed salmon. Outside of the whiting season, • If 3 sectors: for shoreside deliveries, sector specific QP required plus cumulative whiting catch limits apply. Deliveries prohibited for at-sea sectors. • If 4 sectors: whiting sectors are prohibited from delivering. **Under Option 2 in A.1-1, bycatch species will not be managed with IFQ but will be pooled:** **Option 1**: **for the total whiting fishery** **Option 2**: **at the whiting sector level.** **If voluntary whiting co-ops form under the IFQ program, at a future time the Council might decide to allocate bycatch species at the co-op level.**[g]
A-1.6	Special Overfished Species Management Provisions	(placeholder)	No special provisions (except with respect to initial allocation and carryovers (see below)) have thus far been developed. This section will be deleted at a later point if no other special provisions are developed.

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Table 3. Full description of the IFQ Alternatives (continued)

	Element	SubElement	
A-2. ***IFQ System Details***			
A-2.1	**Initial Allocation**		
A-2.1.1	Eligible Groups	a Groups and Initial Split of Quota Share	***Eligible Groups*** The initial allocation of QS will be made either only to permit owners or to permit owners and processors. After the initial allocation, those eligible to purchase QS will not necessarily be limited to these groups (see below: "IFQ/Permit Holding Requirements and IFQ Acquisition"). The following are the shares of the initial QS allocation that are being considered for the eligible groups. **Option 1:** 100% to permit owners **Option 2:** 75% to permit owners and 25% to processors for nonwhiting groundfish. 50% to permit owners and 50% to processors for whiting. *After initial allocation, trading will likely result in changes in the distribution of shares among permit owners and processors. Additionally, entities that are neither permit owners nor processors may acquire quota shares.*
		b Permit History	Landing/delivery history will accrue to the permit under which the landing was made. The owner of a permit at the time of initial allocation will receive the QS issued based on the permit.
		c Processing Definition	A special definition of "processor" and "processing" will be used for initial QS allocation. A main intent of the definition is to specify that if QS is issued for processing only the first processor of the fish receives an initial allocation of QS. See footnote for definition.[h]
		d Attributing and Accruing Processing History	For an allocation for deliveries to at-sea processors: use at-sea fishery observer data and weekly processing reports to document processing history. For an allocation for shoreside processors: **Option 1:** attribute history to the receiver reported on the landing receipt (i.e. the entity responsible for filling out the state fish ticket). **Option 2:** attribute history to the receiver reported on the landing receipt, if that entity meets the definition of processor. **Option 3:** same as Option 1, except history may be reassigned to an entity not on the landings receipt, if parties agree or through an adjudication process.
A-2.1.2	Recent Participation	a Permits (including catcher-processor[i] permits)	**Options:** No minimum~~, or at least 5 or 10 landings/deliveries from 1998–2003 (the recent participation period) are required to qualify for an initial allocation of QS. Recent participation may be met with participation in any sector and will qualify a permit for QS for all sectors in which the permit has history for the 1994-2003 allocation period (even if the permit has no recent participation in that sector). The recent participation requirement applies to catcher-processor permits only if there is not a consensus allocation formula among permits with catcher-processor history (see Section 1.3).~~
		b Processors (motherships)	Recent participation is required to qualify for QS: **1,000 mt in each of any two years** from 1998-~~2003~~ **2004**.
		c Processors (shoreside)	Recent participation is required to qualify for QS: [level of activity to be determined] from 1999-2004.

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Table 3. Full description of the IFQ Alternatives (continued)

	Element	SubElement	
A-2.1.3	Allocation Formula	a Permits with catcher vessel history	For all species: ~~**Option 1:**~~ **all QS allocated based on permit history.** ~~**Option 2**: An equal division of the buy-back permits' pool of QS among all qualifying permits plus allocation of the remaining QS based on each permit's history. (The QS pool associated with the buyback permits will be the buyback permit history as a percent of the total fleet history for the allocation period. The calculation will be based on total absolute pounds with no other adjustments.)~~ **Permit history based allocation suboptions** For **non-whiting** trips, permit history used for QS allocation will be calculated: **For non-overfished species**: using an allocation period of 1994-2003. Within that period use relative history and drop the three worst years.[j] **For overfished species taken incidentally:**: **Overfished Species Option 1:** as it is calculated for non-overfished species. **Overfished Species Option 2: using a proxy species based on the following approach: Apply fleet average bycatch rates and depth and seasonal distributions to each permit's target species QS allocations. Fleet average bycatch rates for the areas shoreward and seaward of the RCA will be developed from West Coast Observer Program data for 2003-2006. For the purposes of the allocation, it will be assumed that a permit's QS for each target species will be distributed shoreward and seaward of the RCA based on the fleet average for that species, derived from logbook information for 2003-2006. Both the fleet bycatch rates and the distribution of fleet target catch will be stratified by latitudinal area.** ~~The permit's 2003-2006 catch or landings/delivery data will be used to determine the average distribution of that permit's catch by depth, area, and season (strata). Fleet bycatch rates for each depth, area, and season combination (strata) will then be applied to the permit's target species for the strata in order to determine the permit's allocation of overfished species. . [Approach to be reviewed]~~ For **whiting** trips, permit history used for QS allocation will be calculated: **For whiting**, using an allocation period of 1994-2003. Within that period, use relative history and drop the two worst years.[k] **For bycatch species** (if IFQ is used for bycatch species): **Bycatch Option 1:** using history for that species, as it is calculated for whiting **Bycatch Option 2:** using the whiting history as a proxy (i.e. allocation will be pro rata based on the whiting allocation). **Relative history (%).** The permit history for each year is measured as a percent of the fleet total for the year.
.		b Permits with catcher-processor history	~~**Option 1:** Owners of permits with catcher-processor history will develop an allocation schedule by unanimous consent and submit it to the Council for consideration.~~ **Option 2:** Owners of catcher-processor permits will be allocated QS based on permit history[l] for 1994-2003 using relative pounds (no option to drop years).

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Table 3. Full description of the IFQ Alternatives (continued)

	Element	SubElement	
		c Processors (motherships)	Calculate processing history based on allocation period of 1998-2003 (no option to drop years) and use relative pounds.
		d Processors (shoreside)	**For most species**, calculate QS based on the entity's history for the allocation period of 1994-2004 (drop two worst years) and use relative pounds. **For selected species**, calculate QS based on the entity's **Selected Species Option 1:** history for that species. **Selected Species Option 2:** history of a proxy species, using separate calculations for non-whiting deliveries and whiting deliveries. The method described for the Overfished Species Option 2 for permits will be applied to each non-whiting delivery as indicated. A weighted average for all of the deliveries will be used to determine an overfished to target species ratio for the processor. [Approach to be reviewed] For whiting deliveries, allocation of bycatch species will pro rata based on the allocation of whiting. *Note: "selected species" means overfished species for non-whiting deliveries and means bycatch species for whiting deliveries.* **<u>If under A-1.1 there is not IFQ for all species, calculation of QS from non-whiting deliveries will be the same as explained above. For whiting deliveries, only whiting QS will be allocated, using the calculation above.</u>**
A-2.1.4	History for Combined Permits and Other Exceptional Situations		Permit history for combined permits will include the history for all the permits that have been combined. History for illegal landings/deliveries will not count toward an allocation of QS. Landings made under EFPs that are in excess of the cumulative limits in place for the non-EFP fishery will not count toward an allocation of QS. Compensation fish will not count toward an allocation of QS.[m]
A-2.1.5	Initial Issuance Appeals		There will be no Council appeals process on the initial issuance of IFQ. NMFS will develop a proposal for an internal appeals process and bring it to the Council for consideration. Any proposed revisions to fishtickets will undergo review by state enforcement personnel prior to finalization of the revisions.
<u>A-2.1.6</u>	**<u>Reallocation After Initial Issuance</u>**		**<u>Option: when a species that is overfished at the time of the initial allocation is rebuilt, the QS for the species will be reallocated within a sector. Staff has been directed to develop options for Council consideration.</u>**
A-2.2	**Permit/IFQ Holding Requirements and Acquisition (after initial allocation)**		

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Table 3. Full description of the IFQ Alternatives (continued)

	Element	SubElement	
A-2.2.1	Permit/IFQ Holding Requirement		1. Only vessels with limited entry trawl permits will be allowed to participate in the trawl IFQ fishery. 2. All catch taken on a trip will have to be covered with QP within 30 days of the landing for that trip. 3. QP must be transferred to a vessel's QP account in order to be used by that vessel. 4. For any vessel with an overage (catch not covered by QP) there will be no more fishing by the vessel until the overage is covered (extent to be determined)[n]. An overage may be covered by with QP from a subsequent year, however, in order to be considered in compliance with the program the vessel must cover the overage within the 30 day allowance and not exceed the limit specified in the carryover provision.[o] Vessels which have not covered their overage within 30 days must still cover the overage before resuming fishing and, if necessary, may do so by the acquisition of QP from a following year in amounts in excess of the carryover provision.[p] 5. For vessels with an overage, the limited entry permit could not be sold or transferred until the deficit is cleared. 6. **Option:** XXX QP (to be analyzed and amount determined) must be held prior to departure from port.
A-2.2.2	IFQ Annual Issuance	a Start-of-Year Quota Pound Issuance	QP will be issued annually to QS holders based on the amount of QS held. *As specified above, QS holders will have to transfer their QP to a vessel account in order for those QP to be used.*
		b Carryover (Surplus or Deficit)	A carryover allowance will allow surplus QP in a vessel's QP account to be carried over from one year to the next or allow a deficit in a vessel's QP account for one year to be carried over and covered with QP from a subsequent year. A vessel with a QP **surplus** at the end of the current year will be able to use that QP in the following year, up to the limit of the carryover allowance (see below). A vessel with a QP **deficit** in the current year will be able to cover that deficit with QP from the following year without incurring a violation if (1) the amount of QP it needs from the following year is within the carryover allowance (see below), and (2) the QP are acquired within the specified time limit (30 days). *The time limit on acquisition of additional shares to avoid a violation implies that subsequent year QP could only be used to avoid a violation if that deficit (catch overage) occurs toward the end of the year.*[q] **Carryover Allowance**: Limit of up to 10 percent carryover for each species. This applies to both non-overfished species and overfished species. The percentage is calculated based on the total pounds (used and unused) in a vessel's QP account for the current year.[r]
		c Quota Share Use-or-Lose Provisions	None. The need for this provision will be evaluated as part of program review process, and the provision could be added later, if necessary.
		d Entry Level Opportunities	Under the MSFCMA, the Council is required to consider entry level fishermen, small vessel owners, and crew members, and in particular the possible allocation of a portion of the annual harvest to individuals falling in those categories. No special provisions have been identified for analysis, given that new entry is addressed indirectly by allowing crew, captains and others to acquire QS in small increments.

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Table 3. Full description of the IFQ Alternatives (continued)

	Element	SubElement	
A-2.2.3	IFQ Transfer Rules	a Eligible to Owners or Hold	Those eligible to own QS will be restricted to (i) any person or entity eligible to own and control a US fishing vessel with a fishery endorsement pursuant to 46 USC 12108 (general fishery endorsement requirements) and 12102(c) (75% citizenship requirement for entities) and (ii) any person or entity eligible to own or control a US fishing vessel with a fishery endorsement pursuant to sections 203(g) and 213(g) of the AFA.
		b Transfers and Leasing	QP/QS will be transferable and transfers must be registered with NMFS. QS leasing will not be facilitated by NMFS.[s] NMFS will not differentiate between a transfer for a lease and a permanent transfer.
		c Temporary Transfer Prohibition	NMFS may establish temporary prohibitions on the transfer of QS, as necessary to facilitate program administration.
		d Divisibility	The divisibility of QS will be unrestricted and the QP will be transferred in whole pound units (i.e. fractions of a pound could not be transferred)
		~~Liens~~	~~Liens could be placed on QS and QP.~~

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QP = Quota Pounds (issued each year based on quota shares held)

Table 3. Full description of the IFQ Alternatives (continued)

	Element	SubElement	
		e Accumulation Limits (Permit and Own or Control)	Limits may vary by species/species group, areas, and sector. See options for each sector listed in endnote.[t] **Permit Use Limit:** A limit on the QP that may be registered for a single permit during the year. This element will mean that a permit could not have more used and unused quota pounds registered for the permit than a predetermined percentage of the QP pool. Stacking permits to circumvent the limit will not be allowed. **Own or Control Accumulation Limit: A person, individually or collectively, may not control QS or QP in excess of the specified limit (unless exempted by the grandfather clause). QS or QP controlled by a person shall include those registered to that person, plus those controlled by other entities in which the person has a direct or indirect ownership interest, as well as shares that the person controls through other means. The calculation of QS or QP controlled by a person will follow the "individual and collective" rule.** **"Individual and collective" rule: The amount of QS or QP that is computed as applying to a person is equal to the sum of the QS or QP registered to that person and an amount equal to the percentage of holdings by that person in any entity in which that person has an interest.** A grandfather clause will apply to (1) permit accumulation limits and (2) own or control accumulation limits. This clause allows a person, if initially allocated QS in amounts in excess of the cap, to maintain ownership of the QS. The grandfather clause will expire with a change in ownership[u] of the QS. If the owner divests some of the QS, the owner may not reacquire QS or QP in excess of the cap. Once under the cap, the grandfather clause expires and additional QS or QP may be acquired but not in excess of the ownership caps. Note: The Council may limit accumulation of total groundfish QS/QP or QS/QP for a complex, in addition to the species/species group limits.

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Table 3. Full description of the IFQ Alternatives (continued)

	Element	SubElement	
A-2.3	**Program Administration**		
A-2.3.1	Tracking, Monitoring and Enforcement NMFS will explore the possibility of less than 100% at-sea monitoring and report back on the possibility.		For all tracking, monitoring and enforcement options: VMS and advance notice of landings will be required; shoreside there will be an electronic landings tracking system; QP account information for vessels will be tracked electronically and available in the field; and there will be a central QS/QP transaction system that will include a QS lien registry. **Option 1:**100% at-sea compliance monitors/observers (small vessel exception, if feasible). Discarding will be allowed. Allowing discarding will require that the timeliness of discard reporting be improved to match that for landings reporting. Such timeliness will be necessary to track QP usage. Electronic landings tracking (state landings system), advance notice of landings, unlimited landing hours. Some shoreside monitoring. Some costs will be controlled through a requirement that delivery sites be licensed. Site licenses (license criteria to be specified). will ensure that certain standards will be met that will facilitate monitoring and will aid work force planning. Any landing not made at a licensed site will be illegal. The lien registry system will include only essential ownership information. **Option 2:** Same as Option 1 except as follows. No small vessel exception. There will be full retention and 100% shoreside monitoring, so the discard reporting system will not need to be upgraded. The site licensing program will be replaced by a limitation on the ports (ports to be specified) to which deliveries could be made. Costs will be further controlled by limiting landing hours (to be specified). A lien registry system will contain expanded ownership information. **Option 3:** Same as Option 1 except as follows. No small vessel exception. Cameras might be provided as an option for vessels to use in place of compliance observers (feasibility to be determined). Discards will be allowed (except when cameras are used, in which case full retention will be required). Instead of creating an electronic state fish ticket system, a Federal system will be created to track trawl landings. A lien registry system will contain expanded ownership information.
A-2.3.2	Socio-Economic Data Collection[v]		The data collection program will be expanded and submission of economic data will be mandatory.[w] Information on QS transaction prices, including leases, will be included in a central QS ownership registry.
A-2.3.3	Program Costs Some cleanup is needed so that the options all cover the same issues.	a Cost Recovery	**Option 1:** Fees will be used to recover costs associated with management of the IFQ program but not for enforcement or science. The limit on fees will be 3% of ex-vessel value, as specified in the MSFCMA. **Option 2:** There will be full cost recovery. Cost recovery will be achieved through landing fees plus privatization of elements of the management system. In particular, privatization for monitoring of IFQ catch (e.g., industry pays for their own compliance monitors). Stock assessments will not be privatized and the electronic fish ticket system will not be privatized.

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QP = Quota Pounds (issued each year based on quota shares held)

Table 3. Full description of the IFQ Alternatives (continued)

	Element	SubElement	
		b Fee Structure	To be determined. TIQC recommends a fee structure that reflects usage. Option (to be developed) that allows for equitable sharing of observer costs for smaller vessels.
A-2.3.4	Program Duration and Modification		Four-year review process to start four years after implementation. Community advisory committee to review IFQ program performance.
A-2.4	Additional Measures for Processors		**1. Any QS received for processing history as part of the initial allocation will expire after a certain period of time (to be determined prior to final Council action). At that time all remaining QS will be adjusted proportionally so that the total is 100%.** **2. The accumulation limit grandfather clause of Section A-2.2.3.e will not apply for processing history. Regardless of the percent of the total QS designated for processors, processing history will not entitle a person to receive additional total allocation in excess of the accumulation limits.** **3. As needed, a fee will be established to provide financial compensation to processors for demonstrated harm. A process will be established for the demonstration of harm.** *Congressional action might be necessary to establish a fee dedicated to this purpose.* **4. The Adaptive Management allocation and process designated in Section A-3 will be used to compensate processors for demonstrated harm by: auctioning QP to generate funds to provide financial compensation, or providing QP to be directed in a fashion that increases benefits for affected processors.**
A-3	***Adaptive Management***		**In each of the first 10 years of the program, up to 10% of the trawl allocation will be distributed as quota pounds (QP) to create incentives or to compensate in response to unforeseen outcomes from implementing the IFQ program. Examples of unforeseen outcomes include, but are not limited to, unexpected geographic shifts in the distribution of catch or landings, unexpected effects on certain segments of the industry (e.g. processors), or an unexpected barrier to new entry into the fishery. This provision will apply to the overall trawl sector (whiting and non-whiting).** **When the Council determines that an adjustment is needed, it will establish criteria for the distribution of up to 10% of the QP in a manner that will encourage those receiving the QP to undertake the desired activities or otherwise compensate for unexpected effects.** **Note: This approach does not change the option for splits of quota share (QS) that will go to eligible groups.**
A-4	***Pacific Halibut Individual Bycatch Quota (IBQ) – non-retention***		**Option: IBQ for Pacific halibut bycatch in the trawl fishery will be established. Such IBQ will be issued on the basis of a bycatch rate applied to the target species quota shares an entity receives. Area specific bycatch rates may be used for allocation but, if so, the halibut IBQ will be divided by area only as necessary to comply with catch sharing plans.**

IFQ = Individual Fishing Quota, in general (encompasses QS and QP)
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Table 3. Full description of the IFQ Alternatives (continued)

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[a] If a new management unit is established that is not a subset of an existing management unit, the Council will need to take action at that time to develop criteria for QS reapportionment.

[b] The current process for changing the opening dates involves a regulatory amendment developed under the FMP through a framework process. Implementation of an IFQ program should not change this process

[c] The Council authority to establish or modify rockfish conservation areas (RCAs) will not be changed by this alternative.

[d] The allocation among trawl sectors may be determined as through the trawl rationalization EIS or as part of the intersector allocation process. The TIQC recommended a number of options for determining the allocation among trawl sectors. One of these would have based the allocation on fleet history but not have included in the fleet history the history of any vessel not meeting the recent participation requirement. The Council rejected this application of a recent participation requirement to a determination of fleet history. The remaining TIQC options recommend that the division of allocation among trawl sectors be based on the fleet history over the same time periods used to allocate QS. The TIQC further recommends that if different periods are used for different trawl sectors, either (1) calculate the share for each sector based on its IFQ allocation period, then adjust all percentages proportionately such that they sum to 100%; OR (2) use the shortest period common to the allocation formula for all sectors.

If bycatch in the whiting sectors is not managed with IFQs and is pooled at the overall whiting fishery or sector level, allocations of bycatch will be determined through the intersector allocation process. Allocate between the whiting sectors based on: Option 1: pro rata in proportion to the whiting allocation, or Option 2: weighted historical catch formula (for example, in projecting bycatch in the whiting fisheries prior to the start of the season, the GMT uses a four-year weighted average starting with the most recent year: 40%, 30%, 20%, 10%).

[e] For the nonwhiting fishery there is a potential that a vessel might make a targeted whiting trip by accumulating whiting QPs provided to cover whiting bycatch in the nonwhiting fishery. This could create a problem if it occurred during a time when the whiting fishery is closed to control for impacts on ESA listed salmon. Other than that, while not intended, whiting targeted trips using whiting QP intended for whiting bycatch in the nonwhiting fishery might not create a problem. Restrictions might be imposed on the nonwhiting fishery as needed to address concerns ESA concerns.

[f] A whiting QP rollover provision was considered but rejected from further analysis. This provision would have allowed unused QP to be reclassified so that they could be used in any whiting sector.

[g] **In the original TIQC recommendation (May 2007), a third option is to allocate bycatch species at the co-op. However, the IFQ alternative does not include consideration of co-ops. In order to have an internally consistent option, the TIQC recommendation has been interpreted as described in the table.**

[h] "**Processors"**

At-sea processors are those vessels that operate as motherships in the at sea whiting fishery and those permitted vessels operating as catcher-processors in the whiting fishery.

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Table 3. Full description of the IFQ Alternatives (continued)

A shoreside processor is an operation, working on US soil, that takes delivery of trawl-caught groundfish that has not been "processed at-sea" and that has not been "processed shoreside"; and that thereafter engages that particular fish in "shoreside processing." Entities that received fish that have not undergone "at-sea processing" or "shoreside processing" (as defined in this paragraph) and sell that fish directly to consumers shall not be considered a "processor" for purposes of QS/QP allocations.

"Shoreside Processing" is defined as either of the following:

1. Any activity that takes place shoreside; and that involves:
   cutting groundfish into smaller portions; OR
   freezing, cooking, smoking, drying groundfish; OR
   packaging that groundfish for resale into 100 pound units or smaller for sale or distribution into a wholesale or retail market.
2. The purchase and redistribution into a wholesale or retail market of live groundfish from a harvesting vessel.

[i] If a catcher-processor consensus formula is used, recent participation will not be applied.

[j] State landings receipts (fish tickets) will be used to assess landings history for shoreside deliveries and observer data will be used for deliveries to motherships.

[k] State landings receipts (fish tickets) will be used to assess landings history for shoreside deliveries and observer data will be used for deliveries to motherships.

[l] Permit history from observer data

[m] **Stacked permits:** On rare occasions two trawl permits have been assigned to the same vessel. During the time more than one permit is assigned to a single vessel . . . Options: A. Divide landing/delivery history equally among both permits. B. Assign all landing/delivery history to the first permit registered for use with the vessel. This issue will not affect the analysis. Therefore, until the issue is decided Option A will be used for the analysis.

[n] The extent of the prohibition (e.g. whether it include state fishery or fisheries in Alaska) and its duration are to be determined.

[o] This implies that a vessel will be able to avoid a violation by the use of QP from a subsequent year to cover current year catch, only if the overage occurs toward the end of the year, such that subsequent year QP are available before the 30 day grace period has expired.

[p] QP from a subsequent year may not be accessed not until such QP have been issued by NMFS.

[q] Carryover of deficits provides some flexibility to use pounds from a year to cover a deficit from a previous year. Without a carryover provision, a vessel would still need to use pounds in a subsequent year to cover an overage but would incur a violation.

[r] There has been some GMT discussion of a possible need for the QP surpluses carried over to a following year be adjusted proportionally in the following year if the trawl allocation for the following year changes.

[s] QS may be transferred on a temporary basis through private contract (leased) but NMFS will not track lease transfers differently than any other transfer.

[t] **Permit and Own/Control Limit Options:**

1) Shoreside Nonwhiting Sector

Table 3. Full description of the IFQ Alternatives (continued)

Own or Control Accumulation Limit Options:

All Groundfish: 1.5%, 2.1%, 3%, or 5%.

Individual Species:	Sablefish 1.7%.	Dover sole 1.95%.	Petrale sole 3.0%	English sole 7.0%	Sanddabs 27.6%
	Other flatfish 9.1%	Longspine 2.1%	Shortspine 2.0%	Widow 3.6%	Yellowtail 3.5%
	Canary 6.0%	Other Sebastes 6.6%			

Permit Accumulation Limit Options:

For each species: Double the own or control limit

2) Shoreside Whiting Sector

Own or Control Accumulation Limit Options:

5%, 10%, and 15%.

Permit Accumulation Limit Options:

7.5%, 10%, and 12%.

3) Mothership Whiting Sector

Own or Control Accumulation Limits

10%, 15%, and 25%.

50% rule for ownership affiliation.

Permit Accumulation Limit Options

20%, 30%, and 50%.

4) Catcher-Processor Sector

~~The catcher-processor sector will provide a proposal for accumulation limits.~~

Own or Control Accumulation Limit Options:

50%, 55%, or 60%.

Permit Accumulation Limit Options:

65%, 70%, or 75%.

5) Whiting Sectors (Combined Shoreside/Mothership/Catcher-Processor)

The following are cross-sector caps for the entire whiting fishery.

Own or Control Accumulation Limit Options:

15%, 25%, 40%.

Permit Accumulation Limit Options:

25%, 40%, 50%.

[u] **Change in Ownership definition:** For the purpose of the grandfather clause, ownership of a legal entity is defined to change with the addition of a new member to the corporation, partnership or other legal entity. Members may leave without causing the grandfather clause to expire for that entity.

[v] **Data collection, status quo.**

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Table 3. Full description of the IFQ Alternatives (continued)

- Voluntary submission of economic data for LE trawl industry (status quo efforts)
- Voluntary submission of economic data for other sectors of the fishing industry.
- Ad hoc assessment of government costs.

Voluntary Provisions: NMFS will continue to support the PSMFC EFIN project attempts to collect economic and social data useful in evaluating the impacts of fishing and fishing regulations.

Central Registry: The program will include no new central registries for QS owners/lessees or limited entry permit owners/lessees other than that necessary to directly support the IFQ tracking and monitoring system, as maintained by the NMFS Permit Office.

Government Costs: Data on the monitoring, administration, and enforcement costs related to governance of the IFQ program will be collected and summarized on an ad hoc basis.

[w] **Data collection:** Expanded **mandatory** submission of economic data:

- Mandatory submission of economic data for LE trawl industry.
- Voluntary submission of economic data for other sectors of the fishing industry.
- Include transaction value information in a centralized registry of ownership and leases[shaded is added text].
- Formal monitoring or government costs.

Mandatory Provisions: The Pacific Fishery Management Council and the National Marine Fisheries Service shall have the authority to implement a data collection program for cost, revenue, ownership, and employment data, compliance with which will be mandatory for members of the West Coast groundfish industry harvesting or processing fish under the Council's authority. Data collected under this authority will be maintained in a confidential manner and may not be released to any party other than staffs of Federal and state agencies directly involved in the management of the fisheries under the Council's authority and their contractors.

A mandatory data collection program shall be developed and implemented as part of the groundfish trawl IFQ program and continued through the life of the program. Cost, revenue, ownership, and employment data will be collected on a periodic basis (based on scientific requirements) to provide the information necessary to study the impacts of the IFQ program. This data could also be used to analyze the economic and social impacts of future FMP amendments on industry, regions, and localities. This data collection effort is also required to evaluate achievement of goals and objectives associated with the IFQ program. Both statutory and regulatory language shall be developed to ensure the confidentiality of these data. Additional funding (as compared to status quo) will be needed to support the collection of these data.

Any mandatory data collection program shall include: A comprehensive discussion of the enforcement of such a program, including enforcement actions that will be taken if inaccuracies are found in mandatory data submissions. The intent of this action will be to ensure that accurate data are collected without being overly burdensome on industry in the event of unintended errors.

Voluntary Provisions: A voluntary data collection program will be used to collect information needed to assess spillover impacts on non-trawl fisheries.

Central Registry: Information on transaction prices will be included in a central registry of QS owners/lessees. Such information will also be included for LE permit owners/lessees.

Government Costs: Data will be collected and maintained on the monitoring, administration, and enforcement costs related to governance of the IFQ program.

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Whiting Sector Cooperative Alternative

This alternative considers another form of a dedicated access privilege – co-ops – for the whiting fishery. If this alternative is adopted, the Council still also could consider adopting the IFQ alternative for the non-whiting shoreside sector only, or maintain the non-whiting shoreside sector under status quo. Similarly, the Council could adopt co-ops for all or any combination of whiting sectors. There are provisions that will apply to the whiting fishery in general under this alternative, and then specific provisions for the mothership sector, the shoreside sector, and the catcher-processor sector. As described below, all qualified catcher vessels (delivering shoreside or to motherships) will have a choice whether to participate in a co-op or in the non-coop portion of the fishery. For catcher-processors (CP), no formal co-op fishery will be established; instead, a closed class will be created by limiting the number of CP permits, and a co-op may be formed on a voluntary basis among limited entry permit owners in the fishery. Rather than each permit being issued a privilege to harvest a proportion of the allowable catch (as with QS in the IFQ alternative), this alternative allocates a permit's whiting catch history to the co-op to which the permit is assigned (or to the non-coop portion of the fishery).

Table 4. Overview of the co-op alternative.

Co-op Alternative	
B.1	***Whiting Sector Management Under Co-ops***
B-1.1	Whiting Management
B-1.2	Annual Rollovers
B-1.3	Bycatch Species Management
B-1.4	Bycatch Subdivision by Sector
B-1.5	At-sea Observers/Monitoring
B-1.6	Sector Allocations
B-2	***Co-ops for Catcher Vessels Delivering to Motherships (CV(MS))***
B-2.1	Catcher Vessel (MS) Endorsement and Catch History Calculation
B-2.2	Mothership (MS) Permits
B-2.3	Annual Registration
B-2.4	Co-op Formation
B-2.5	Co-op Allocation
B-2.6	Non-co-op Allocation
B-2.7	Movement between Motherships
B-2.8	Mutual Agreement Exception
B-2.9	Temporary Transfer of Allocation to CV(MS) and nonCV(MS) Endorsed Permits
B-2.10	CV(MS) Permit Combination to Achieve a Larger Size Endorsement
B-2.11	Accumulation Limits
B-2.12	MS Permit Ownership

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Co-op Alternative	
B-2.13	Mothership Permit Transfer
B-2.14	Mothership Withdrawal
B-3	***Co-ops for Catcher Vessels Delivering to Shoreside Processors***
B-2.1	Catcher Vessel (SS) Endorsement and Catch History Calculation
B-2.2	Shoreside Processor (SSP) Permits
B-2.3	Annual Registration
B-2.4	Co-op Formation and Structure
B-2.5	Co-op Allocation
B-2.6	Non-co-op Allocation
B-2.7	Movement between Motherships
B-2.8	Mutual Agreement Exception
B-2.9	Temporary Transfer of Allocation to CV(SS) and nonCV(SS) Endorsed Permits
B-2.10	CV(SS) Permit Combination to Achieve a Larger Size Endorsement
B-2.11	Accumulation Limits
B-2.12	SS Permit Transfer
B-2.13	Shoreside Processor Withdrawal
B-2.14	Permit Qualification for a Catcher Vessel Shoreside [CV(SS)] Endorsement
B-4	***Co-ops for Catcher-Processors***
B-4.1	Catcher-Processor (CP) Endorsement
B-4.2	Annual Registration
B-4.3	Co-op Formation
B-4.4	Co-op Allocation
B-4.5	CP Permit Combination to Achieve a Larger Size Endorsement

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Whiting Sector Management Under Co-ops

Summary

The existing allocation of whiting between the shoreside whiting, mothership, and CP sectors will remain under this alternative (42%, 24%, and 34%, respectively). Within each sector, this allowable catch will be assigned each year to co-ops or to the non-coop portion of the fishery. Co-ops will then be responsible for monitoring and enforcing the catch of the organization and of co-op members, and NMFS will monitor the catch of each sector and in the non-coop fishery, as well as the overall catch by all three sectors. NMFS will make the following closures if limits are reached: close a co-op fishery if co-ops have collectively reached their limit; close the non-coop fishery if it reaches its limit; and/or close the combined co-op and non-co-op fishery if that whiting sector reaches its limit.

Provisions also will address the catch of overfished species (widow, canary, and darkblotched rockfish) and salmon in the whiting fishery. For bycatch limits (hard caps) on overfished species, the Council is considering whether or not to make these sector-specific. If the latter is chosen, this will be done proportionately relative to the whiting allocation. NMFS will also close the whiting fishery, or particular sectors, if a bycatch limit were reached.

Given the high levels of monitoring already in place in the whiting fishery, only moderate changes are expected to be required to implement this alternative. For the shoreside whiting fishery, at-sea observers/monitoring will be increased to 100 percent to enforce catch accounting requirements. For the at-sea fishery, 100 percent coverage aboard mothership and catcher-processors will continue. For some coverage, it may be possible for cameras to be used in place of observers.

Whiting Management

Under the co-op options for the mothership and shoreside sectors, catcher vessel permits will be endorsed for deliveries to these sectors and amounts of history assigned.

The whiting catch history calculation for each mothership endorsed catcher vessel permit [CV(MS)] and shoreside endorsed catcher vessel permit [CV(MS)] will be assigned to a pool for the co-op in which the permit will participate or a pool for the mothership or shoreside non-co-op fishery. Co-ops are responsible for monitoring and enforcing the catch limits of co-op members. NMFS will monitor the catch in the non-co-op fishery, the co-op fisheries and the overall catch of all three sectors. NMFS will close these fisheries when their catch limits have been achieved.

Annual Whiting Rollovers

Whiting Rollover Option 1. There **will not** be a **rollover** of unused whiting from one whiting sector to another.

Whiting Rollover Option 2. Each year rollovers to other sectors may occur if sector participants are surveyed by NMFS and no participants intend to harvest remaining sector allocations in that year. Current provisions for NMFS to re-allocate unused sector allocations of whiting (from sectors no longer active in the fishery) to other sectors still active in the fishery will be maintained (see 50CFR660.323(c) – Reapportionments).

Bycatch Species Management

For the foreseeable future the whiting fishery will be managed under bycatch limits (hard caps) for widow, canary, and darkblotched rockfish. The ESA-listed salmon bycatch management measures, that is, the 11,000 Chinook threshold, 0.05 rate threshold, and triggered 100 fathom closure, will also continue to be in place. The goal of bycatch management is to control the rate and amounts of rockfish and salmon bycatch to ensure each sector is provided an opportunity to harvest its whiting allocation.

Bycatch Subdivision by Sector

Subdivision Option A: Do not subdivide bycatch species.
Subdivision Option B: Subdivide bycatch species allocation among each of the whiting sectors as specified in the section below on allocation.

For Subdivision Option A (No Bycatch Subdivision) if bycatch species are not allocated among the sectors, then

- **Bycatch Management Option 1:** all sectors and co-ops will close as soon as the whiting fishery bycatch cap is reached for one species; a controlled pace may be established if the sectors choose to work together cooperatively, potentially forming an intersector/interco-op cooperative.
- **Bycatch Management Option 2:** Same as Option 1, including the potential for forming co-ops, except there will be seasonal releases of bycatch allocation.

  At the outset, it is envisioned that the seasonal approach will be used to manage widow rockfish bycatch; for canary rockfish and darkblotched rockfish, status quo management will be maintained (i.e., no sector allocation and no seasonal apportionment).

  A seasonal release bycatch management program will be implemented through regulation. For reference, a similar program is used to manage halibut bycatch in NPFMC-managed flatfish and Pacific cod fisheries, see 50CFR679.21(d).

  In practice, seasonal releases protect the next sector entering the fishery. For example, a May 15-June 15 release will be used by the catcher-processors and motherships, but it protects the shoreside fishery; the June15-September release will be used by shoreside and whatever catcher-processors and motherships are still fishing whiting, and to protect a fall at-sea season after September 15; the final release in September will again be shared by the catcher-processors and motherships, assuming shoreside is done.

  For example:

  1. No sector bycatch allocations.
  2. Status quo for canary and darkblotched rockfish; i.e., no seasonal or sector allocation.
  3. May 15 - June 15; 40% of widow hard cap released.
  4. June 15 - August 31; an additional 45% of widow hard cap released.
  5. Sept. 1 - Dec. 31; final 15% of widow hard cap released.

6. Once a seasonal release of widow rockfish is reached, the whiting fishery is closed to all three sectors for that period. The fishery re-opens to all three sectors upon release of the next seasonal release of widow rockfish.
7. Unused amounts from one seasonal release rollover into subsequent release periods.

(note–percentages are for illustration purposes only, actual release percentages will be developed through the PFMC process)

For Subdivision Option B (Bycatch Subdivision).

- **Rollover Option 1**: If each sector has its own allocation of bycatch, unused bycatch may be rolled over from one sector to another if the sector's full allocation of whiting has been harvested or participants in the sector do not intend to harvest the remaining sector allocation.
- **Rollover Option 2**: **Rollovers are not allowed.**

At-sea Observers/ Monitoring

- **Shoreside Whiting Fishery:** Increase to 100% to enforce catch accounting requirements.
- **At-sea Whiting Fishery:** 100% coverage aboard mothership and catcher-processors will continue.

For some coverage, cameras may be used in place of observers (feasibility to be determined).

Co-ops for Catcher Vessels Delivering to Motherships

The following is a description of the co-op alternative for catcher vessels delivering to motherships.

The mothership whiting fishery will be managed in two modes:

1. Co-op Fishery: Catcher vessels in co-op(s) delivering to motherships (CV(MS))
2. Non-co-op Fishery: Seasonal management (closure on attainment of the allocation) for those not participating in co-ops

Catcher vessels with a CV(MS) co-op endorsement will **annually** choose, **by a set date**, the mode in which they will fish during a fishing year and commit to that mode for the entire fishing year.

CV(MS) Endorsement. Permits with a qualifying history will be designated as CV(MS) permits through the addition of an endorsement to their limited entry groundfish permit.

Qualifying for a CV(MS) Endorsement. A limited entry permit will qualify for a CV(MS) endorsement if it has a total of more than 500 mt of whiting deliveries to motherships from

Qualification Option A: 1998 through 2004

Qualification Option B: 1994 through 2003

Initial calculation to be used by NMFS to determine the distribution to co-op and non-co-op fishery pools. A CV(MS) permit calculated catch history will be based on

Allocation Option A: its best 6 out of 7 years from 1998 through 2004

Allocation Option B: its best 9 out of 11 years from 1994 through 2004

Allocation Option C: its best **5** out of **6** years from 1998 through 2003

Allocation Option D: its best 8 out of **10** years from 1994 through 2003

For the purpose of the endorsement and initial calculation, catch history associated with the permit includes that of permits that were combined to generate the current permit.

Mothership (MS) Permits. The vessel owners of qualifying motherships will be issued MS permits. In the case of bareboat charters, the charterer of the bareboat will be issued the permit. Only vessels for which such permits are held may receive at-sea deliveries from catcher vessels. A qualifying mothership is one which processed

at least 1,000 mt of whiting in each of any two years from 1998 through 2004

MS permits will be transferable and there will be no size endorsements associated with the permit. A vessel may not harvest whiting and operate as a mothership in the same year. MS permits may only be used for processing by one vessel per year. Exclusionary language will be added to indicate that a vessel that has left US fisheries will not be allowed to return.

Annual Registration. Each year MS and CV(MS) permit holders planning to participate in the mothership sector must register with NMFS. At that time they must identify which co-op they will participate in or if they plan to participate in the non-co-op fishery ~~so that NMFS can make appropriate distributions to the co-op and non-co-op fisheries~~.

Co-op Formation. Co-ops will be formed among CV(MS) permit owners.

Option 1 (Multiple Coops): In the first year of the program, permit owners choosing to participate in a co-op must form those co-ops ~~multiple co-ops must be formed~~ based on the mothership where the CV permit holders delivered the majority of their most recent years' catch. **A separate co-op must be formed for each mothership**

to which deliveries were made. There can be only one catcher vessel co-op for each mothership. Co-op agreements will be submitted to NMFS. In subsequent years, multiple coops are required to be formed based on the processor where CV permit holder delivered the majority of their most recent years' catch.

Option 2: Multiple coops are not required. Catcher vessels may organize a single coop or multiple coops of like-minded catcher vessels. Vessels within the coop(s) will have separate contracts with the processor to whom they are delivering. Permit owners choosing to participate in a coop must register annually with NMFS and express their intent to be a member of the coop at a date certain prior to the start of the fishery. In the first year of the program, permit holders are required to deliver their percentage of the coop allocation to the mothership where they delivered the majority of the most recent years' catch.

Coop agreements must stipulate that catch allocations to members of the coop be based on their catch history calculation distribution to the coop by NMFS ("The Golden Rule")

Annual Allocation to Co-ops and the Non-co-op Fishery.

Co-op Allocation. Each year NMFS will determine the ~~distribution~~ percent of the Mothership Sector's harvest allocation to be given to each co-op based on the catch history calculation of CV(MS) permits registered to participate in the co-op that year. **NMFS does not allocate to the individual permit holder, rather, allocates an aggregate amount of harvest tonnage annually to the coop, based on the catch histories associated with the members of the coops.**

Non-co-op Allocation. Each year NMFS will determine the distribution to be given to the non-co-op fishery based on the catch history calculation of permit holders registered to participate in that fishery.

Movement between Motherships.

Option A: Each year, CV(MS) permit owners will choose between fishing in the non-co-op fishery or delivering to the same mothership that they most recently delivered the majority of their whiting catch in the last calendar year in which they participated. However, if a CV(MS) permit participated in the non-co-op fishery in the previous year, or did not participate in the mothership whiting fishery, it is released from its obligation and may deliver to any mothership in a subsequent year. In the first year of the program, the CV(MS) permit owner's choice will be between delivering in the non-co-op fishery and making co-op deliveries to the licensed mothership to which the permit made a majority of its whiting deliveries in the last calendar year in which they participated.

Option B: CV(MS) permit owners may move between motherships **on an annual basis without having to participate in the non-coop fishery in a previous year.** (If this option is selected, conforming changes will be made to all other sections of the mothership co-op alternative.)

Mutual Agreement Exception. By mutual agreement of the CV(MS) permit owner and mothership to which the permit is obligated, and on a year-to-year basis, a permit may deliver to a licensed mothership other than that to which it is obligated. Such an agreement will not change the permit's future year obligation to the mothership (i.e., the vessel will still need to participate in the non-co-op fishery for one year in order to move from one mothership to another).

Temporary Transfer of Allocation to CV(MS) and nonCV(MS) Endorsed Permits. ~~Owners of valid limited entry permits that are members of co-ops~~ **CV(MS) permit owners** are permitted to transfer co-op allocations amongst other coop members. Such inter- or intra-co-op transfers must deliver co-op shares to the mothership to which allocation is obligated unless released by mutual agreement. Also, a co-op allocation may be harvested by any catcher vessel holding a valid limited entry trawl permit (including one that does not have a CV(MS) endorsement). Whiting allocations are not permanently separable from a limited entry permit. Allocations may not be transferred from the mothership sector to another sector.

CV(MS) Permit Combination to Achieve a Larger Size Endorsement. In general, when a CV(MS) endorsed permit is combined with another permit, the resulting permit will be CV(MS) endorsed, except when the CV(MS) permit is combined with a CP permit. Specifically, a CV(MS) endorsed permit that is combined with a limited entry trawl permit that is not CV(MS) endorsed or one that is CV(Shorside) [CV(SS)] endorsed will be reissued with the CV(MS) endorsement. If the other permit is CV(SS) endorsed, the CV(SS) endorsement will also be maintained on the resulting permit. However, CV(MS) and CV(SS) catch histories will be maintained separately on the resulting permit and be specific to participation in the sectors for which the catch histories were originally determined. If a CV(MS) permit is combined with a CP permit, the CV(MS) endorsement and history will not be reissued on the combined permit. The size endorsement resulting from permit combinations will be determined based on the existing permit combination formula.

Accumulation Limits.

MS Permit Ownership: No individual or entity owning a MS permit(s) may process more than **20%, 30% or 50%** of the total mothership sector whiting allocation.

CV(MS) Permit Ownership: No individual or entity may own CV(MS) permits for which the allocation totals greater than **10%, 15%, or 25%** of the total mothership sector whiting allocation.

Mothership Permit Transfer. If a mothership transfers its MS permit to a different mothership or different owner, the CV(MS) permit obligation remains in place **and transfers with the MS permit to the replacement mothership** unless **the obligation is** changed by mutual agreement or participation in the non-co-op fishery.

Mothership Withdrawal. If a mothership does not participate in the fishery and does not transfer its permit to another mothership or mutually agree to transfer delivery to another mothership, the CV(MS) permit holders obligated to that mothership may participate in the non-co-op fishery.

If a mothership does not qualify for an MS permit in the first year of the program, the vessels which delivered to that mothership in the previous year may deliver to the qualified mothership to which it last delivered its majority of catch or participate in the non-co-op fishery.

Co-ops for Catcher Vessels Delivering to Shoreside Processors

Management

The shoreside whiting fishery will be managed in two modes:

1. Co-op Fishery: Catcher vessels in co-ops delivering to shoreside processors [CV(SS)]
2. Non-co-op Fishery: Seasonal management (close on attainment of allocation) for those not participating in co-ops. Vessels in the non-co-op fishery will be prohibited from forming a separate co-op but may deliver to any processor. Quota attached to vessels in the non-co-op fishery will not be available to vessels in any co-op but will be pooled – i.e., will be available to any non-co-op vessel.
3. Incidental Harvest: Whiting harvested incidentally in the nonwhiting shoreside fishery may be processed by any shoreside processor.

Catcher vessels with a CV(SS) co-op endorsement will choose the mode in which they will fish during a fishing year and commit to that mode for the entire fishing year.

CV(SS) Endorsement

Permits with a qualifying history will be designated as CV(SS) permits through the addition of an endorsement to their limited entry groundfish permit.

Qualifying for a CV(SS) Endorsement. A limited entry permit will qualify for a CV(SS) endorsement if it has a total of more than 500 mt of whiting deliveries to shoreside processors from **Qualification Option A:** 1998 through 2004

Qualification Option B: 1998 through 2003
Qualification Option C: 1994 through 2004
Qualification Option D: 1994 through 2003
Qualification Option E: 2001 through 2003

Initial calculation to be used in determining NMFS distribution to co-op and non-co-op fishery pools. A CV(SS) permit calculated landings history will be based on

Allocation Option A: its best 6 out of 7 years from 1998 through 2004
Allocation Option B: its best 9 out of 11 years from 1994 through 2004
Allocation Option C: its best 5 out of 6 years from 1998 through 2003
Allocation Option D: it's best 9 out of 10 years from 1994 through 2003

For the purpose of the endorsement and initial calculation, landing history associated with the permit includes that of permits that were combined to generate the current permit.

Shoreside Processor (SSP) Permits.

An initial co-op qualified shoreside processor corporation is one that processed at least 1,000 mt of whiting in each of any two years from 1998 through 2004. Only these processor corporations are eligible to receive fish from whiting cooperatives in the first two years of the program. Thereafter, any processing corporation could be eligible to receive fish from vessels in a whiting cooperative, subject to the other provisions of this plan. Processors without SSPs may receive whiting from participants in the non-co-op fishery and whiting harvested incidentally in the nonwhiting fishery at any time, including within the first two years of the program.

A shoreside processor is an operation, working on US soil, that takes landings of trawl-caught groundfish that has not been processed at-sea or previously processed shoreside; and that thereafter subjects those groundfish to shoreside processing. Entities that

received fish that have not undergone at-sea processing or shoreside processing (as defined in this paragraph) and sell that fish directly to consumers shall not be considered a processor for purposes of the shoreside co-op program.

"Shoreside Processing" is defined as any activity that takes place shoreside; and that involves:

a) cutting groundfish into smaller portions; OR
b) freezing, cooking, smoking, drying groundfish; OR
c) packaging that groundfish for resale into 100 pound units or smaller for sale or distribution into a wholesale or retail market.

Annual Registration.

Each year SSP and CV(SS) permit holders planning to participate in the shoreside sector must register with NMFS. At that time CV(SS) permit holders must identify which co-op they will participate in or if they plan to participate in the non-co-op fishery so that NMFS can make appropriate distributions to co-op(s) and the non-co-op fishery.

Co-op Formation and Structure.

Co-ops will be formed among CV(SS) permit owners. Multiple co-ops may be formed and new co-ops may be formed each year, prior to annual registration. Two or more vessels may form a co-op.

Co-op agreements will be submitted to NMFS. Co-op agreements must distribute catch allocations to members based on the permit specific history calculation that NMFS used to distribute allocation to the co-op.

During the first two years of co-op formation, permit owners that join a co-op shall be required to deliver their whiting catches to the co-op qualified processors that were the basis of their landing history during the period ***[DATE RANGE TO BE DETERMINED]*** on a pro rata basis. Determination of the processor(s) to which a permit owner is obligated will take into account any successors in interest (see following paragraph). Transfers may take place within the co-op between permit holders to allow a permit holder to make deliveries exclusively to one processor so long as the total allocation received by the co-op, based on the permit holders that are members thereof, is distributed between the various co-op qualified processors on a pro rata basis based on the landing history of the members of the co-op during the period ***[SAME AS PREVIOUS DATE RANGE]***. Thereafter, once a CV(SS) permit has participated in the non-co-op fishery for ***[OPTION: 1 to 5]*** consecutive years, it is released from its delivery obligations to the processor(s) that were the basis of its history, and may join any of the various co-ops, or join with other permit holders who have also been released from delivery obligations to form a new co-op, and deliver to any shoreside processor in the subsequent years after the SSPs have expired.

Processor Successor In Interest. In determining the processor to whom a permit owner that participates in a co-op is required to deliver in the first two years of the program, a processor's successor in interest will be taken into account. If a processor's assets were purchased and the landing history expressly identified as an asset in the purchase agreement, then any permit owner obligation based on those landings will accrue to the processor making the purchase. For landings history associated with a defunct or non-qualifying processor, that portion of a permit's allocation will be linked to the permit's initially assigned landing history on a pro-rata basis.

Co-op Allocation

Each year NMFS will determine the distribution to be given to each co-op based on the landing history calculation of CV(SS) permits registered to participate in the co-op that year. In addition, NMFS will determine the landing history linking each co-op to each processor, if any.

Non-co-op Allocation

Each year NMFS will determine the distribution to be given to the non-co-op fishery based on the landing history calculation of permit holders registered to participate in that fishery. The whiting allocation for the non-co-op segment shall be in proportion to the permit history of non-co-op participants, relative to the co-op participants. That allocation shall be available to all CV(SS) endorsed permit holders who have registered to participate in the non-co-op fishery that year.

Mutual Agreement Exception.

By mutual agreement of the CV(SS) permit owner and shoreside processor to which the permit's catch is obligated, a CV(SS) vessel may deliver to a shoreside processor other than that to which it is obligated. The transfer may be temporary or permanent. In either case the vessels catch taken under that permit will continue to be obligated to its permanent processor (which is the transferor processor if the transfer is temporary or the transferee processor if the transfer is permanent) subject to the terms of the transfer agreement. To make an additional change from its processor link (a change that is not by mutual agreement) the permit will need to be used in the non-co-op fishery for the prescribed time.

Temporary Transfer of Quota Shares to CV(SS) and non-CV(SS) Endorsed Permits.

Owners of valid limited entry permits that are members of co-ops are permitted to transfer co-op allocation amongst members of other co-ops or their own co-op. Such inter- or intra co-op transfers must deliver co-op allocation (shares) to the shoreside processor to which the shares are obligated unless released by mutual agreement. Co-op shares may be harvested by any catcher vessel holding a valid trawl limited entry permit (including one that does not have a CV(SS) endorsement provided it has become a member of a co-op and has acquired the right to harvest co-op shares via lease or other contract with a CV(SS)co-op member.). Whiting co-op shares are not permanently separable from a trawl limited entry permit. Transfers of co-op shares from the Shoreside sector to other sectors in any form are prohibited.

CV(SS) Permit Combination to Achieve a Larger Size Endorsement

In general, when a CV(SS) endorsed permit is combined with another permit, the resulting permit will be CV(SS) endorsed, except when the CV(SS) permit is combined with a CP permit. Specifically, a CV(SS) endorsed permit that is combined with a limited entry trawl permit that is not CV(SS) endorsed or one that is CV(MS) endorsed will be reissued with the CV(SS) endorsement. If the other permit is CV(MS) endorsed, the CV(MS) endorsement will also be maintained on the resulting permit. However, CV(SS) and CV(MS) histories will be maintained separately on the resulting permit and be specific to participation in the sectors for which the histories were originally determined. If a CV(SS) permit is combined with a CP permit, the CV(SS) endorsement and history will not be reissued on the combined permit. The size endorsement resulting from permit combinations will be determined based on the existing permit combination formula.

Accumulation Limits.

CV(SS) Permit Ownership: No individual or entity may own CV(SS) permits for which the allocation totals greater than ***15***% of the total whiting shoreside allocation.

SSP Permit Transfer.

If a shoreside processor transfers its SSP permit to a different shoreside processor or different owner, the CV(SS) permit's obligation remains in place unless changed by mutual agreement or participation in the non-co-op fishery. (Since SSP permits are only in effect for the first two years of the program, this section is also in effect only for the first two years of the program.)

Shoreside Processor Withdrawal.

If a qualified shoreside processor does not participate in the whiting fishery in any year in which the co-op fishery is in operation, the CV(SS) permit holders that will otherwise be obligated to deliver to that shoreside processor shall be free to deliver to any other shoreside processor that year.

Co-ops for Catcher-Processors

Catch by the catcher-processor sector will be controlled primarily by closing the fishery when a constraining allocation is reached. As under status quo, vessels may form co-ops to achieve benefits that result from a slower paced more controlled harvest. The main change from status quo is the creation of a catcher-processor endorsement that will close the catcher-processor fishery to new entrants.

Catcher-Processor (CP) Endorsement. The class of CP endorsed permits (CP permits) will be limited by an endorsement placed on a limited entry permit. Limited entry permits registered to qualified catcher-processor vessels will be endorsed as CP permits. A qualified permit is one that harvested and processed in the catcher-processor sector of the Pacific whiting fishery sometime from 1997 through ~~2006~~ **2004.** Only vessels with a CP limited entry permit will be allowed to process whiting at-sea. Limited entry permits with CP endorsements will continue to be transferable.

Annual Registration. No annual registrations or declarations are required.

Co-op Formation. As under status quo, co-op(s) will be formed among holders of permits for catcher-processors. Participation in the co-op will be at the discretion of those permit holders. If eligible participants choose to form a co-op, the catcher-processor sector will be managed as a private voluntary cooperative and governed by a private contract that specifies, *inter alia*, allocation of whiting among CP permits, catch/bycatch management, and enforcement and compliance provisions. Since NMFS will not establish an allocation of catch or catch history among permits, if any permit holder decides not to participate, the potential co-op benefits will diminish and a race for fish is likely to ensue. Similarly, if more than one co-op forms, a race for fish could likely ensue, absent an inter co-op agreement.

Co-op Allocation. There will be no government directed subdivision of the catcher-processor sector quota among participants. The catcher-processor sector allocation will be divided among eligible catcher-processor vessels (i.e., those catcher-processor vessels for which a CP permit is held) according to an agreed catcher-processor cooperative harvest schedule as specified by private contract.

Annual Reporting Requirements: The CP cooperative will submit an annual report to the Pacific Fishery Management Council at their November meeting. The report will contain information about the current year's CP fishery, including the CP sector's annual allocation of Pacific whiting; the CP cooperative's actual retained and discarded catch of Pacific whiting, salmon, rockfish, groundfish, and other species on a vessel-by-vessel basis; a description of the method used by the CP cooperative to monitor performance of cooperative vessels that participated in the CP sector of the fishery; and a description of any actions taken by the CP cooperative in response to any vessels that exceed their allowed catch and bycatch. The report will also identify plans for the next year's CP fishery, including the companies participating in the cooperative, the harvest agreement, and catch monitoring and reporting requirements.

CP Permit Combination to Achieve a Larger Size Endorsement. A CP permit that is combined with a limited entry trawl permit that is not CP endorsed will result in a single

CP permit with a larger size endorsement (a CV(MS) or CV(SS) endorsement on one of the permits being combined will not be reissued on the resulting permit). The resulting size endorsement will be determined based on the existing permit combination formula.

Quantitative Analysis of Qualification and Allocation Rules

Earlier versions of this document were presented to the TIQC on May 2-3,2007 and to the GAC on May 15-16, 2007. This version incorporates changes based on feedback received at those meetings.

The following is a table of contents for the quantitative analysis in this document.

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Results Summary

Recent Participation to Qualify for Quota Share (QS) Allocation

The results on pages 1 through 5 generally show that none of the recent participation criteria selected for analysis has much effect on the number of permits eligible to receive catch a history-based portion of the initial allocation. Detailed results for the individual items are described below.

1a. Shoreside Nonwhiting Recent Participation (p. 2)

Six of the 163 non-buyback permits with some landings in the shoreside nonwhiting fishery during 1994-2003 had no groundfish deliveries during the 1998-2003 recent participation period. Three permits had no yellowtail deliveries during the period. More than zero but fewer than three (“W”) had no arrowtooth or nearshore rockfish landings.

Seven permits would fail to qualify under a five-delivery minimum threshold. Of the seven permits that would fail to qualify, three recorded catch in 2006.

Ten permits would be disqualified given a ten-landing threshold, including five permits that were active in 2006.

1b. Shoreside Whiting Recent Participation (p. 3)

Fewer than three ("W") of the 58 permits with landings between 1994 and 2003 in the shoreside whiting sector are affected by any of the recent participation thresholds. At least one permit ("W") active in 2006 had no shoreside whiting catch history during the entire 1994-2003 period, and at least one permit had fewer than five deliveries during the period.

1c. At-sea Whiting Catcher Vessels Recent Participation (p. 3)

None of the 32 permits with 840 million total lbs. of groundfish deliveries in the at-sea whiting catcher vessel sector are affected by any of the delivery thresholds below 10 deliveries during the period. None of the permits active in 2006 is affected by any of the delivery thresholds shown.

1d. Motherships Recent Participation (p. 4)

Of eleven total MS participating in the at-sea whiting fishery between 1994 and 2006, ten took some deliveries between 1994 and 2004, and six were active during 1998-2003, 1999-2004, and 2000-2003. One MS received no deliveries during 1994-2004, but did in 2006. Five of the 11 MS took no deliveries in 1998-2003, 1999-2004, or 2000-2003.

With a 10,000 mt threshold, five of the eleven MS would fail to qualify during the periods 1994-2006, 1994-2004, 1998-2003, and 1999-2004; seven would not qualify based on the shorter 2000-2003 period. Of these seven MS, two were active in the 2006 fishery.

1e. Catcher Processors Recent Participation (p. 4)

Of ten whiting CP permits in the fishery from 1994-2006, nine participated during 1998-2003, and all nine had at least 40 whiting "deliveries" during the period (one CP showed no activity after 1997). Only one of the ten total CPs would be disqualified with any threshold below about 40 deliveries during the 1998-2003 period. Two would not qualify if at least 50 deliveries were required, and four would not if at least 100 deliveries were required.

Quota Share Allocations to Permits (begins on p. 6)

Results are summarized below for one selected species group for each of the three sectors. These represent a subset of the tables and graphs shown on pages 9 through 29. Results for all species and sectors generally follow the patterns indicated below.

Summary of the key elements of the quota share allocation formula:

1. *Allocation is based on catch history (1994-2003) with provisions to drop the three worst years for the non-whiting sector, and drop the two worst years for the whiting sectors. There are 168 existing non-CP permits with at least some catch history from 1994 to 2003.*
2. *Catch history is measured using relative pounds.*
3. *Recent participation during 1998-2003 is required to receive an allocation based on catch history. There are 162 total non-CP permits with some catch history during 1998-2003. The analysis assumes recent participation of at*

least five landings or deliveries is required. 161 total non-CP permits qualify under this criterion.

4. *The buyback permits' catch share is equally divided among the 169 valid groundfish trawl permits (No recent participation requirement).*
5. *100% of the QS is allocated to permits (No processor allocation).*

Summary of the main results of the quota share allocation formula:

1. *Points above* 45° line indicate allocation is greater than 2006 revenue; p*oints below* 45° line indicate allocation is less than 2006 revenue.
2. *Allocations generally bear little resemblance to 2006 experience.*
3. *Dropping years tends to be a disadvantage for permits that have a consistent catch history.*
4. *Permits that gain compared to 2006 tend to be those with relatively small or sporadic catch histories*
5. *Dividing buyback permits' share equally ensures that all permits get at least some QS for all species.*

2a. Shoreside Nonwhiting Catcher Vessel Permits (p. 9)

Shoreside Nonwhiting Sector: Total Groundfish

The top panel shows 123 permits landed a total of $23.65 mil. revenue in the non-whiting sector in 2006. Average is $192,284 per permit. Under the allocation formula (Dropping 3 yrs catch history, 1994-2003), 169 permits would divvy up the $23.65 mil., so average falls to $139,946. Of those 169 permits, 99 would gain revenue compared with 2006. On average the winners gain $81,419 (+160%). Seventy permits would get less revenue under the allocation formula than they landed in 2006. The "losers" average revenue would drop by $115,150 (-43%). Average 2006 revenue of "losers" was considerably higher than average 2006 revenue of the "winners". Dropping years tends to favor permits with relatively sporadic participation at the expense of participants with more consistent catch history.

The upper panel also shows that 169 eligible permits divvy up the buyback permits' catch portion, which amounts to $10.5 million in terms of 2006 landings. Each permit receives $62,038. Thirteen (13) of these permits receive no allocation of nonwhiting groundfish QS other than an equal share of the buyback portion.

Bottom panel shows geographic distribution of revenue shift, based on "principle port". Biggest losers are Astoria, Eureka and Coos Bay. Biggest winners are Seattle Area, San Francisco Area, Westport, Princeton and Moss Landing. Many ports gain some revenue mostly via the equal distribution of the buyback portion.

Graph shows few permits with the same allocation formula revenue as 2006 landed revenue (i.e., no obvious clustering around the 45° line). It is difficult to see any pattern. Many permits with no 2006 revenue in the sector get allocations. Some permits with high revenues in 2006 get quite low allocations.

2b. Shoreside Whiting Catcher Vessel Permits (p. 22)

Shoreside Whiting Sector: Pacific whiting

Top panel shows 35 permits landed $13 mil. revenue from whiting in the shoreside whiting sector in 2006. Average was $373,671 per permit. Under the allocation formula (Dropping 2 yrs catch history, 1994-2003), 169 permits would divvy up the $13 mil., so average falls to $77,387. Of those 169 permits, 146 would gain revenue compared with 2006. These 146 "winners" would gain $30,692 (+115%) on average. 23 permits would get less revenue under the allocation formula than they landed in 2006. The "losers" average revenue would drop by $194,827 (-49%). Average 2006 revenue of "losers" was considerably higher than average 2006 revenue of the "winners". Dropping years tends to favor permits with relatively sporadic participation at the expense of participants with more consistent catch history.

The upper panel also shows that 169 eligible permits divvy up the buyback permits' catch portion, which amounts to $1.016 million in terms of 2006 landings. Each permit receives $6,012. One hundred eleven (111) of these permits receive no allocation of shoreside whiting QS other than an equal share of the buyback portion.

Bottom panel shows biggest losers are Ilwaco, Westport, Astoria and Coos Bay. Biggest winners are "Not Indicated" (i.e., no whiting history so no whiting principle port) and Seattle. Southern ports gain a relatively small amount of revenue via equal distribution of the buyback portion.

Graph shows no relationship between 2006 landed revenue and allocation formula revenue (i.e., no clustering around the 45° line). Many permits with no 2006 revenue in the sector get allocations. Some permits with revenues in 2006 get very low allocations.

2c. At-sea Whiting Catcher Vessel Permits (p. 26)

At-sea Whiting CV Sector: Pacific whiting

Top panel shows 20 permits fishing in the at-sea whiting sector landed $7 mil. revenue from whiting in 2006. Average $347,619 per permit.

Under the allocation formula (Dropping 2 yrs catch history, 1994-2003), 169 permits would divvy up the $7 mil., so average falls to $41,138. Of those 169 permits, 155 would gain revenue compared with 2006. These 155 "winners" would gain $13,512 (+145%) on average. 14 permits would get less revenue under the allocation formula than they landed in 2006. The "losers" average revenue would drop by $149,495 (-38%). Average 2006 revenue of "losers" was considerably higher than average 2006 revenue of the "winners". Dropping years tends to favor permits with relatively sporadic participation at the expense of participants with more consistent catch history.

The upper panel also shows that 169 eligible permits divvy up the buyback permits' catch portion, which amounts to $438,338 in terms of 2006 landings. Each permit receives $2,594. One hundred thirty seven (137) of these permits receive no allocation of at-sea whiting QS other than an equal share of the buyback portion.

Bottom panel shows biggest losers are Newport and Westport. Biggest winners are San Francisco Area and “Not Indicated” (i.e., no whiting history so no whiting principle port). Southern ports gain a relatively small amount of revenue via equal distribution of the buyback portion.

Graph shows possibly some correlation between 2006 landed revenue and allocation formula revenue for permits active in 2006 (i.e., some clustering near the 45° line). Many permits with no 2006 revenue in the sector get allocations. No permits with revenues in 2006 get extremely low allocations.

2d. Buyback Permit History

(p. 30-31): Table shows the share of OY species aggregate catch history during 1994-2003 that was recorded by permits that were bought back in December 2003. The table shows that 91 buyback permits participating in the nonwhiting sector landed 43.62% of total groundfish roundweight during 1994-2003. This total includes more than half of certain groundfish species, such as arrowtooth flounder, spiny dogfish, and chilipepper. By contrast, the 20 buyback permits participating in the shoreside whiting fishery landed only about 7% of total groundfish in that sector, and the three at-sea catcher vessel buyback permits accounted for only about 2% of total groundfish delivered in that sector.

(p. 32-33): Table shows aggregate catch history (mt) during 1994-2003 of OY species recorded by all non-CP limited entry trawl permits (i.e., permits that were bought back in December 2003, plus remaining permits).

Co-op Proposal Qualification Requirements (p. 34)

3a. At-sea Whiting Catcher Vessel Endorsement Qualification (p. 34)

There were 32 total permits with some at-sea CV sector catch history during 1994-2006. Of those permits, two had less than 500 mt total whiting deliveries, and three had less than 1,000 mt total whiting deliveries during 1994-2006. None of the permits that failed to meet these thresholds were involved in the sector in 2006.

The same pattern holds for the 1994-2003 period. During the shorter 1998-2004 period, five of the 32 total permits failed to make a delivery to an at-sea MS. None of these permits was involved in the sector in 2006.

3b. Mothership Permit Qualification (p. 34)

Eleven total MS participated in the at-sea whiting sector between 1994 and 2006. Four of these would fail to meet the criterion of having received at least 1,000 mt in each of any two years during 1994-2006. One of the MS that fails to meet the criterion was active in 2006.

Six of the eleven MS were active in the fishery during the 1998-2004 qualification period, but all six of these meet the qualification criterion.

3c. Catcher-processor Endorsement Qualification (p. 35)

There were 10 permits associated with 11 vessels that harvested some whiting in the CP fishery between 1994 and 2006. Of these, all 10 permits have catch history during the 1997-2006 period. This catch is associated with all but one of the 11 vessels. The one vessel that would fail to qualify under the criterion shows no CP catch history since 1996. One permit comes close to not qualifying. This permit shows no CP catch history since 1997.

Co-op Permit History Assignments – At-Sea Whiting CV Permits (p. 36)

The number of permits with qualifying catch history during the applicable periods varies from 27 under options A and C, to 32 under options B and D. Options A and C, with fewer qualifying permits, show the largest maximum catch shares, while options B and D, with relatively more qualifying permits, show the smallest minimum catch shares.

In all cases, the average catch share is higher than the median catch share, implying a somewhat “top heavy” distribution of catch assignments. The two measures are closest in option D, implying that of the four options, option D probably results in the most equal distribution of CV catch shares among participating permits.

Review Quantitative Analysis of Qualification and Allocation Rules

(Revised following TIQC and GAC meetings)

1. Recent Participation to Qualify for Quota Share (QS) Allocation

The nature of the west coast groundfish fishery has changed substantially over the past 15 years. According to the reauthorized Magnuson-Stevens Act, fair and equitable allocation requires consideration of current and historic fishing practices. In balancing the multiple factors to be considered, one means for increasing the emphasis on current practices is a recent participation requirement. Recent participation requirements are designed to limit initial allocations to those who are able to demonstrate "relevant" engagement in the fishery. The TIQC has recommended consideration of an option to require that groundfish trawl permits make at least a minimum number of landings or deliveries during 1998-2003 in any or all of the three fishery sectors: shoreside nonwhiting, shoreside whiting, and at-sea whiting catcher vessel. For analysis, the Council adopted minimum thresholds of ten, five, and zero (i.e., no recent participation requirement) landings or deliveries during the period. So, for example, if a permit had a single nonwhiting landing, and two landings in each of the whiting sectors anytime from 1998 to 2003, it would satisfy the recent participation requirement of having made at least five deliveries during the period. If receiving an initial allocation were then contingent on meeting the recent participation requirement, the permit would qualify to receive QS allocations in all three fisheries, depending on its share of relative lbs. catch history in each sector. For the analysis in section 2, below, it has been assumed that a permit must have at least five recent participation landings to receive the catch history-based portion of the initial allocation, but recent participation is <u>not</u> required to receive an equal share allocation of the buyback catch history.

The following tables show the impact of a range of alternative recent participation requirements on the number and catch history of permits that are estimated to fail to meet the requirement. In addition to the three Council-adopted thresholds of zero, five, and ten deliveries, the table displays results under three higher threshold amounts: 15, 20, and 25 landings or deliveries during the period. While recent participation is evaluated on combined participation in all three sectors, the tables display impacts on permits based on their engagement in the individual sectors: shoreside nonwhiting sector, shoreside whiting, and at-sea whiting catcher vessel sectors. "W" denotes that data were withheld for confidentiality because fewer than three permits (but more than zero) fell into the category. As such, the tables relate little information for the whiting sectors, apart from the total number of permits with catch history in the sector, and the fact that very few of those permits are affected by the recent participation alternatives.

1a. Shoreside Nonwhiting Recent Participation

Totals that would be excluded under different recent participation options: Shoreside Non-whiting

	Number of Landings or Deliveries Required 1998-03						1994-2003
	At least 1	At least 5	At least 10	At least 15	At least 20	At least 25	**Total (excl buyback)**
Total Groundfish lbs	1,457,448	1,506,825	2,041,348	4,084,356	10,353,691	10,353,691	**433,378,137**
No. of permits	6	7	10	11	16	16	**163**
DTS lbs	314,252	328,531	684,798	1,159,676	3,801,322	3,801,322	**186,102,718**
No. of permits	6	7	9	10	15	15	**155**
Petrale lbs	180,952	186,074	235,043	244,472	647,373	647,373	**19,293,861**
No. of permits	6	7	10	11	16	16	**156**
Arrowtooth lbs	W	35,021	35,027	41,059	841,059	841,059	**28,425,523**
No. of permits	W	3	4	5	8	8	**132**
Yellowtail RF lbs	47,588	47,628	53,193	435,569	841,858	841,858	**26,600,289**
No. of permits	3	4	5	6	9	9	**133**
Nearshore RF lbs	W	W	166	166	174	174	**102,457**
No. of permits	W	W	4	4	7	7	**103**
2006 GF Revenue $	333,822	333,822	901,674	901,674	1,275,157	1,275,157	**23,650,939**
No. of permits	3	3	5	5	7	7	**123**

Percent of totals that would be excluded under different recent participation options: Shoreside Non-whiting

	Number of Landings or Deliveries Required 1998-03						1994-2003
	At least 1	At least 5	At least 10	At least 15	At least 20	At least 25	**Total (excl buyback)**
Total Groundfish lbs	0.34%	0.35%	0.47%	0.94%	2.39%	2.39%	**433,378,137**
No. of permits	3.68%	4.29%	6.13%	6.75%	9.82%	9.82%	**163**
DTS lbs	0.17%	0.18%	0.37%	0.62%	2.04%	2.04%	**186,102,718**
No. of permits	3.87%	4.52%	5.81%	6.45%	9.68%	9.68%	**155**
Petrale lbs	0.94%	0.96%	1.22%	1.27%	3.36%	3.36%	**19,293,861**
No. of permits	3.85%	4.49%	6.41%	7.05%	10.26%	10.26%	**156**
Arrowtooth lbs	W	0.12%	0.12%	0.14%	2.96%	2.96%	**28,425,523**
No. of permits	W	2.27%	3.03%	3.79%	6.06%	6.06%	**132**
Yellowtail RF lbs	0.18%	0.18%	0.20%	1.64%	3.16%	3.16%	**26,600,289**
No. of permits	2.26%	3.01%	3.76%	4.51%	6.77%	6.77%	**133**
Nearshore RF lbs	W	W	0.16%	0.16%	0.17%	0.17%	**102,457**
No. of permits	W	W	3.88%	3.88%	6.80%	6.80%	**103**
2006 GF Revenue $	1.41%	1.41%	3.81%	3.81%	5.39%	5.39%	**23,650,939**
No. of permits	2.44%	2.44%	4.07%	4.07%	5.69%	5.69%	**123**

These two tables show that of the total 163 non-buyback permits with some landings in the shoreside nonwhiting fishery during 1994-2003, six (3.68%) had no groundfish, DTS, or petrale deliveries during the 1998-2003 recent participation period, representing 1.46 million lbs. (0.34%) of cumulative catch history. Three permits had no yellowtail deliveries during the period. More than zero but fewer than three ("W") had no arrowtooth or nearshore rockfish landings. Of the 123 permits active in 2006, three permits made no landings during the qualification period, accounting for 2.44% of permits and $333,822 (1.41%) of groundfish revenue in 2006. With a five-landing requirement, seven permits that had some catch history during 1994-2003 would fail to qualify, including three permits with catch in 2006. A total of ten permits would be disqualified given a ten-landing threshold, including five permits (4.07%) that were active in 2006, representing $901,674 (3.81%) of nonwhiting groundfish ex-vessel revenue in that year.

1b. Shoreside Whiting Recent Participation

Totals that would be excluded under different recent participation options: Shoreside Whiting

	Number of Landings or Deliveries Required 1998-03						1994-2003
	At least 1	At least 5	At least 10	At least 15	At least 20	At least 25	**Total (excl buyback)**
Total Groundfish lbs	0	0	0	W	W	W	**1,514,814,568**
No. of permits	0	0	0	W	W	W	**58**
Whiting lbs	0	0	0	W	W	W	**1,504,359,487**
No. of permits	0	0	0	W	W	W	**58**
2006 GF Revenue $	W	W	W	W	W	W	**13,321,802**
No. of permits	W	W	W	W	W	W	**35**

Percent of totals that would be excluded under different recent participation options: Shoreside Whiting

	Number of Landings or Deliveries Required 1998-03						1994-2003
	At least 1	At least 5	At least 10	At least 15	At least 20	At least 25	**Total (excl buyback)**
Total Groundfish lbs	0%	0%	0%	W	W	W	**1,514,814,568**
No. of permits	0%	0%	0%	W	W	W	**58**
Whiting lbs	0%	0%	0%	W	W	W	**1,504,359,487**
No. of permits	0%	0%	0%	W	W	W	**58**
2006 GF Revenue $	W	W	W	W	W	W	**13,321,802**
No. of permits	W	W	W	W	W	W	**35**

These two tables show that fewer than three ("W") of the 58 permits with landings between 1994 and 2003 in the shoreside whiting sector are affected by any of the recent participation thresholds. Thirty five permits received $13 million ex-vessel revenue in the shoreside whiting sector in 2006. At least one of these permits ("W") had no shoreside whiting catch history during the entire 1994-2003 period.

1c. At-sea Whiting Catcher Vessels Recent Participation

Totals that would be excluded under different recent participation options: At-sea Whiting catcher vessels

	Number of Landings or Deliveries Required 1998-03						1994-2003
	At least 1	At least 5	At least 10	At least 15	At least 20	At least 25	**Total (excl buyback)**
Total Groundfish lbs	0	0	0	W	W	W	**840,121,691**
No. of permits	0	0	0	W	W	W	**32**
Whiting lbs	0	0	0	W	W	W	**832,534,478**
No. of permits	0	0	0	W	W	W	**32**
2006 GF Revenue $	0	0	0	0	0	0	**7,102,007**
No. of permits	0	0	0	0	0	0	**20**

Percent of totals that would be excluded under different recent participation options: At-sea Whiting catcher vessels

	Number of Landings or Deliveries Required 1998-03						1994-2003
	At least 1	At least 5	At least 10	At least 15	At least 20	At least 25	**Total (excl buyback)**
Total Groundfish lbs	0%	0%	0%	W	W	W	**840,121,691**
No. of permits	0%	0%	0%	W	W	W	**32**
Whiting lbs	0%	0%	0%	W	W	W	**832,534,478**
No. of permits	0%	0%	0%	W	W	W	**32**
2006 GF Revenue $	0%	0%	0%	0%	0%	0%	**7,102,007**
No. of permits	0%	0%	0%	0%	0%	0%	**20**

These two tables show that none of the 32 permits with 840 million total lbs. of groundfish deliveries in the at-sea catcher vessel whiting sector are affected by any of the recent participation delivery thresholds up to at least 10 deliveries. Twenty permits received $7.1 million ex-vessel revenue in the at-sea whiting catcher vessel sector in 2006. However none of these permits is affected by any of the recent participation delivery thresholds shown in the table.

1d. Motherships Recent Participation

Recent participation requirements might be used to determine eligibility of at-sea whiting motherships (MS) to receive QS allocations under an IQ program. A range of recent participation periods and tonnage thresholds were examined for MS. Four recent participation periods are examined: 1994-2004, 1998-2003, 1999-2004, and 2000-2003. In addition, the period 1994-2006 is included for comparison purposes. Four total tonnage thresholds (minimum total whiting deliveries received) are applied to each period: one mt (i.e., something greater than zero), 10,000 mt, 20,000 mt, and 30,000 mt.

The following table shows the number of MS that would be affected under each recent participation option (combination of qualification period and tonnage threshold). For each recent participation option, the table also notes how many of the affected MS received at-sea whiting deliveries in 2006.

At-sea Whiting Motherships

Number of Motherships (MS) that would be excluded under different recent participation options

		Delivery Threshold During the Period (mt)							
		at least 1 mt		at least 10,000 mt		at least 20,000 mt		at least 30,000 mt	
Period	Total MS taking deliveries during the period	Number of MS not meeting threshold	Number not meeting threshold that were active in 2006	Number of MS not meeting threshold	Number not meeting threshold that were active in 2006	Number of MS not meeting threshold	Number not meeting threshold that were active in 2006	Number of MS not meeting threshold	Number not meeting threshold that were active in 2006
1994-2006	11	0	0	5	1	5	1	5	1
1994-2004	10	1	1	5	1	5	1	5	1
1998-2003	6	5	1	5	1	6	1	7	2
1999-2004	6	5	1	5	1	7	2	7	2
2000-2003	6	5	1	7	2	7	2	9	4

The table shows that of 11 total MS participating in the at-sea whiting fishery between 1994 and 2006, ten took some deliveries between 1994 and 2004, and six were active during 1998-2003, 1999-2004, and 2000-2003. One MS received no deliveries during 1994-2004, but did in 2006. Five of the 11 MS took no deliveries in 1998-2003, 1999-2004, or 2000-2003. With a 10,000 mt threshold, five of the eleven MS would fail to qualify during the periods 1994-2006, 1994-2004, 1998-2003, and 1999-2004; seven would not qualify based on the shorter 2000-2003 period. Of these seven MS, two were active in the 2006 fishery.

1e. Catcher Processors Recent Participation

Catcher processors (CP) are vessels that catch and process in the at-sea whiting fishery, that is, they “deliver” their catch to themselves. Each recorded catch event is considered a delivery for purposes of this analysis. Operating CPs are required to hold a limited entry trawl permit. CPs currently active in the whiting fishery are members of a co-op. To determine recent participation eligibility for CPs to receive QS, the committee requested three delivery thresholds (zero, five, and ten deliveries) be evaluated during a single recent participation period: 1998-2003.

The following table shows the results of applying the zero, five, and ten delivery threshold criteria to CPs during the 1998-2003 recent participation period. The table also shows results for arbitrarily chosen higher delivery thresholds: 40, 50, and 100 deliveries.

Number of permits that would be excluded under different recent participation options for at-sea whiting catcher-processors (CP)

	Total Active CPs 1994-2006	Total Active CPs 1998-2003	Number of Deliveries Required 1998-03					
			At least 1	At least 5	At least 10	At least 40	At least 50	At least 100
No. of permits excluded:	10	9	1	1	1	1	2	4

The table shows that of ten whiting CPs in the fishery from 1994-2006, nine participated during 1998-2003, and all nine had at least 40 whiting “deliveries” during the period (one CP showed no activity after 1997). Only one of the ten total CPs would be disqualified with any threshold below about 40 deliveries during the 1998-2003 period. Two would not qualify if at least 50 deliveries were required, and four would not qualify if at least 100 deliveries were required.

2. Quota Share Allocations to Permits

Summary of the key elements of the quota share allocation formula applied in this section:

1. *Allocation is based on catch history (1994-2003) with provisions to drop the three worst years for the non-whiting sector, and drop the two worst years for the whiting sectors. There are 168 existing non-CP permits with at least some catch history from 1994 to 2003.*
2. *Catch history is measured using relative pounds.*
3. *Recent participation during 1998-2003 is required to receive an allocation based on catch history. There are 162 total non-CP permits with some catch history during 1998-2003. The analysis in this section assumes recent participation of at least five landings or deliveries during the period is required. 161 total non-CP permits qualify under this criterion.*
4. *The catch share attributed to buyback permits is equally divided among the 169 valid groundfish trawl permits (No recent participation requirement). The total catch by species attributed to the buyback permits are shown in tables at the end of this section (pp. 30-33).*
5. *100% of the QS is allocated to permits (No processor allocation).*

Allocation Formula:

For the presentation that follows, it is assumed that species allocations to eligible permits will be based on (1) species catch history for permits meeting the recent participation requirement, plus (2) an equal division among all eligible permits of the catch share that is attributed to buy-back permits.

"Relative lbs." catch history (a permit's average share of total sector catch of a species) rather than "absolute lbs." catch history will be used to calculate the catch history portion of each qualifying permit's species QS.

For non-overfished species, the catch history portion of the allocation will be based on a permit's relative lbs. catch history over the period 1994-2003. Within that period, the two lowest years will be dropped for whiting sector catch history, and the three lowest years will be dropped for nonwhiting sector catch history.

For overfished species, there are two options for determining the catch history portion of the allocation:

Option 1: actual catch history-based allocation (same as for non-overfished species). Results of the catch history-based allocation approach for selected overfished species are included in the following tables.

Option 2: proxy species catch history-based allocation. This option would apply a bycatch rate to the QS of relevant target species to determine the amount of overfished species QS that would be awarded. Results of the proxy species allocation approach are not included in this section.

Recent participation: For this analysis, it is assumed that only non-catcher processor permits with at least five groundfish landings or deliveries during 1998-2003 in any or all of the three fishery sectors (shoreside nonwhiting, shoreside whiting, or at-sea whiting catcher vessel) are eligible to receive an allocation based on permit catch history. There are 161 such permits potentially qualified to receive some base allocation under a five-groundfish deliveries recent participation criterion. However it is also assumed that any current groundfish trawl permit that is not associated with a catcher-processor is eligible to receive an equal split of the buyback permits' aggregate catch history share, regardless of whether that permit had catch history during 1994-2003 or the 1998-2003 recent participation period. Under this assumption, there are 169 total current permits that are each eligible to receive a 1/169 portion (0.59%) of the buyback permits' total catch share for each species. Species total catch shares attributed to the buyback permits are shown in a table appended at the end of this section.

The results in this section tend to describe an upper bound on the number of permits receiving QS, and therefore something of a lower bound on the QS amounts allocated to each permit. Note however that for purposes of this analysis, 100% of available QS is assumed allocated to eligible permits (i.e., there is no processor allocation share).

The following tables and graphs summarize and compare allocations resulting from the formula described above against the permits' 2006 revenues for selected species. Performance in comparison to 2006 is one of a number of criteria that might be used to evaluate the effects of the allocation formula. Comparisons are in terms of 2006 dollars. The question the tables and graphs attempt to answer is: "Compared with fleet experience in 2006, how would an equivalent amount of total QS be distributed among recipients under the allocation formula?" In other words, if 2006 experience represents the "need" for QS, how does the distribution under allocation formula affect eligible permits?

Tables and Graphs: Each page of tables and graphs examines results for one sector's allocation of a single species category. The sectors examined are: shoreside nonwhiting, shoreside whiting, and at-sea whiting catcher vessels. The upper panels of the tables compare revenues in 2006 with revenues under the allocation, and indicate the number of "winners" (those who, when 2006 harvest levels and prices are applied to the QS allocation, would gain revenue compared with 2006) and "losers" (those who would receive less revenue than in 2006 even if they harvested their entire QS). In addition, the tables show the total and average QS amounts for all permits receiving an equal share of the buyback portion, and the same information for permits whose only allocation under the formula results from equal sharing of the buyback portion.

The lower panel in each table shows the aggregated change in projected revenues by "principle port." Principle ports were assigned to each permit in order to aggregate geographically the actual revenues received in 2006 and revenues projected to be allocated under the allocation formula. Whiting and nonwhiting principle ports were identified for each permit as the PacFIN port code (PCID) receiving the largest share of each permit's whiting and nonwhiting deliveries, respectively, during the most recent three year period, 2004-2006. In cases where a permit made no shoreside deliveries during 2004-2006, the permit holder's address was used to assign a principle port area. Nonwhiting principle ports are used to aggregate the allocations of the shoreside nonwhiting sector's species groups. Whiting principle ports are used for the allocations of shoreside whiting and at-sea whiting sectors' species groups. Allocations of whiting sectors' species groups received by permits that do not have a whiting principle port (i.e., no whiting deliveries during the period) were assigned to the "Not Indicated" category.

Each point on graphs (scatterplots) represents a given permit. Each scatterplot shows the correlation of a permit's 2006 revenue (x-axis) against the revenue that would be earned by the permit if it delivered its entire allocation share of 2006 catch at 2006 prices (y-axis). If allocated revenue were distributed exactly the same as actual 2006 revenue, then each scatterplot would trace a 45° line emanating from the origin (A 45° line is included for comparison). Points above the 45° line indicate an allocation greater than the value of landings in 2006 (i.e., "winners"). Points falling below the 45° line indicate an allocation less than the value of what was landed in 2006 (i.e., "losers"). Note that for most scatterplots, it was necessary to truncate the axes somewhat to preserve confidentiality.

The list of sectors and species groups examined in the following tables and graphs is shown below. For this analysis, species QS allocated from a given sector is assumed to remain in that sector. Therefore a yellowtail rockfish allocation received from the nonwhiting sector is separate from any yellowtail rockfish allocations from the whiting sectors.

Shoreside nonwhiting	**Shoreside whiting**	**At-sea whiting CV**
1. Total groundfish	1. Pacific whiting	1. Pacific whiting
2. DTS	2. Yellowtail rockfish	2. Yellowtail rockfish
3. Sablefish	3. Widow rockfish	3. Widow rockfish
4. Dover sole	4. Canary rockfish	4. Canary rockfish
5. Petrale sole		
6. Yellowtail rockfish		
7. Arrowtooth flounder		
8. Other flatfish		
9. Lingcod		
10. Pacific Ocean perch		
11. Darkblotched rockfish		
12. Canary rockfish		
13. Yelloweye rockfish		

2a. Shoreside Nonwhiting Catcher Vessel Permits

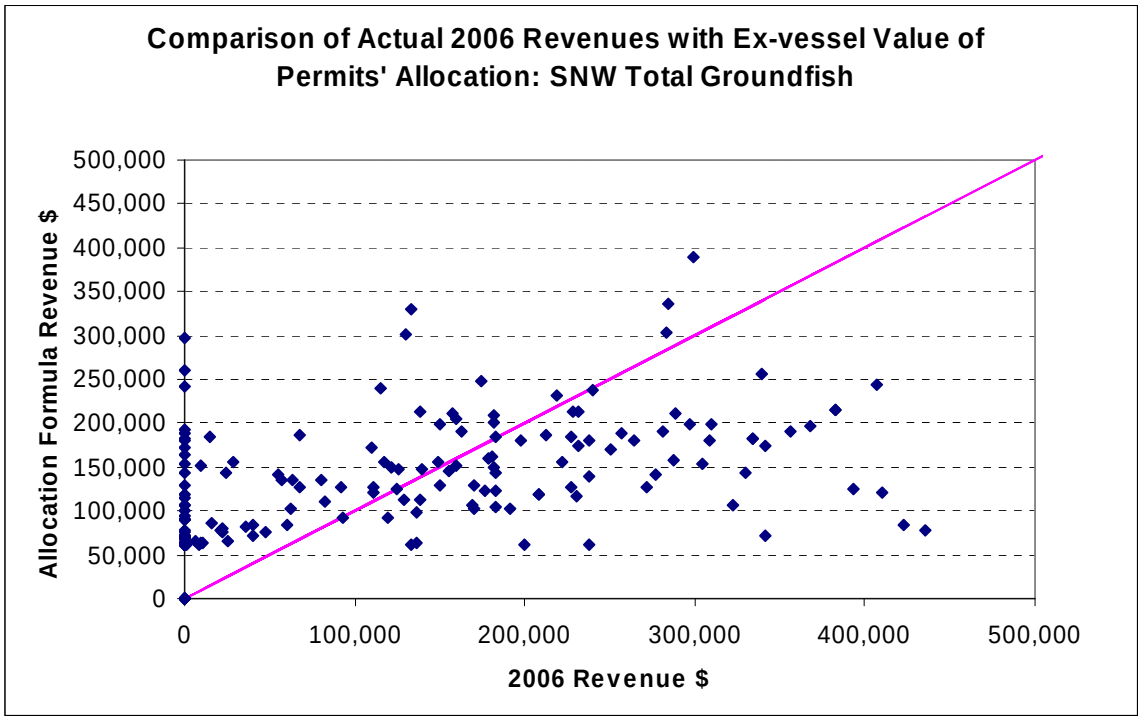
Shoreside Nonwhiting Sector: Total Groundfish

Shift in Ex-vessel Revenue Value of Allocation compared with 2006
Total and Average Shift

				Buyback Portion QS Allocated to:	
	2006 REV	Drop 3 REV	Change	All Recipients	Recips. receiving only buyback QS
TOTAL	$23,650,939	$23,650,939	+$0	$10,484,475	$806,498
Average	$192,284	$139,946	-$52,338	$62,038	$62,038
Total # of Permits	123	169	+ 46	169	13
# Winners		99			
$ average for winners	$50,632	$132,051	+$81,419		
Percent change			+160.80%		
# Losers		70			
$ average for losers	$266,262	$151,112	-$115,150		
Percent change			-43.25%		
Total # of Permits Affected		169			

Geographic Shift (based on "principle port")

Port Code	$ change
BLAINE	+90,658
BELLINGHAM BAY	-272,215
SEATTLE AREA	+837,776
NEAH BAY	+199,391
WESTPORT	+445,730
ILWACO/CHINOOK	+242,001
ASTORIA	-1,919,854
TILLAMOOK	+72,105
NEWPORT	+186,691
COOS BAY	-319,286
BROOKINGS	-165,087
CRESCENT CITY	+78,648
EUREKA	-1,457,457
FORT BRAGG	+28,217
BODEGA BAY	+62,038
SAN FRANCISCO AREA	+836,542
PRINCETON	+404,738
SANTA CRUZ	+59,523
MOSS LANDING	+363,954
MONTEREY	-66,843
MORRO BAY	+149,667
AVILA	+143,061
Total	0



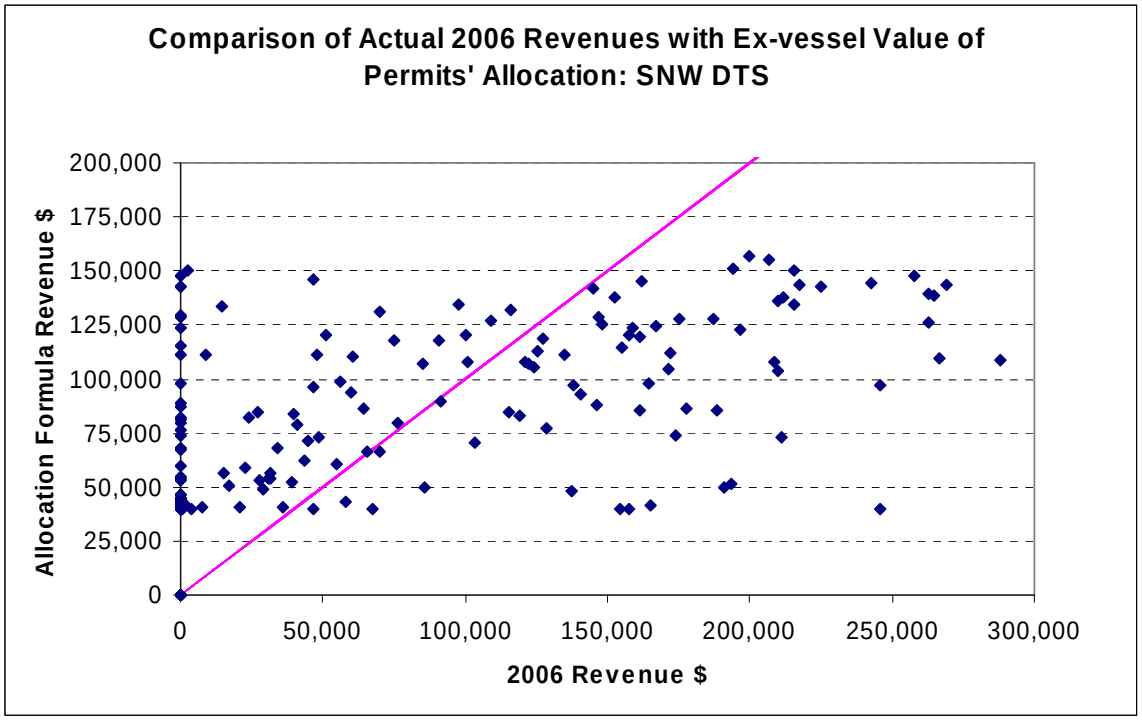
Shoreside Nonwhiting Sector: DTS

Shift in Ex-vessel Revenue Value of Allocation compared with 2006
Total and Average Shift

				Buyback Portion QS Allocated to:	
	2006 REV	Drop 3 REV	Change	All Recipients	Recips. receiving only buyback QS
TOTAL	$14,594,332	$14,594,332	+$0	$6,767,627	$840,948
Average	$119,626	$86,357	-$33,269	$40,045	$40,045
Total # of Permits	122	169	+ 47	169	21
# Winners		100			
$ average for winners	$21,197	$73,157	+$51,960		
Percent change			+245.13%		
# Losers		69			
$ average for losers	$180,792	$105,487	-$75,304		
Percent change			-41.65%		
Total # of Permits Affected		169			

Geographic Shift (based on "principle port")

Port Code	$ change
BLAINE	+3,521
BELLINGHAM BAY	-306,417
SEATTLE AREA	+470,080
NEAH BAY	+141,229
WESTPORT	+339,026
ILWACO/CHINOOK	+120,916
ASTORIA	-591,699
TILLAMOOK	+46,351
NEWPORT	-446,653
COOS BAY	-238,979
BROOKINGS	-244,668
CRESCENT CITY	+122,553
EUREKA	-821,497
FORT BRAGG	-110,036
BODEGA BAY	+40,045
SAN FRANCISCO AREA	+567,447
PRINCETON	+317,666
SANTA CRUZ	+40,044
MOSS LANDING	+230,667
MONTEREY	+33,987
MORRO BAY	+171,224
AVILA	+115,193
Total	0



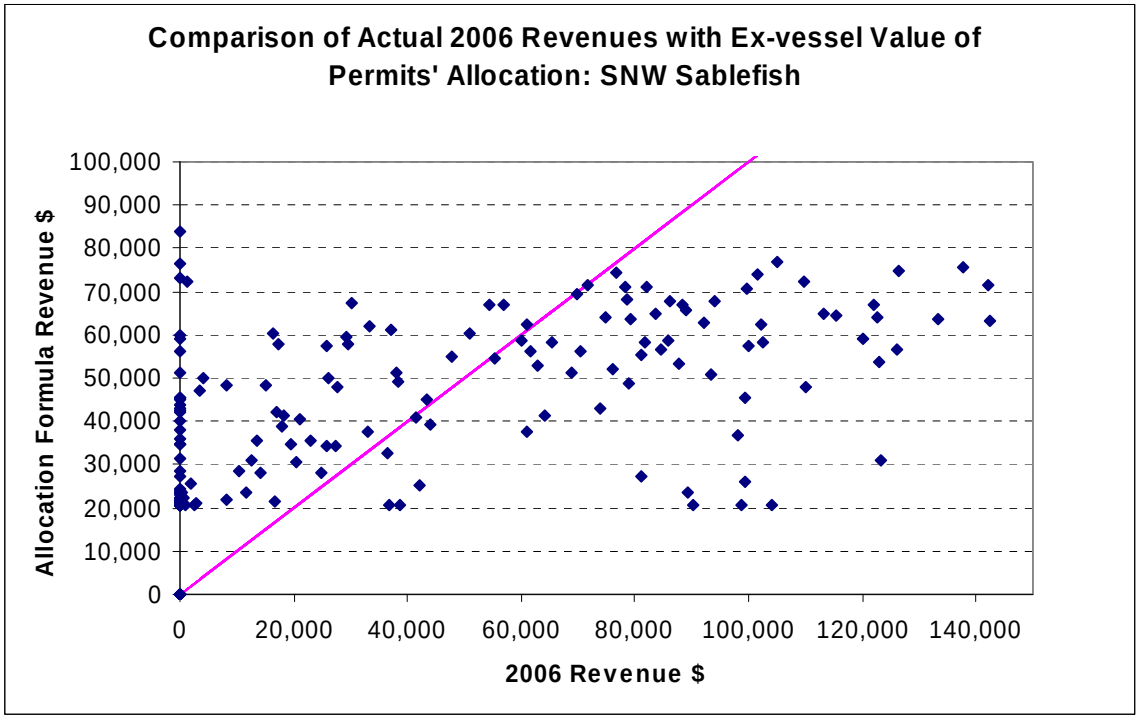
Shoreside Nonwhiting Sector: Sablefish

Shift in Ex-vessel Revenue Value of Allocation compared with 2006
Total and Average Shift

				Buyback Portion QS Allocated to:	
	2006 REV	Drop 3 REV	Change	All Recipients	Recips. receiving only buyback QS
TOTAL	$7,546,640	$7,546,640	+$0	$3,508,091	$456,675
Average	$65,057	$44,655	-$20,403	$20,758	$20,758
Total # of Permits	116	169	+ 53	169	22
# Winners		100			
$ average for winners	$10,394	$37,286	+$26,892		
Percent change			+258.74%		
# Losers		69			
$ average for losers	$94,308	$55,334	-$38,975		
Percent change			-41.33%		
Total # of Permits Affected		169			

Geographic Shift (based on "principle port")

Port Code	$ change
BLAINE	+13,239
BELLINGHAM BAY	-195,275
SEATTLE AREA	+266,074
NEAH BAY	+87,731
WESTPORT	+198,342
ILWACO/CHINOOK	+64,851
ASTORIA	-378,935
TILLAMOOK	+21,381
NEWPORT	-403,189
COOS BAY	-108,375
BROOKINGS	-98,575
CRESCENT CITY	+75,470
EUREKA	-248,810
FORT BRAGG	+57,043
BODEGA BAY	+20,758
SAN FRANCISCO AREA	+212,348
PRINCETON	+164,642
SANTA CRUZ	+20,758
MOSS LANDING	+90,724
MONTEREY	+18,635
MORRO BAY	+78,768
AVILA	+42,396
Total	0



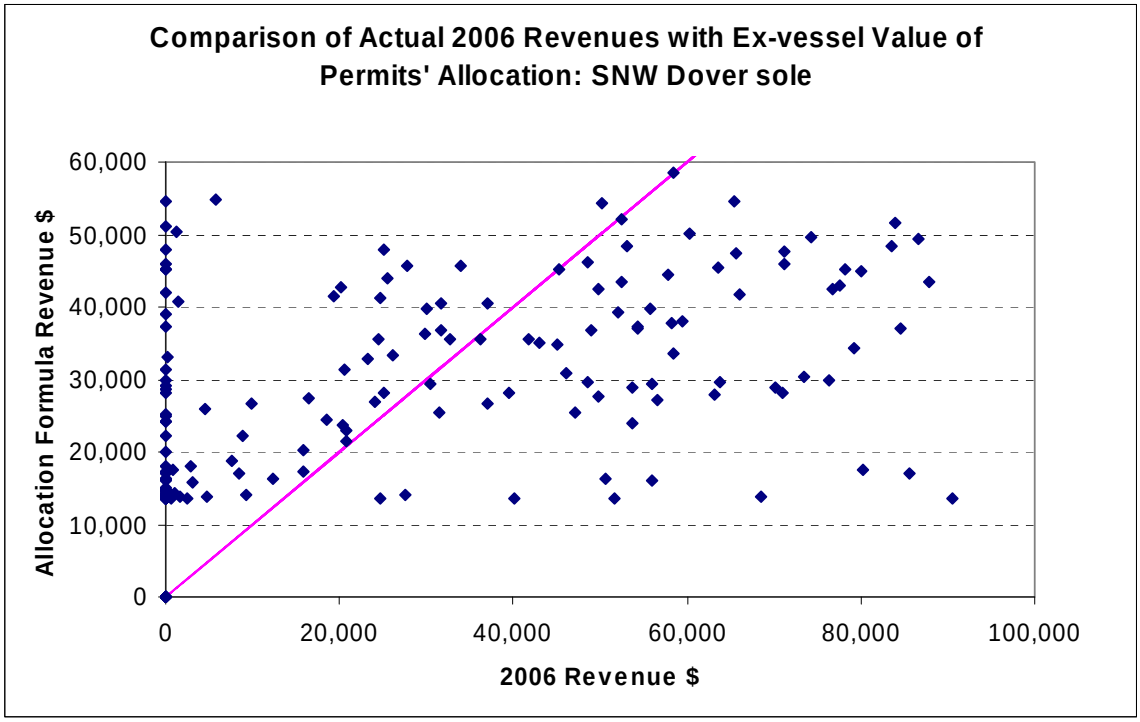
Shoreside Nonwhiting Sector: Dover sole

Shift in Ex-vessel Revenue Value of Allocation compared with 2006

Total and Average Shift				Buyback Portion QS Allocated to:	
	2006 REV	Drop 3 REV	Change	All Recipients	Recips. receiving only buyback QS
TOTAL	$4,992,502	$4,992,502	+$0	$2,314,726	$287,629
Average	$41,260	$29,541	-$11,719	$13,697	$13,697
Total # of Permits	121	169	+ 48	169	21
# Winners		102			
$ average for winners	$8,209	$25,890	+$17,681		
Percent change			+215.40%		
# Losers		67			
$ average for losers	$62,018	$35,100	-$26,918		
Percent change			-43.40%		
Total # of Permits Affected		169			

Geographic Shift (based on "principle port")

Port Code	$ change
BLAINE	-10,228
BELLINGHAM BAY	-121,968
SEATTLE AREA	+150,461
NEAH BAY	+43,892
WESTPORT	+93,371
ILWACO/CHINOOK	+42,737
ASTORIA	-457,348
TILLAMOOK	+17,396
NEWPORT	+52,050
COOS BAY	-112,498
BROOKINGS	-71,035
CRESCENT CITY	+20,419
EUREKA	-281,085
FORT BRAGG	-8,592
BODEGA BAY	+13,697
SAN FRANCISCO AREA	+238,289
PRINCETON	+116,931
SANTA CRUZ	+13,693
MOSS LANDING	+108,224
MONTEREY	+13,506
MORRO BAY	+96,050
AVILA	+42,038
Total	0



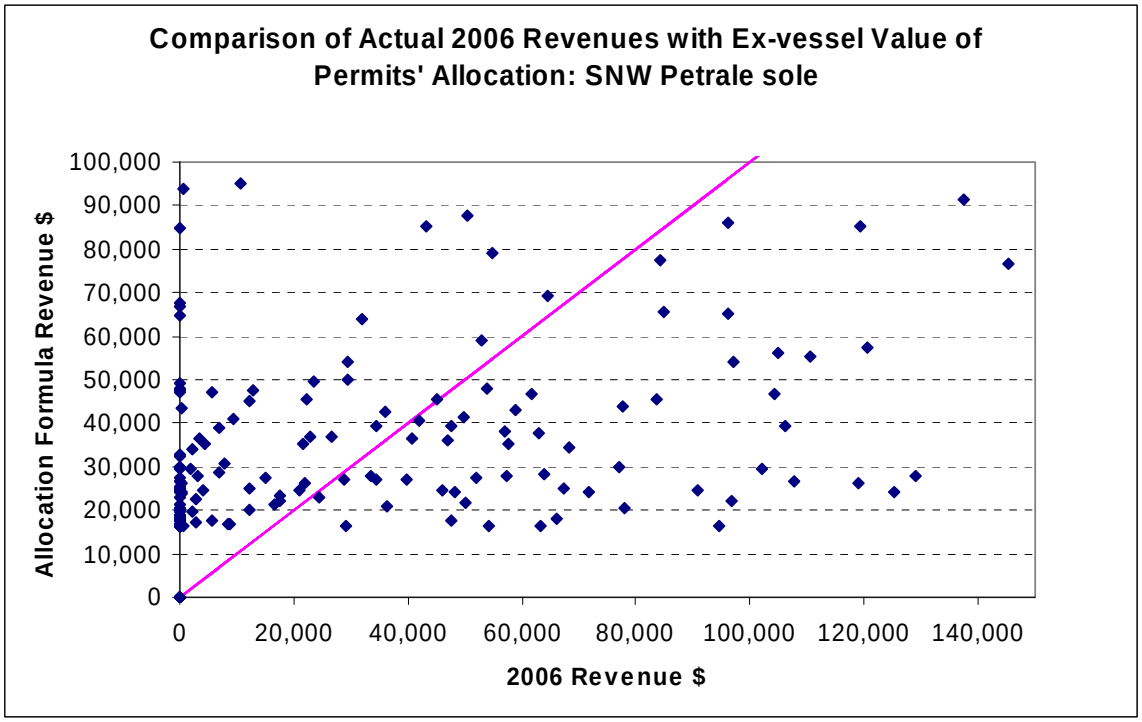
Shoreside Nonwhiting Sector: Petrale sole

Shift in Ex-vessel Revenue Value of Allocation compared with 2006
Total and Average Shift

				Buyback Portion QS Allocated to:	
	2006 REV	Drop 3 REV	Change	All Recipients	Recips. receiving only buyback QS
TOTAL	$5,761,058	$5,761,058	+$0	$2,770,864	$327,913
Average	$50,536	$34,089	-$16,446	$16,396	$16,396
Total # of Permits	114	169	+ 55	169	20
# Winners		109			
$ average for winners	$7,769	$31,848	+$24,078		
Percent change			+309.91%		
# Losers		60			
$ average for losers	$81,903	$38,161	-$43,742		
Percent change			-53.41%		
Total # of Permits Affected		169			

Geographic Shift (based on "principle port")

Port Code	$ change
BLAINE	-46,063
BELLINGHAM BAY	-110,070
SEATTLE AREA	+184,028
NEAH BAY	+91,023
WESTPORT	+90,434
ILWACO/CHINOOK	+64,208
ASTORIA	-677,644
TILLAMOOK	+27,331
NEWPORT	+268,905
COOS BAY	+16,444
BROOKINGS	+118,492
CRESCENT CITY	+15,185
EUREKA	-466,894
FORT BRAGG	+172,595
BODEGA BAY	+16,396
SAN FRANCISCO AREA	+190,183
PRINCETON	-24,714
SANTA CRUZ	+14,393
MOSS LANDING	+70,635
MONTEREY	-66,187
MORRO BAY	+26,648
AVILA	+24,672
Total	0



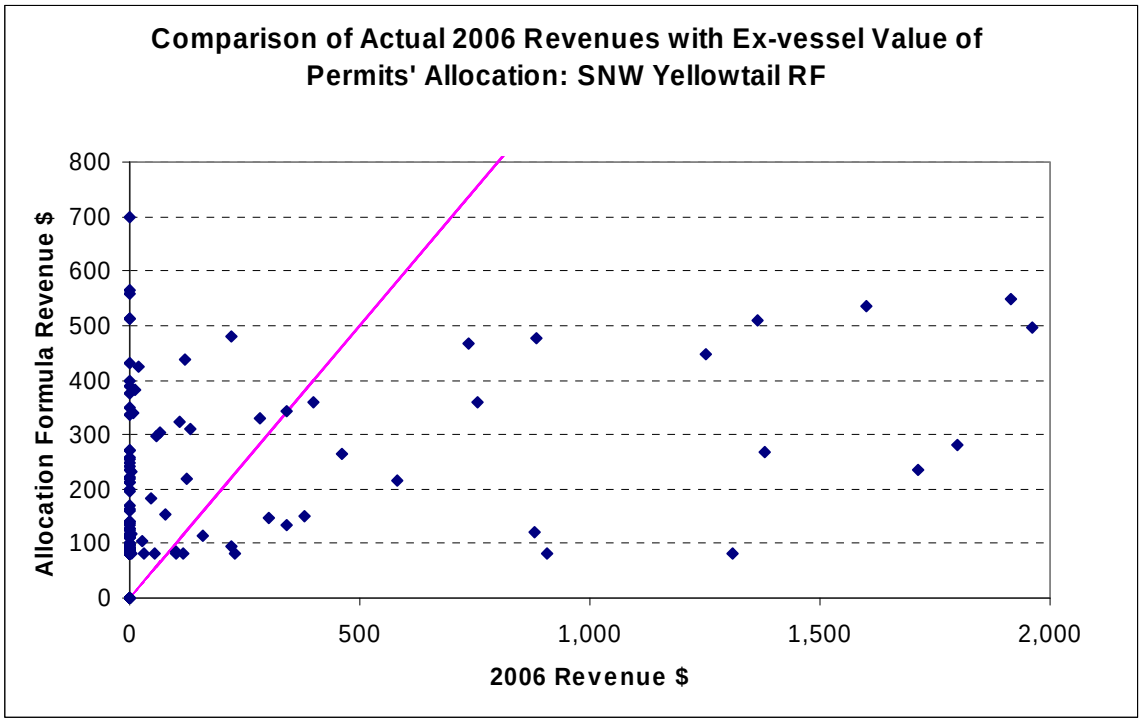
Shoreside Nonwhiting Sector: Yellowtail RF

Shift in Ex-vessel Revenue Value of Allocation compared with 2006
Total and Average Shift

				Buyback Portion QS Allocated to:	
	2006 REV	Drop 3 REV	Change	All Recipients	Recips. receiving only buyback QS
TOTAL	$30,600	$30,600	+$0	$13,570	$3,212
Average	$638	$181	-$456	$80	$80
Total # of Permits	48	169	+ 121	169	40
# Winners		141			
$ average for winners	$12	$158	+$146		
Percent change			+1180.86%		
# Losers		28			
$ average for losers	$1,031	$297	-$733		
Percent change			-71.15%		
Total # of Permits Affected		169			

Geographic Shift (based on "principle port")

Port Code	$ change
BLAINE	-1,365
BELLINGHAM BAY	-731
SEATTLE AREA	+1,557
NEAH BAY	-2,459
WESTPORT	+661
ILWACO/CHINOOK	+319
ASTORIA	-9,831
TILLAMOOK	+83
NEWPORT	+4,494
COOS BAY	+2,183
BROOKINGS	+918
CRESCENT CITY	+333
EUREKA	+1,191
FORT BRAGG	+704
BODEGA BAY	+80
SAN FRANCISCO AREA	+996
PRINCETON	+562
SANTA CRUZ	+80
MOSS LANDING	-341
MONTEREY	+80
MORRO BAY	+406
AVILA	+80
Total	0



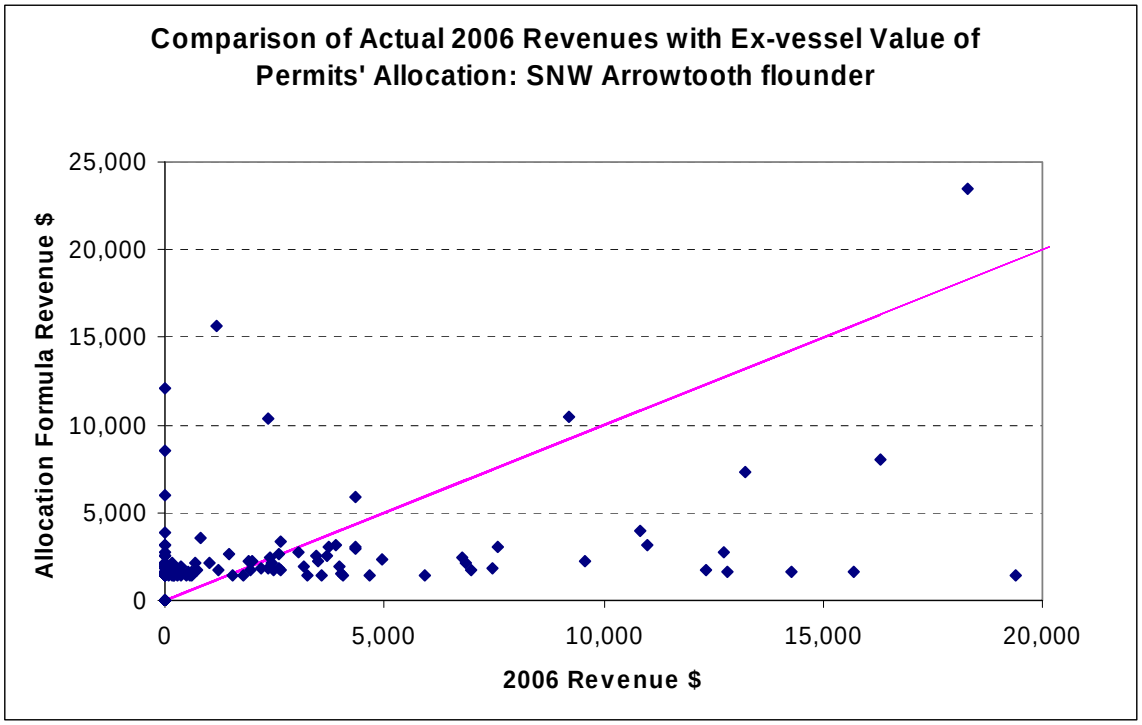
Shoreside Nonwhiting Sector: Arrowtooth flounder

Shift in Ex-vessel Revenue Value of Allocation compared with 2006
Total and Average Shift

				Buyback Portion QS Allocated to:	
	2006 REV	Drop 3 REV	Change	All Recipients	Recips. receiving only buyback QS
TOTAL	$441,018	$441,018	+$0	$240,797	$56,993
Average	$4,742	$2,610	-$2,133	$1,425	$1,425
Total # of Permits	93	169	+ 76	169	40
# Winners		124			
$ average for winners	$679	$2,530	+$1,851		
Percent change			+272.68%		
# Losers		45			
$ average for losers	$7,929	$2,828	-$5,102		
Percent change			-64.34%		
Total # of Permits Affected		169			

Geographic Shift (based on "principle port")

Port Code	$ change
BLAINE	+2,505
BELLINGHAM BAY	-13,247
SEATTLE AREA	+24,494
NEAH BAY	-5,078
WESTPORT	+13,969
ILWACO/CHINOOK	+5,328
ASTORIA	-132,299
TILLAMOOK	+1,542
NEWPORT	+5,691
COOS BAY	+6,131
BROOKINGS	+9,781
CRESCENT CITY	+3,852
EUREKA	+21,508
FORT BRAGG	+12,524
BODEGA BAY	+1,425
SAN FRANCISCO AREA	+14,559
PRINCETON	+9,975
SANTA CRUZ	+1,425
MOSS LANDING	+5,921
MONTEREY	+1,425
MORRO BAY	+7,144
AVILA	+1,425
Total	0



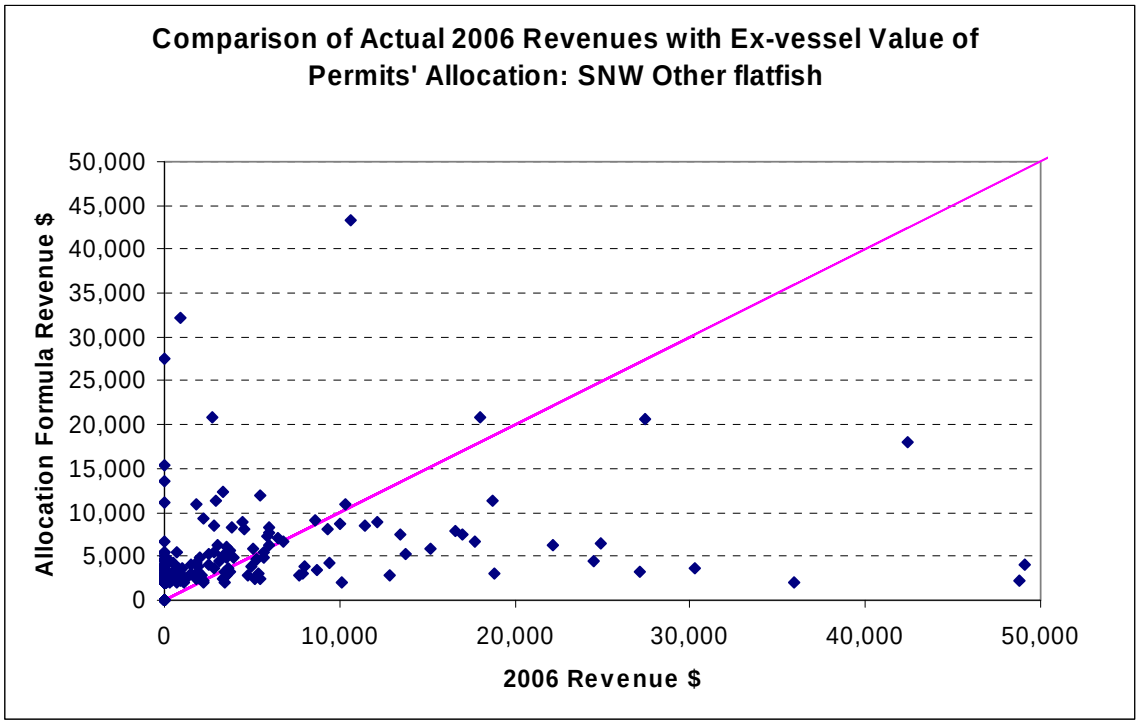
Shoreside Nonwhiting Sector: Other flatfish

Shift in Ex-vessel Revenue Value of Allocation compared with 2006
Total and Average Shift

				Buyback Portion QS Allocated to:	
	2006 REV	Drop 3 REV	Change	All Recipients	Recips. receiving only buyback QS
TOTAL	$981,866	$981,866	+$0	$333,472	$39,464
Average	$8,321	$5,810	-$2,511	$1,973	$1,973
Total # of Permits	118	169	+ 51	169	20
# Winners		120			
$ average for winners	$1,774	$6,051	+$4,277		
Percent change			+241.08%		
# Losers		49			
$ average for losers	$15,693	$5,219	-$10,474		
Percent change			-66.74%		
Total # of Permits Affected		169			

Geographic Shift (based on "principle port")

Port Code	$ change
BLAINE	+1,844
BELLINGHAM BAY	+7,890
SEATTLE AREA	+16,232
NEAH BAY	-1,099
WESTPORT	+14,864
ILWACO/CHINOOK	+4,228
ASTORIA	-381,318
TILLAMOOK	+2,999
NEWPORT	+45,680
COOS BAY	+60,545
BROOKINGS	+1,427
CRESCENT CITY	-11,831
EUREKA	-43,272
FORT BRAGG	+20,645
BODEGA BAY	+1,973
SAN FRANCISCO AREA	+78,642
PRINCETON	+96,555
SANTA CRUZ	+2,486
MOSS LANDING	+61,270
MONTEREY	-603
MORRO BAY	+15,387
AVILA	+5,456
Total	0



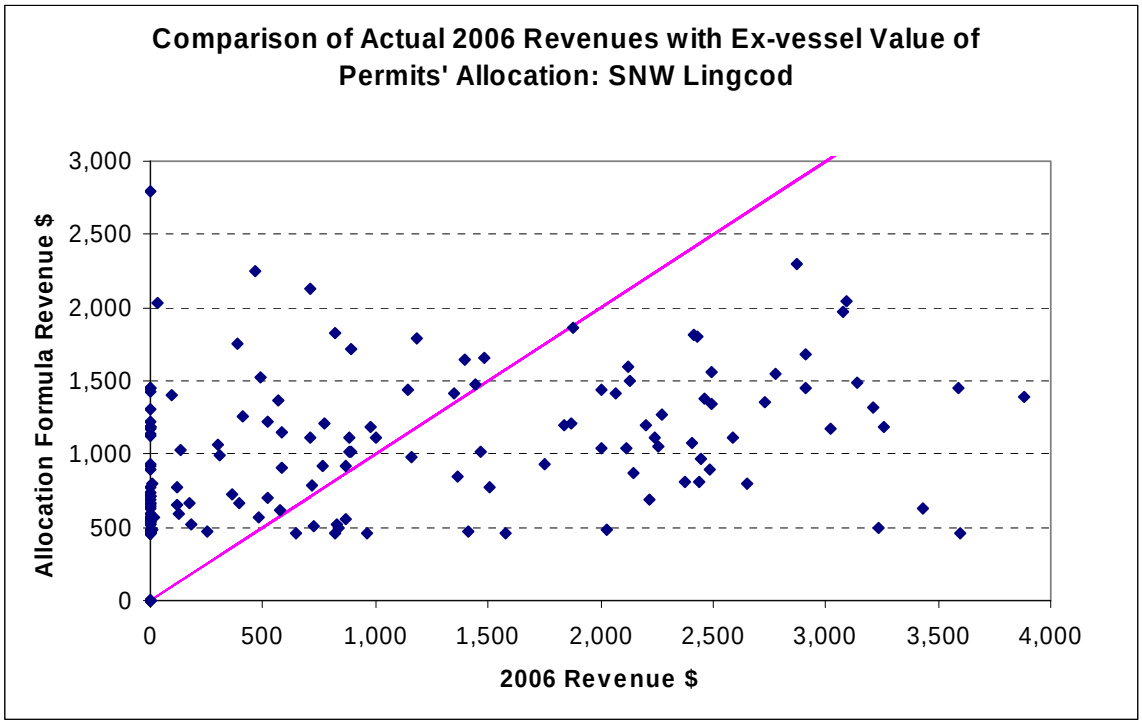
Shoreside Nonwhiting Sector: Lingcod

Shift in Ex-vessel Revenue Value of Allocation compared with 2006
Total and Average Shift

				Buyback Portion QS Allocated to:	
	2006 REV	Drop 3 REV	Change	All Recipients	Recips. receiving only buyback QS
TOTAL	$172,711	$172,711	+$0	$78,224	$9,720
Average	$1,599	$1,022	-$577	$463	$463
Total # of Permits	108	169	+ 61	169	21
# Winners		108			
$ average for winners	$261	$926	+$665		
Percent change			+255.11%		
# Losers		61			
$ average for losers	$2,370	$1,192	-$1,178		
Percent change			-49.70%		
Total # of Permits Affected		169			

Geographic Shift (based on "principle port")

Port Code	$ change
BLAINE	-1,233
BELLINGHAM BAY	-2,285
SEATTLE AREA	+6,301
NEAH BAY	-2,818
WESTPORT	+569
ILWACO/CHINOOK	+1,631
ASTORIA	-28,781
TILLAMOOK	+566
NEWPORT	+11,916
COOS BAY	+3,703
BROOKINGS	+1,910
CRESCENT CITY	+238
EUREKA	-6,660
FORT BRAGG	+7,456
BODEGA BAY	+463
SAN FRANCISCO AREA	+1,136
PRINCETON	+2,150
SANTA CRUZ	-940
MOSS LANDING	+1,834
MONTEREY	-516
MORRO BAY	+2,824
AVILA	+536
Total	0



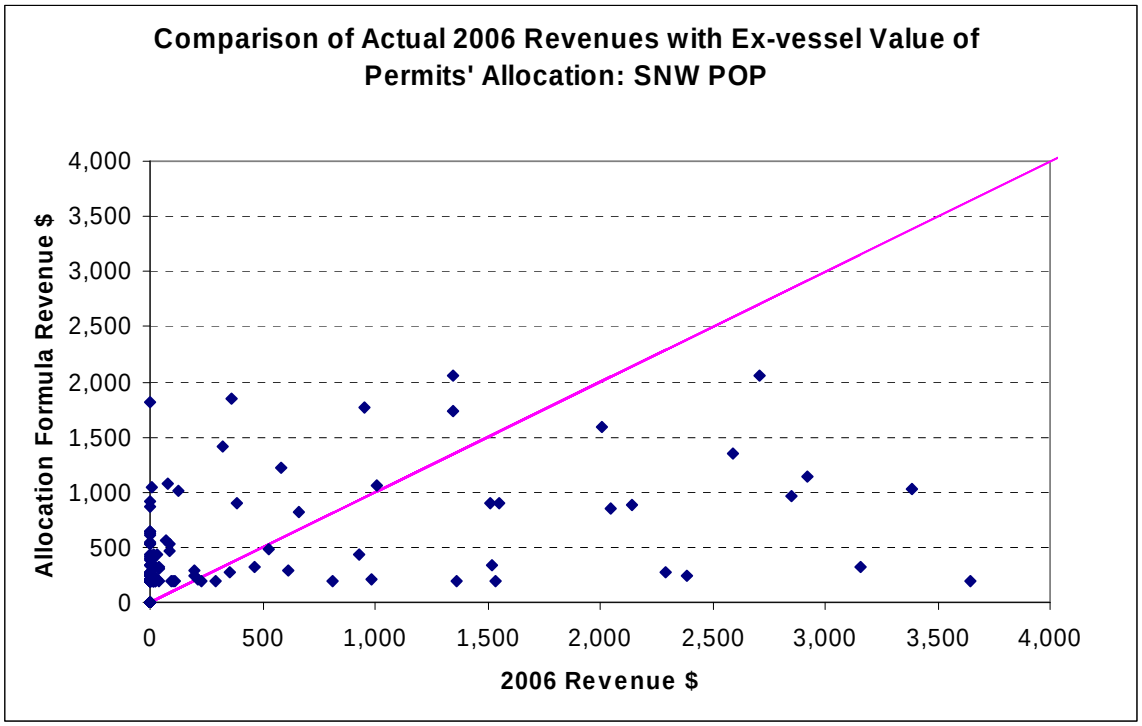
Shoreside Nonwhiting Sector: POP

Shift in Ex-vessel Revenue Value of Allocation compared with 2006
Total and Average Shift

				Buyback Portion QS Allocated to:	
	2006 REV	Drop 3 REV	Change	All Recipients	Recips. receiving only buyback QS
TOTAL	$68,976	$68,976	+$0	$31,729	$8,261
Average	$852	$408	-$443	$188	$188
Total # of Permits	81	169	+ 88	169	44
# Winners		140			
$ average for winners	$63	$361	+$298		
Percent change			+475.45%		
# Losers		29			
$ average for losers	$2,076	$635	-$1,440		
Percent change			-69.38%		
Total # of Permits Affected		169			

Geographic Shift (based on "principle port")

Port Code	$ change
BLAINE	-1,241
BELLINGHAM BAY	-6,651
SEATTLE AREA	+3,521
NEAH BAY	+1,252
WESTPORT	+1,978
ILWACO/CHINOOK	+1,100
ASTORIA	-14,847
TILLAMOOK	+192
NEWPORT	-3,191
COOS BAY	+4,168
BROOKINGS	+1,409
CRESCENT CITY	+759
EUREKA	+3,571
FORT BRAGG	+1,693
BODEGA BAY	+188
SAN FRANCISCO AREA	+2,139
PRINCETON	+1,314
SANTA CRUZ	+188
MOSS LANDING	+1,134
MONTEREY	+188
MORRO BAY	+951
AVILA	+188
Total	0



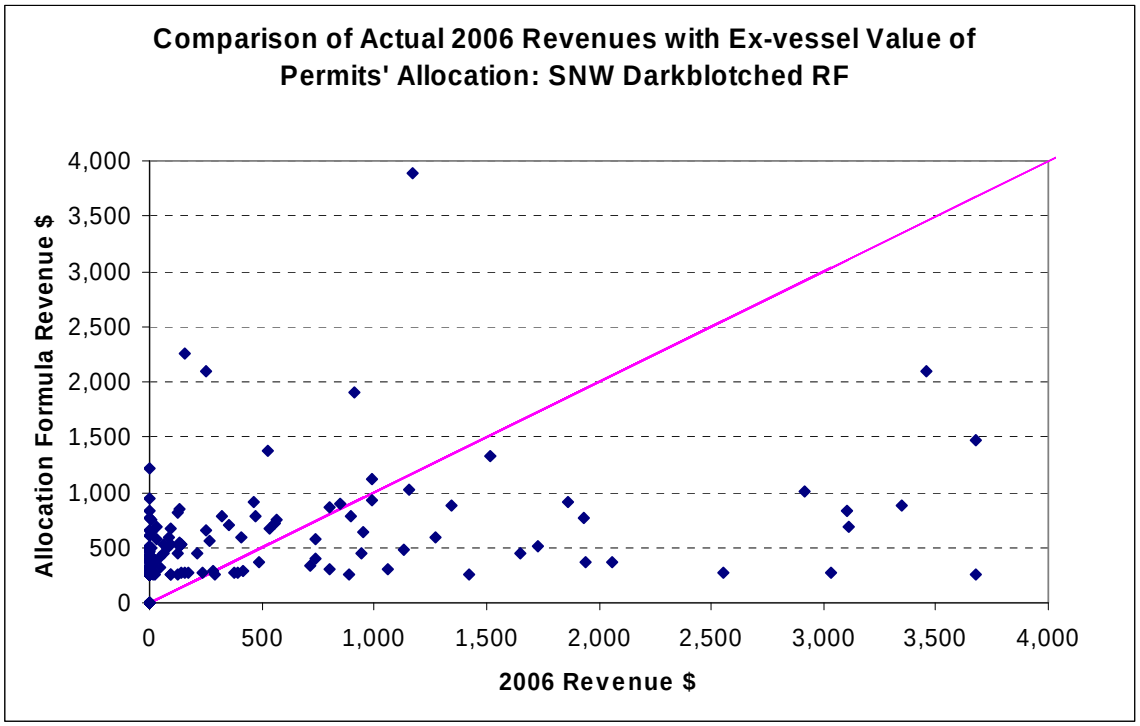
Shoreside Nonwhiting Sector: Darkblotched RF

Shift in Ex-vessel Revenue Value of Allocation compared with 2006
Total and Average Shift

				Buyback Portion QS Allocated to:	
	2006 REV	Drop 3 REV	Change	All Recipients	Recips. receiving only buyback QS
TOTAL	$89,246	$89,246	-$0	$43,667	$5,684
Average	$911	$528	-$383	$258	$258
Total # of Permits	98	169	+ 71	169	22
# Winners		129			
$ average for winners	$101	$495	+$393		
Percent change			+388.52%		
# Losers		40			
$ average for losers	$1,905	$636	-$1,269		
Percent change			-66.61%		
Total # of Permits Affected		169			

Geographic Shift (based on "principle port")

Port Code	$ change
BLAINE	-111
BELLINGHAM BAY	+1,926
SEATTLE AREA	+2,299
NEAH BAY	+1,209
WESTPORT	+2,381
ILWACO/CHINOOK	+633
ASTORIA	-7,010
TILLAMOOK	+262
NEWPORT	+4,153
COOS BAY	-7,468
BROOKINGS	+1,314
CRESCENT CITY	+1,643
EUREKA	-6,528
FORT BRAGG	-2,129
BODEGA BAY	+258
SAN FRANCISCO AREA	+2,863
PRINCETON	+1,475
SANTA CRUZ	+258
MOSS LANDING	+982
MONTEREY	+44
MORRO BAY	+1,110
AVILA	+434
Total	0



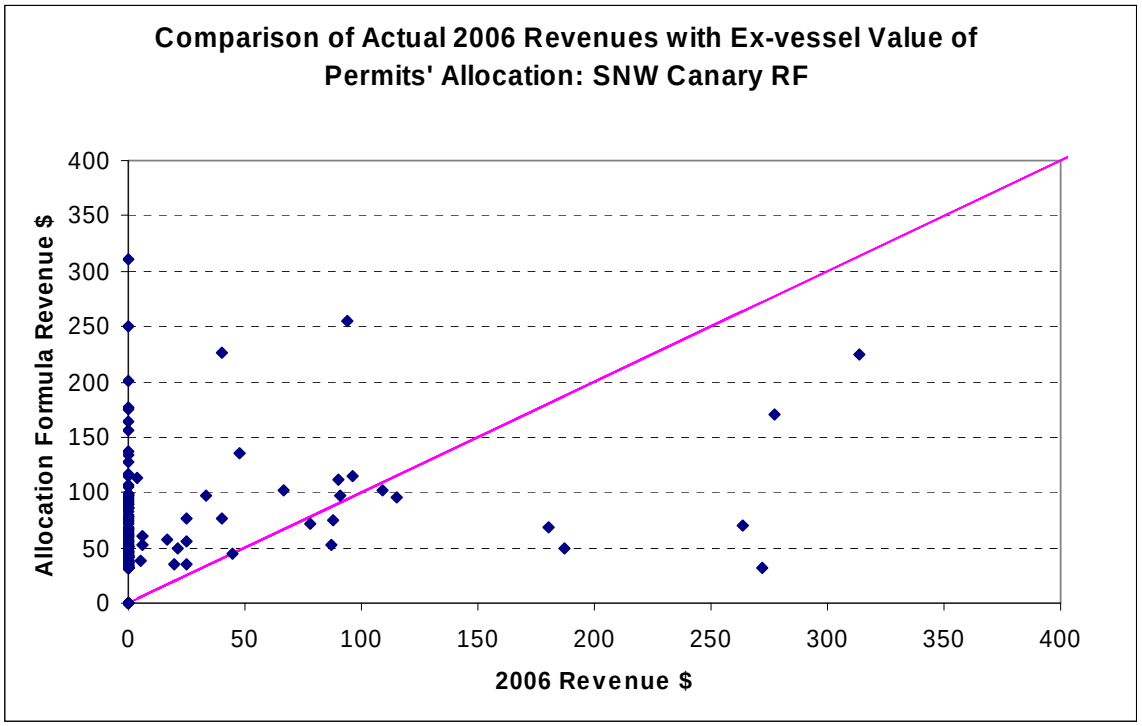
Shoreside Nonwhiting Sector: Canary RF

Shift in Ex-vessel Revenue Value of Allocation compared with 2006
Total and Average Shift

				Buyback Portion QS Allocated to:	
	2006 REV	Drop 3 REV	Change	All Recipients	Recips. receiving only buyback QS
TOTAL	$11,704	$11,704	+$0	$5,308	$628
Average	$334	$69	-$265	$31	$31
Total # of Permits	35	169	+ 134	169	20
# Winners		153			
$ average for winners	$5	$66	+$61		
Percent change			+1242.10%		
# Losers		16			
$ average for losers	$684	$100	-$585		
Percent change			-85.41%		
Total # of Permits Affected		169			

Geographic Shift (based on "principle port")

Port Code	$ change
BLAINE	+186
BELLINGHAM BAY	+474
SEATTLE AREA	+407
NEAH BAY	-44
WESTPORT	+317
ILWACO/CHINOOK	+141
ASTORIA	+1,675
TILLAMOOK	+33
NEWPORT	-3,703
COOS BAY	+1,066
BROOKINGS	+380
CRESCENT CITY	+173
EUREKA	-1,522
FORT BRAGG	+380
BODEGA BAY	+31
SAN FRANCISCO AREA	-687
PRINCETON	+246
SANTA CRUZ	+31
MOSS LANDING	+193
MONTEREY	+15
MORRO BAY	+176
AVILA	+32
Total	0



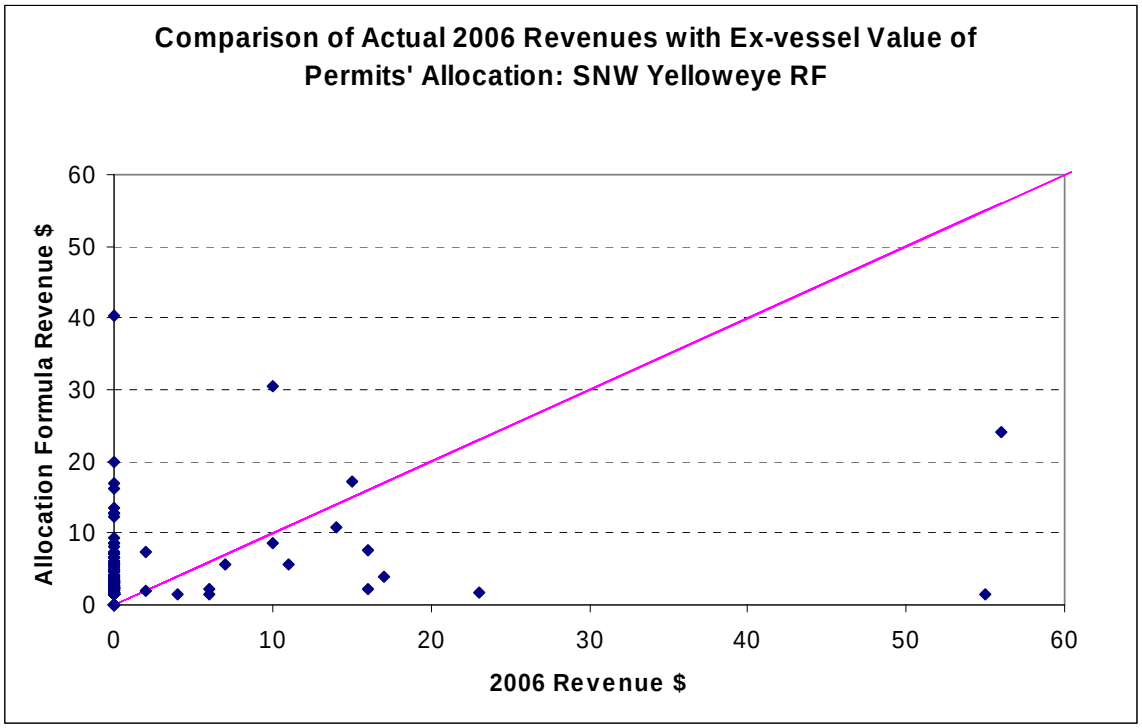
Shoreside Nonwhiting Sector: Yelloweye RF

Shift in Ex-vessel Revenue Value of Allocation compared with 2006
Total and Average Shift

				Buyback Portion QS Allocated to:	
	2006 REV	Drop 3 REV	Change	All Recipients	Recips. receiving only buyback QS
TOTAL	$669	$669	+$0	$233	$39
Average	$35	$4	-$31	$1.38	$1.38
Total # of Permits	19	169	+ 150	169	28
# Winners		154			
$ average for winners	$0	$4	+$4		
Percent change			+1923.93%		
# Losers		15			
$ average for losers	$43	$5	-$37		
Percent change			-87.18%		
Total # of Permits Affected		169			

Geographic Shift (based on "principle port")

Port Code	$ change
BLAINE	+2
BELLINGHAM BAY	-31
SEATTLE AREA	+17
NEAH BAY	-309
WESTPORT	+13
ILWACO/CHINOOK	+14
ASTORIA	-80
TILLAMOOK	+1
NEWPORT	+131
COOS BAY	+112
BROOKINGS	+17
CRESCENT CITY	+9
EUREKA	+18
FORT BRAGG	+16
BODEGA BAY	+1
SAN FRANCISCO AREA	+29
PRINCETON	+10
SANTA CRUZ	+1
MOSS LANDING	+14
MONTEREY	+1
MORRO BAY	+9
AVILA	+1
Total	0



2b. Shoreside Whiting Catcher Vessel Permits

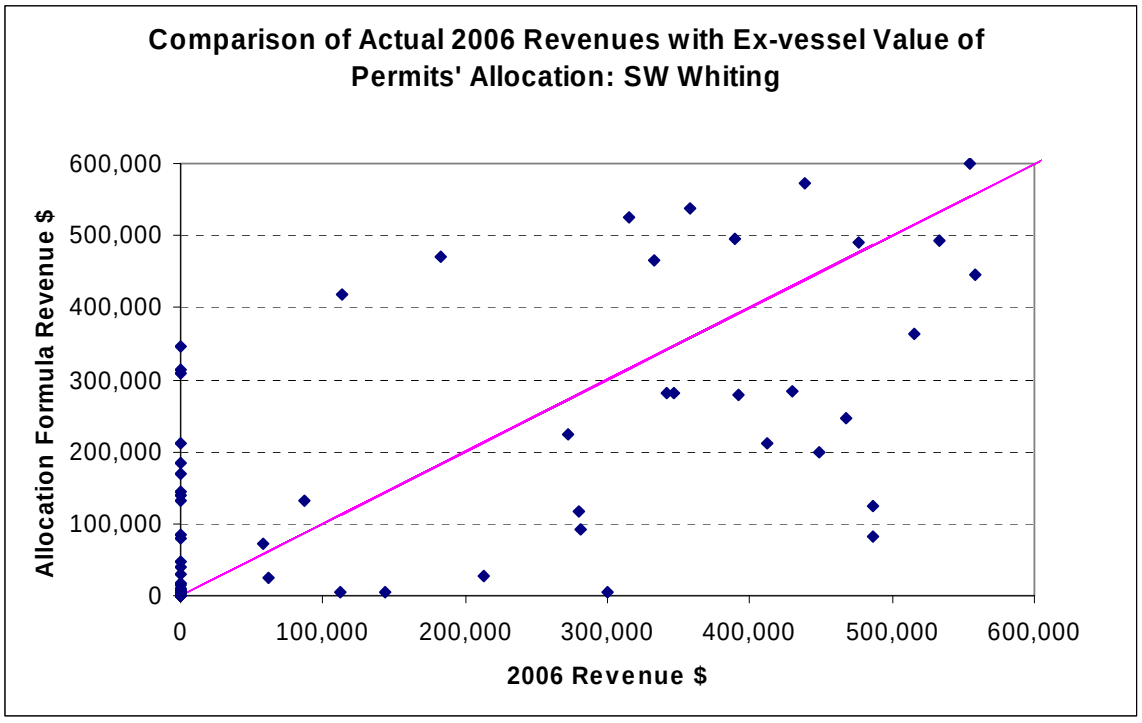
Shoreside Whiting Sector: Pacific whiting

Shift in Ex-vessel Revenue Value of Allocation compared with 2006
Total and Average Shift

				Buyback Portion QS Allocated to:	
	2006 REV	Drop 2 REV	Change	All Recipients	Recips. receiving only buyback QS
TOTAL	$13,078,482	$13,078,482	-$0	$1,016,060	$667,353
Average	$373,671	$77,387	-$296,283	$6,012	$6,012
Total # of Permits	35	169	+ 134	169	111
# Winners		146			
$ average for winners	$26,646	$57,338	+$30,692		
Percent change			+115.18%		
# Losers		23			
$ average for losers	$399,484	$204,657	-$194,827		
Percent change			-48.77%		
Total # of Permits Affected		169			

Geographic Shift (based on "principle port")

PCID	$ change
SEATTLE	+1,069,267
WESTPORT	-551,506
ILWACO/CHINOOK	-733,345
ASTORIA	-548,223
NEWPORT	-250,939
COOS BAY	-512,650
EUREKA	-23,063
SAN FRANCISCO AREA	+13,064
MOSS LANDING	+6,012
MONTEREY	+6,012
(Not Indicated)	+1,525,371
Total	0



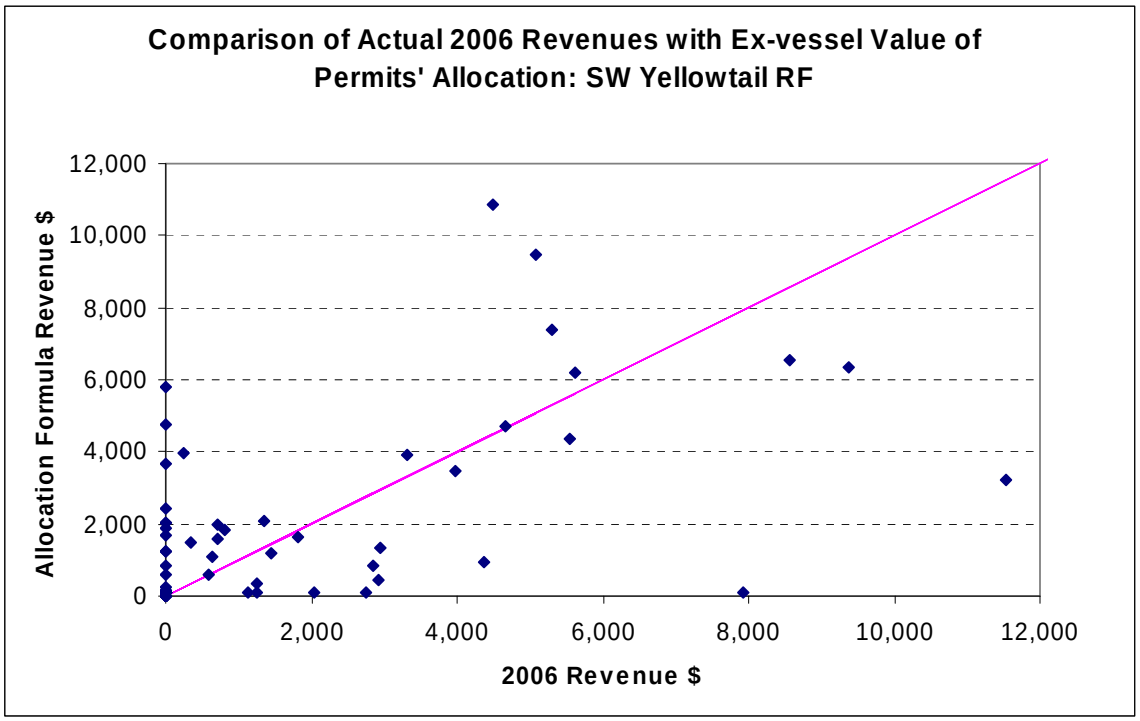
Shoreside Whiting Sector: Yellowtail RF

Shift in Ex-vessel Revenue Value of Allocation compared with 2006
Total and Average Shift

				Buyback Portion QS Allocated to:	
	2006 REV	Drop 2 REV	Change	All Recipients	Recips. receiving only buyback QS
TOTAL	$134,005	$134,005	+$0	$18,288	$12,769
Average	$3,941	$793	-$3,148	$108	$108
Total # of Permits	34	169	+ 135	169	118
# Winners		149			
$ average for winners	$223	$662	+$438		
Percent change			+196.39%		
# Losers		20			
$ average for losers	$5,038	$1,772	-$3,265		
Percent change			-64.82%		
Total # of Permits Affected		169			

Geographic Shift (based on "principle port")

PCID	$ change
SEATTLE	+16,757
WESTPORT	-8,236
ILWACO/CHINOOK	-12,919
ASTORIA	-7,345
NEWPORT	-2,641
COOS BAY	-2,796
EUREKA	-1,019
SAN FRANCISCO AREA	+377
MOSS LANDING	+108
MONTEREY	+108
(Not Indicated)	+17,605
Total	0



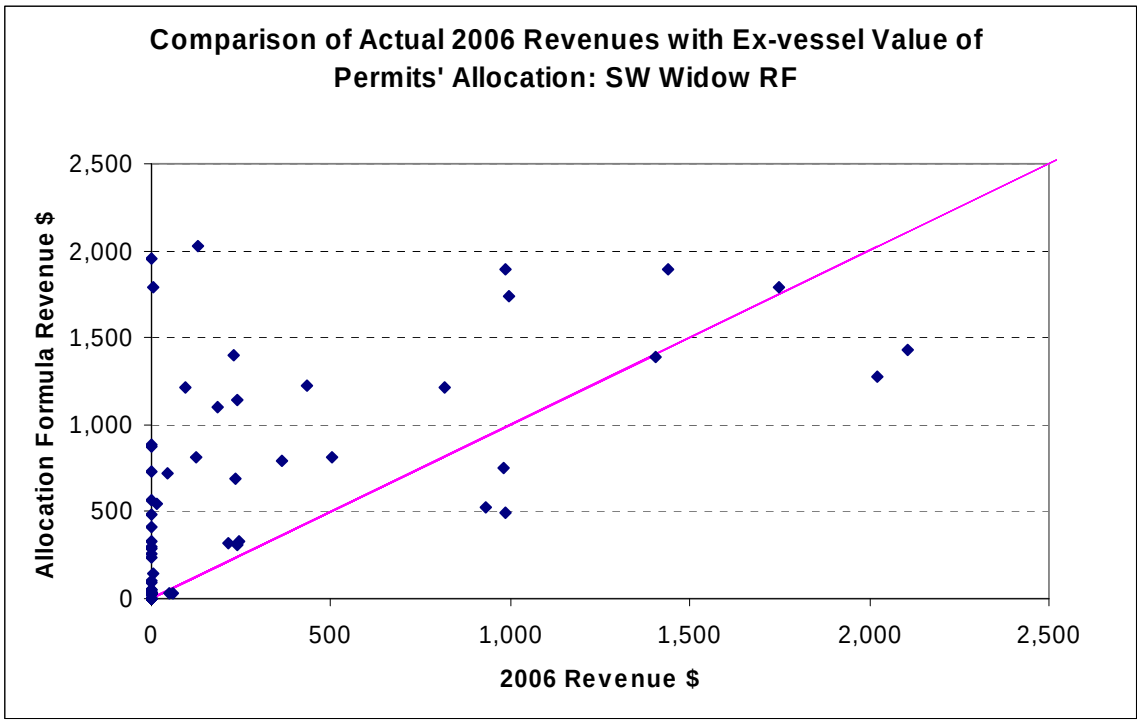
Shoreside Whiting Sector: Widow RF

Shift in Ex-vessel Revenue Value of Allocation compared with 2006
Total and Average Shift

				Buyback Portion QS Allocated to:	
	2006 REV	Drop 2 REV	Change	All Recipients	Recips. receiving only buyback QS
TOTAL	$44,630	$44,630	-$0	$5,317	$3,744
Average	$1,313	$264	-$1,049	$31	$31
Total # of Permits	34	169	+ 135	169	119
# Winners		158			
$ average for winners	$64	$239	+$176		
Percent change			+276.27%		
# Losers		11			
$ average for losers	$3,145	$623	-$2,521		
Percent change			-80.18%		
Total # of Permits Affected		169			

Geographic Shift (based on "principle port")

PCID	$ change
SEATTLE	+4,711
WESTPORT	+2,806
ILWACO/CHINOOK	-21,709
ASTORIA	+2,732
NEWPORT	+3,274
COOS BAY	+2,505
EUREKA	+161
SAN FRANCISCO AREA	+63
MOSS LANDING	+31
MONTEREY	+31
(Not Indicated)	+5,394
Total	0



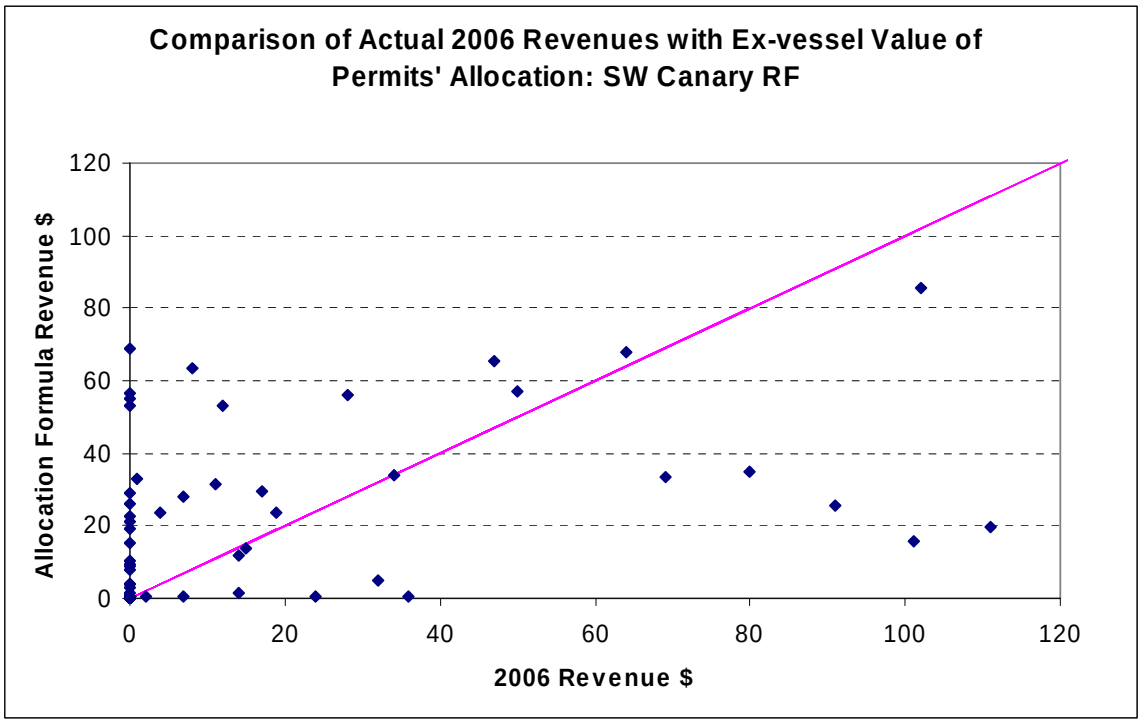
Shoreside Whiting Sector: Canary RF

Shift in Ex-vessel Revenue Value of Allocation compared with 2006
Total and Average Shift

				Buyback Portion QS Allocated to:	
	2006 REV	Drop 2 REV	Change	All Recipients	Recips. receiving only buyback QS
TOTAL	$1,618	$1,618	+$0	$97	$69
Average	$51	$10	-$41	$0.57	$0.57
Total # of Permits	32	169	+ 137	169	121
# Winners		151			
$ average for winners	$2	$8	+$6		
Percent change			+277.66%		
# Losers		18			
$ average for losers	$72	$24	-$48		
Percent change			-66.86%		
Total # of Permits Affected		169			

Geographic Shift (based on "principle port")

PCID	$ change
SEATTLE	+124
WESTPORT	+51
ILWACO/CHINOOK	-87
ASTORIA	+124
NEWPORT	-317
COOS BAY	-87
EUREKA	-4
SAN FRANCISCO AREA	+11
MOSS LANDING	+1
MONTEREY	+1
(Not Indicated)	+183
Total	0



2c. At-sea Whiting Catcher Vessel Permits

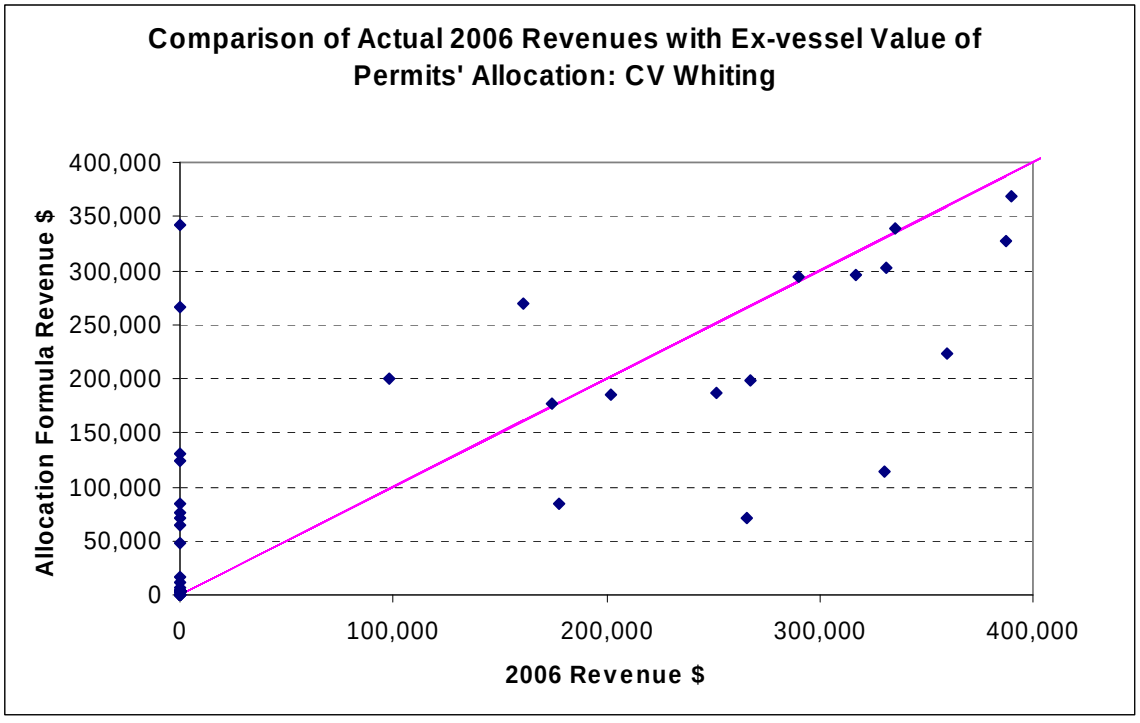
At-sea Whiting CV Sector: Pacific whiting

Shift in Ex-vessel Revenue Value of Allocation compared with 2006
Total and Average Shift

				Buyback Portion QS Allocated to:	
	2006 REV	Drop 2 REV	Change	All Recipients	Recips. receiving only buyback QS
TOTAL	$6,952,372	$6,952,372	-$0	$438,338	$355,339
Average	$347,619	$41,138	-$306,480	$2,594	$2,594
Total # of Permits	20	169	+ 149	169	137
# Winners		155			
$ average for winners	$9,349	$22,861	+$13,512		
Percent change			+144.52%		
# Losers		14			
$ average for losers	$393,089	$243,495	-$149,594		
Percent change			-38.06%		
Total # of Permits Affected		169			

Geographic Shift (based on "principle port")

PCID	$ change
SEATTLE	-136,248
WESTPORT	-570,666
ILWACO/CHINOOK	+139,668
ASTORIA	+136,061
NEWPORT	-632,016
COOS BAY	+18,156
EUREKA	+5,187
SAN FRANCISCO AREA	+620,950
MOSS LANDING	+2,594
MONTEREY	+2,594
(Not Indicated)	+413,720
Total	0



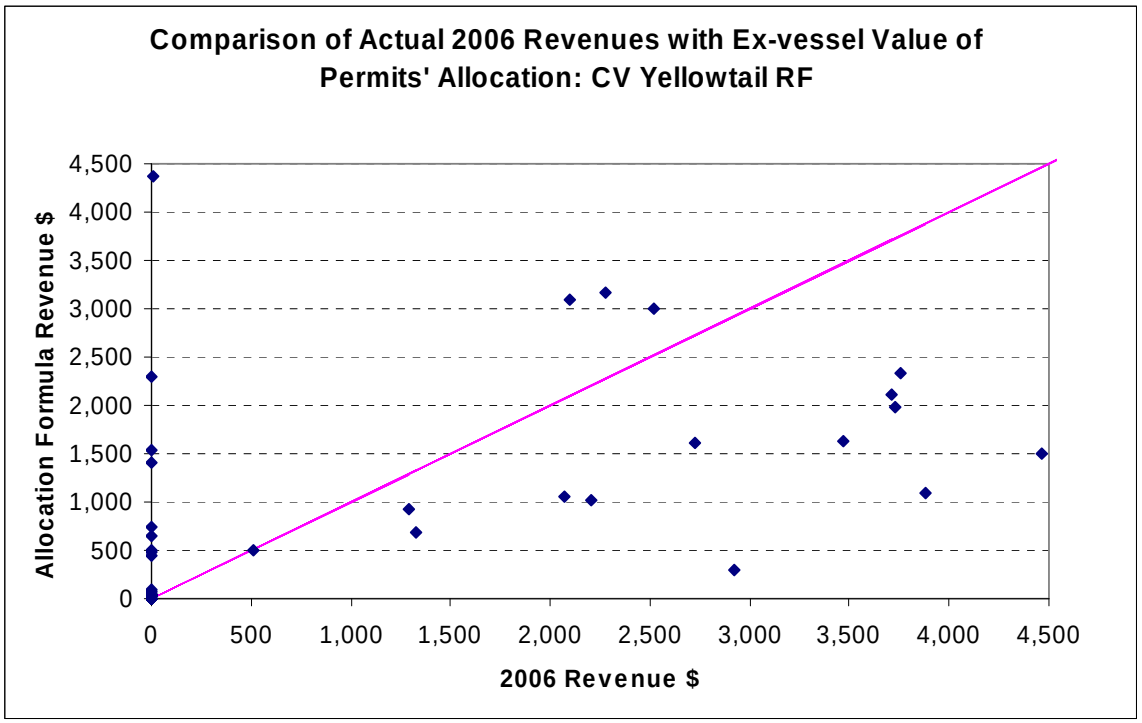
At-sea Whiting CV Sector: Yellowtail RF

Shift in Ex-vessel Revenue Value of Allocation compared with 2006
Total and Average Shift

				Buyback Portion QS Allocated to:	
	2006 REV	Drop 2 REV	Change	All Recipients	Recips. receiving only buyback QS
TOTAL	$54,335	$54,335	-$0	$5,821	$4,719
Average	$2,717	$322	-$2,395	$34	$34
Total # of Permits	20	169	+ 149	169	137
# Winners		154			
$ average for winners	$45	$214	+$169		
Percent change			+377.05%		
# Losers		15			
$ average for losers	$3,162	$1,427	-$1,735		
Percent change			-54.87%		
Total # of Permits Affected		169			

Geographic Shift (based on "principle port")

PCID	$ change
SEATTLE	-5,768
WESTPORT	-1,843
ILWACO/CHINOOK	+1,474
ASTORIA	-3,078
NEWPORT	-2,270
COOS BAY	+241
EUREKA	+69
SAN FRANCISCO AREA	+6,655
MOSS LANDING	+34
MONTEREY	+34
(Not Indicated)	+4,452
Total	0



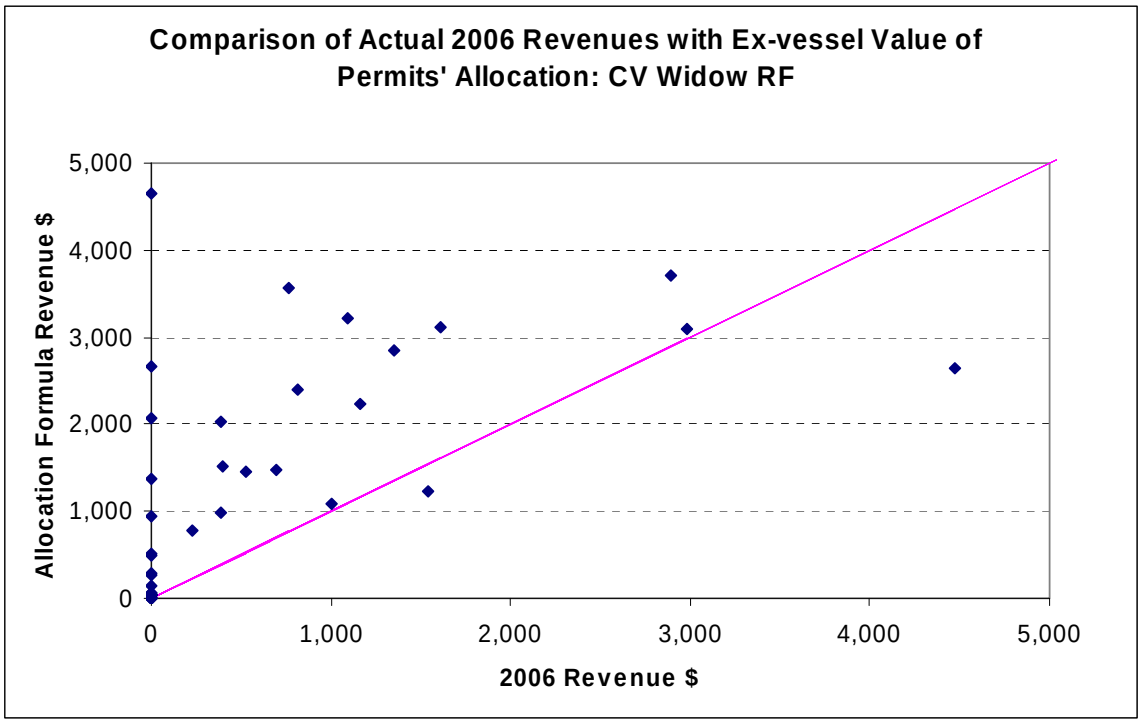
At-sea Whiting CV Sector: Widow RF

Shift in Ex-vessel Revenue Value of Allocation compared with 2006
Total and Average Shift

				Buyback Portion QS Allocated to:	
	2006 REV	Drop 2 REV	Change	All Recipients	Recips. receiving only buyback QS
TOTAL	$70,007	$70,007	+$0	$7,617	$6,175
Average	$3,500	$414	-$3,086	$45	$45
Total # of Permits	20	169	+ 149	169	137
# Winners		165			
$ average for winners	$103	$358	+$255		
Percent change			+247.90%		
# Losers		4			
$ average for losers	$13,262	$2,750	-$10,511		
Percent change			-79.26%		
Total # of Permits Affected		169			

Geographic Shift (based on "principle port")

PCID	$ change
SEATTLE	+9,801
WESTPORT	+5,545
ILWACO/CHINOOK	+1,463
ASTORIA	-14,375
NEWPORT	+8,539
COOS BAY	+315
EUREKA	+90
SAN FRANCISCO AREA	-17,128
MOSS LANDING	+45
MONTEREY	+45
(Not Indicated)	+5,659
Total	0



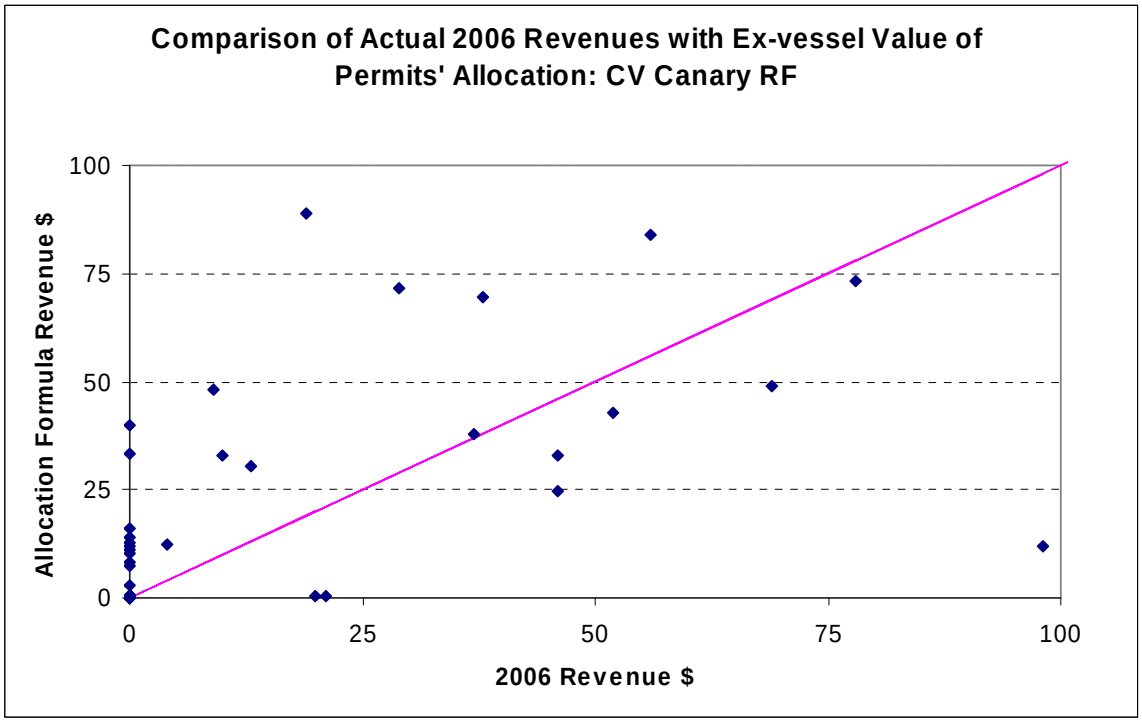
At-sea Whiting CV Sector: Canary RF

Shift in Ex-vessel Revenue Value of Allocation compared with 2006
Total and Average Shift

				Buyback Portion QS Allocated to:	
	2006 REV	Drop 2 REV	Change	All Recipients	Recips. receiving only buyback QS
TOTAL	$1,042	$1,042	+$0	$77	$64
Average	$52	$6	-$46	$0.46	$0.46
Total # of Permits	20	169	+ 149	169	140
# Winners		158			
$ average for winners	$1	$4	+$3		
Percent change			+228.91%		
# Losers		11			
$ average for losers	$75	$30	-$45		
Percent change			-59.51%		
Total # of Permits Affected		169			

Geographic Shift (based on "principle port")

PCID	$ change
SEATTLE	-44
WESTPORT	-96
ILWACO/CHINOOK	+34
ASTORIA	+26
NEWPORT	-16
COOS BAY	+3
EUREKA	+1
SAN FRANCISCO AREA	+14
MOSS LANDING	+0
MONTEREY	+0
(Not Indicated)	+77
Total	0



2d. Buyback Permit History

1994 - 2003 Aggregate Catch History Shares (%) for ***Buyback Permits***

Species Group	Shoreside Nonwhiting	Shoreside Whiting	At-Sea Whiting CVs	Total non-CP Groundfish CVs
Lingcod - coastwide	44.16%	5.74%	0.14%	44.11%
N. of 42° (OR & WA)	45.93%	3.99%	0.14%	45.87%
S. of 42° (CA)	39.27%	28.53%	-	39.27%
Pacific Cod	51.06%	7.23%	2.70%	51.03%
Pacific Whiting (Coastwide)	64.48%	7.20%	2.28%	5.51%
Sablefish (Coastwide)	45.87%	4.51%	1.32%	45.29%
N. of 36° (Monterey north)	46.23%	4.51%	1.32%	45.62%
S. of 36° (Conception area)	36.77%	-	-	36.77%
PACIFIC OCEAN PERCH	44.40%	2.59%	1.71%	43.08%
Shortbelly Rockfish	46.92%	12.02%	0.00%	39.77%
WIDOW ROCKFISH	36.03%	7.54%	3.43%	33.92%
CANARY ROCKFISH	44.61%	5.59%	2.54%	44.46%
Chilipepper Rockfish	19.98%	-	-	19.98%
BOCACCIO	18.30%	-	-	18.30%
Splitnose Rockfish	24.90%	-	-	24.90%
Yellowtail Rockfish	42.77%	11.36%	4.39%	36.48%
Shortspine Thornyhead - coastwide	45.00%	27.62%	0.00%	44.99%
N. of 34°27'	49.71%	27.62%	0.00%	49.70%
S. of 34°27'	33.61%	-	-	33.61%
Longspine Thornyhead - coastwide	46.23%	69.91%	0.00%	46.24%
N. of 34°27'	46.23%	69.91%	0.00%	46.24%
S. of 34°27'	35.64%	-	-	35.64%
Other thornyheads	39.99%	0.00%	-	39.99%
COWCOD	55.88%	-	-	55.88%
DARKBLOTCHED	48.44%	30.10%	1.82%	48.06%
YELLOWEYE	34.13%	0.21%	0.00%	34.06%
Black Rockfish - coastwide	21.40%	0.33%	0.00%	21.27%
Black Rockfish (WA)	59.88%	0.00%	-	57.87%
Black Rockfish (OR-CA)	16.00%	1.18%	0.00%	15.98%
Minor Rockfish North	45.51%	11.79%	2.12%	44.47%
Nearshore Species	59.46%	0.00%	0.00%	58.78%
Shelf Species	45.64%	3.34%	0.65%	44.17%
BOCACCIO: N. of Monterrey	47.55%	0.32%	2.21%	47.18%
Chilipepper Rockfish: Eureka	72.57%	1.63%	0.00%	66.62%
Redstripe Rockfish	36.77%	3.90%	0.08%	35.65%
Silvergrey Rockfish	47.37%	0.02%	0.00%	47.09%
Other Northern Shelf Rockfish	41.66%	4.34%	1.56%	40.19%
Slope Species	45.31%	38.31%	4.36%	44.84%
Bank Rockfish	68.07%	89.87%	0.00%	67.77%
Sharpchin Rockfish, north	48.76%	11.37%	0.00%	48.67%
Splitnose Rockfish: N. of Monterrey	48.43%	52.25%	0.20%	47.18%
Yellowmouth Rockfish	32.13%	0.02%	0.00%	31.95%
Other Northern Slope Rockfish	44.72%	3.56%	10.65%	44.15%

1994 - 2003 Aggregate Catch History Shares (%) for ***Buyback Permits***

Species Group	Shoreside Nonwhiting	Shoreside Whiting	At-Sea Whiting CVs	Total non-CP Groundfish CVs
Minor Rockfish South	31.29%	-	-	31.29%
Nearshore Species	28.69%	-	-	28.69%
Shelf Species	24.95%	-	-	24.95%
Redstripe Rockfish	45.57%	-	-	45.57%
Yellowtail Rockfish	35.69%	-	-	35.69%
Other Southern Shelf Rockfish	16.29%	-	-	16.29%
Slope Species	33.27%	-	-	33.27%
Bank Rockfish	34.15%	-	-	34.15%
Blackgill Rockfish	30.01%	-	-	30.01%
Sharpchin Rockfish	45.77%	-	-	45.77%
Yellowmouth Rockfish	21.57%	-	-	21.57%
Other Southern Slope Rockfish	30.90%	-	-	30.90%
California scorpionfish	3.74%	-	-	3.74%
Cabezon (off CA only)	4.11%	-	-	4.11%
Dover sole (total)	45.85%	56.27%	0.00%	45.85%
Dover Sole (Summer)	44.86%	42.45%	0.00%	44.86%
Dover Sole (Winter)	46.89%	99.95%	0.00%	46.89%
English Sole	38.79%	37.19%	0.07%	38.79%
Petrale Sole (coastwide)	47.51%	47.35%	0.00%	47.51%
N of 40°10' (summer)	50.55%	66.82%	-	50.56%
N of 40°10' (winter)	52.01%	11.70%	0.00%	52.00%
S of 40°10' (summer)	23.37%	-	-	23.37%
S of 40°10' (winter)	33.19%	-	-	33.19%
Arrowtooth Flounder (total)	53.41%	17.24%	1.06%	53.38%
Arrowtooth Flounder (summer)	52.25%	16.89%	1.20%	52.22%
Arrowtooth Flounder (winter)	59.48%	62.21%	0.48%	59.46%
Starry Flounder	12.36%	0.00%	-	12.35%
Other Flatfish	33.52%	62.08%	0.02%	33.53%
Kelp Greenling	10.13%	-	-	10.13%
Spiny Dogfish	69.43%	8.04%	3.73%	58.82%
Other Fish	40.98%	81.01%	0.00%	41.02%
Nearshore spp	41.39%	4.72%	0.13%	41.35%
Shelf spp	44.40%	10.98%	4.16%	42.89%
Slope spp	43.71%	8.60%	3.22%	42.99%
DTS spp	45.83%	7.27%	1.21%	45.73%
Total Groundfish	43.62%	7.22%	2.29%	14.39%
Number of Buyback Permits	91	20	3	91

1994 - 2003 Aggregate Catch History (mt) for *All non-CP Limited Entry Trawl Permits (Buyback + Remaining)*

Species Group	Shoreside Nonwhiting	Shoreside Whiting	At-Sea Whiting CVs	Total non-CP Groundfish CVs
Lingcod - coastwide	5,534.7	4.9	1.4	5,540.9
N. of 42° (OR & WA)	4,062.2	4.5	1.4	4,068.1
S. of 42° (CA)	1,472.4	0.3	0.0	1,472.8
Pacific Cod	5,341.2	2.9	0.2	5,344.2
Pacific Whiting (Coastwide)	922.2	745,047.3	408,768.2	1,154,737.6
Sablefish (Coastwide)	29,327.6	408.9	6.8	29,743.3
N. of 36° (Monterey north)	28,212.0	408.9	6.8	28,627.7
S. of 36° (Conception area)	1,115.6	0.0	0.0	1,115.6
PACIFIC OCEAN PERCH	4,936.9	105.0	54.2	5,096.1
Shortbelly Rockfish	221.9	9.9	33.0	264.8
WIDOW ROCKFISH	36,264.4	1,901.2	863.2	39,028.8
CANARY ROCKFISH	4,806.3	9.4	8.3	4,824.0
Chilipepper Rockfish	8,188.1	0.0	0.0	8,188.1
BOCACCIO	1,428.0	0.0	0.0	1,428.0
Splitnose Rockfish	3,286.3	0.0	0.0	3,286.3
Yellowtail Rockfish	21,897.9	2,616.1	2,244.6	26,758.5
Shortspine Thornyhead - coastwide	12,228.5	6.0	0.6	12,235.1
N. of 34°27'	8,647.5	6.0	0.6	8,654.1
S. of 34°27'	3,581.1	0.0	0.0	3,581.1
Longspine Thornyhead - coastwide	27,992.6	7.2	0.0	27,999.8
N. of 34°27'	27,992.2	7.2	0.0	27,999.4
S. of 34°27'	0.5	0.0	0.0	0.5
Other thornyheads	564.6	0.0	0.0	564.6
COWCOD	0.0	0.0	0.0	0.0
DARKBLOTCHED	4,847.5	21.3	31.0	4,899.8
YELLOWEYE	462.6	0.6	0.3	463.4
Black Rockfish - coastwide	187.8	1.1	0.0	188.9
Black Rockfish (WA)	23.1	0.8	0.0	23.9
Black Rockfish (OR-CA)	164.7	0.3	0.0	165.0
Minor Rockfish North	10,261.5	184.4	110.4	10,556.4
Nearshore Species	8.2	0.0	0.1	8.3
Shelf Species	5,840.7	139.8	66.3	6,046.9
BOCACCIO: N. of Monterrey	808.4	2.9	3.7	815.0
Chilipepper Rockfish: Eureka	629.6	39.3	18.0	686.9
Redstripe Rockfish	1,086.9	12.4	23.1	1,122.4
Silvergrey Rockfish	766.6	4.0	0.5	771.1
Other Northern Shelf Rockfish	2,549.2	81.2	21.1	2,651.5
Slope Species	4,412.5	44.6	44.0	4,501.1
Bank Rockfish	120.2	0.1	0.6	120.9
Sharpchin Rockfish, north	1,196.8	2.6	0.3	1,199.6
Splitnose Rockfish: N. of Monterrey	723.0	31.3	22.6	776.9
Yellowmouth Rockfish	615.3	0.6	3.0	618.9
Other Northern Slope Rockfish	1,757.2	10.0	17.6	1,784.9

1994 - 2003 Aggregate Catch History (mt) for *All non-CP Limited Entry Trawl Permits (Buyback + Remaining)*

Species Group	Shoreside Nonwhiting	Shoreside Whiting	At-Sea Whiting CVs	Total non-CP Groundfish CVs
Minor Rockfish South	5,123.0	0.0	0.0	5,123.0
Nearshore Species	60.5	0.0	0.0	60.5
Shelf Species	1,186.7	0.0	0.0	1,186.7
Redstripe Rockfish	6.8	0.0	0.0	6.8
Yellowtail Rockfish	519.6	0.0	0.0	519.6
Other Southern Shelf Rockfish	660.3	0.0	0.0	660.3
Slope Species	3,875.8	0.0	0.0	3,875.8
Bank Rockfish	2,394.9	0.0	0.0	2,394.9
Blackgill Rockfish	923.1	0.0	0.0	923.1
Sharpchin Rockfish	152.7	0.0	0.0	152.7
Yellowmouth Rockfish	5.5	0.0	0.0	5.5
Other Southern Slope Rockfish	399.7	0.0	0.0	399.7
California scorpionfish	6.1	0.0	0.0	6.1
Cabezon (off CA only)	2.9	0.0	0.0	2.9
Dover sole (total)	87,944.2	11.3	0.0	87,955.5
Dover Sole (Summer)	44,970.2	8.6	0.0	44,978.8
Dover Sole (Winter)	42,974.0	2.7	0.0	42,976.7
English Sole	10,435.8	6.3	0.2	10,442.3
Petrale Sole (coastwide)	16,836.0	5.4	0.0	16,841.4
N of 40°10' (summer)	4,975.9	3.5	0.0	4,979.4
N of 40°10' (winter)	8,829.1	1.9	0.0	8,831.0
S of 40°10' (summer)	1,172.6	0.0	0.0	1,172.6
S of 40°10' (winter)	1,858.4	0.0	0.0	1,858.4
Arrowtooth Flounder (total)	28,536.5	10.1	7.5	28,554.1
Arrowtooth Flounder (summer)	23,958.4	10.0	6.0	23,974.3
Arrowtooth Flounder (winter)	4,578.2	0.1	1.5	4,579.8
Starry Flounder	362.9	0.0	0.0	363.0
Other Flatfish	17,839.8	12.1	2.7	17,854.6
Kelp Greenling	1.8	0.0	0.0	1.8
Spiny Dogfish	4,006.2	191.7	594.8	4,792.6
Other Fish	4,847.0	5.9	0.9	4,853.8
Nearshore spp	6,164.9	6.0	1.5	6,172.3
Shelf spp	138,670.5	2,988.9	2,920.6	144,580.0
Slope spp	156,870.8	2,099.9	1,027.6	159,998.3
DTS spp	158,057.5	433.4	7.4	158,498.4
Total Groundfish	354,642.8	750,569.0	412,728.2	1,517,940.0
Number of Buyback Permits	91	20	3	91

3. Co-op Proposal Qualification Requirements

3a. At-sea Whiting Catcher Vessel Endorsement Qualification

At-sea catcher vessels (CV) deliver whiting to floating processors called motherships (MS). One co-op proposal includes an endorsement process to identify permits associated with CVs that may be eligible to form co-ops. The following table reports results for permits evaluated under three at-sea whiting catch thresholds (at least 1 mt, at least 500 mt, and at least 1,000 mt) during three qualification periods (1994-2006, 1994-2003, and 1998-2004).

Number of At-sea Catcher Vessels (CV) that would be excluded under different coop endorsement options

		Delivery Threshold During the Period (mt)					
		at least 1 mt		at least 500 mt		at least 1,000 mt	
Period	Total CV taking deliveries during the period	Number of CV not meeting threshold	Number not meeting threshold that were active in 2006	Number of CV not meeting threshold	Number not meeting threshold that were active in 2006	Number of CV not meeting threshold	Number not meeting threshold that were active in 2006
1994-2006	32	0	0	2	0	3	0
1994-2003	32	0	0	2	0	3	0
1998-2004	27	5	0	5	0	5	0

The table shows that there were 32 total permits with some CV sector catch history during 1994-2006. Of those permits, two had less than 500 mt total whiting deliveries, and three had less than 1,000 mt total whiting deliveries during 1994-2006. None of the permits that failed to meet the threshold were involved in the sector in 2006. The same pattern holds for the 1994-2003 period. During the shorter 1998-2004 period, five of the 32 total permits failed to make a delivery to an at-sea MS. However none of these permits was involved in the sector in 2006.

3b. Mothership Permit Qualification

MS receive and process at-sea deliveries of whiting from catcher vessels. One proposal includes establishing a permitting process to identify MS that may be eligible to receive whiting from catcher vessels. Qualifying MS would be issued MS permits. Under the proposal, a qualifying MS is defined as one that received at least 1,000 mt of whiting in each of any two years from 1998 through 2004.

The following table shows the number of MS meeting the 1,000 mt qualification criterion during the 1998-2004 period. The 1994-2006 period is also included for comparison.

Number of Motherships (MS) that would be excluded under the co-op permit qualfication option

Criterion: processed at least 1,000 mt of whiting in each of any two years during the period.

Period	Total MS taking deliveries during the period	Number of MS not meeting criterion	Number not meeting criterion that were active in 2006
1994-2006	11	4	1
1998-2004	6	0	NA

The table shows that 11 total MS participated in the at-sea whiting sector between 1994 and 2006. Four of these would fail to meet the criterion of having received at least 1,000 mt in each of any two years during 1994-2006. One of these four MS was active in 2006. Only six of the eleven MS were active in the fishery during the 1998-2004 qualification period, but all six of these meet the qualification criterion.

3c. Catcher-processor Endorsement Qualification

Under a co-op proposal for the catcher-processor (CP) sector, a qualified vessel is one that harvested and processed in the CP sector of the Pacific whiting fishery sometime from 1997 through 2006. Currently only catch data exists for vessels in the sector, so for purposes of this analysis, it is assumed that all whiting caught by a CP is also "processed" by the CP.

There were 10 permits associated with 11 vessels that harvested some whiting in the CP fishery between 1994 and 2006. Of these, all 10 permits have catch history during the 1997-2006 period. This catch is associated with all but one of the 11 vessels. The one vessel that would fail to qualify under the criterion shows no CP catch history since 1996. One permit comes close to not qualifying. This permit shows no CP catch history since 1997.

4. Co-op Permit History Assignments – At-Sea Whiting Catcher Vessel Permits

This proposal specifies four alternative formulas to compare in calculating the amount of at-sea catcher vessel (CV) catch history that would be assigned to permits in the co-op and non co-op fishery pools. Under the proposal, a permit's qualified CV catch history will be calculated based on four options shown in the following table.

Allocation Option	Catch History Calculation
A	Best 6 out of 7 years from 1998 through 2004
B	Best 9 out of 11 years from 1994 through 2004
C	Best 5 out of 6 years from 1998 through 2003
D	Best 9 out of 10 years from 1994 through 2003

Several parameters resulting from application of these four catch history calculation methods are presented and compared in the following table.

Comparison of statistics resulting from application of CV co-op catch history calculation options

Statistic	Option A	Option B	Option C	Option D
No. of qualifying CV permits	27	32	27	32
Maximum catch share	11.92%	10.25%	10.75%	9.58%
90th percentile	5.88%	5.49%	5.45%	5.52%
75th percentile	5.15%	4.50%	5.14%	4.36%
Average catch share	3.70%	3.13%	3.70%	3.13%
Median catch share	3.45%	2.94%	3.33%	3.05%
25th percentile	2.06%	1.30%	2.30%	1.35%
Minimum catch share	0.558%	0.079%	0.625%	0.082%

The table shows the number of permits with qualifying catch history during the applicable periods varies from 27 under options A and C, to 32 under options B and D. Options A and C, with fewer qualifying permits, show the largest maximum catch shares, while options B and D, with relatively more qualifying permits, show the smallest minimum catch shares. In all cases, the average catch share is higher than the median catch share. However the two measures are closest in option D, implying that of the four options, option D probably results in the most equal distribution of CV catch shares among participating permits.

SUPPLEMENTAL QUANTITATIVE ANALYSIS OF QUALIFICATION AND ALLOCATION RULES

Comparison of Permit Allocation Formulas With and Without Equal Sharing

This document contains two sections, which compare formulas for allocating quota shares to permit owners.

The first section contains graphical comparisons of:

- average 1994-2003 landings,[1]
- average 2004-2006 landings,
- a permit allocation formula that includes recent participation and some equal sharing, and
- a permit allocation formula that includes neither recent participation nor equal sharing.

The second section contains a facing pages comparison of:

- selected Attachment 3 results on a permit allocation formula that includes recent participation and some equal sharing to
- similar results for a permit allocation formula that includes neither recent participation nor equal sharing.

This section is laid out so that each left hand page is from Attachment 3 and each right hand page contains similar information except that the results are for an alternative allocation formula.

[1] The term landings references both landings or at-sea deliveries

Graphical Comparison of Permit Allocation Formulas for Selected Species

The following graphs compare the results of two different formulas for allocating selected species quota share to trawl permits.

Under **Allocation Formula 1 (recent participation and some equal sharing)**, recent participation of five landings or deliveries during 1998-2003 is required, but the buyback portion is equally divided among all 169 valid trawl permits.

Under **Allocation Formula 2 (no recent participation and no equal sharing)**, recent participation is not required and the buyback portion is allocated only to permits with sector landing history for that particular species.

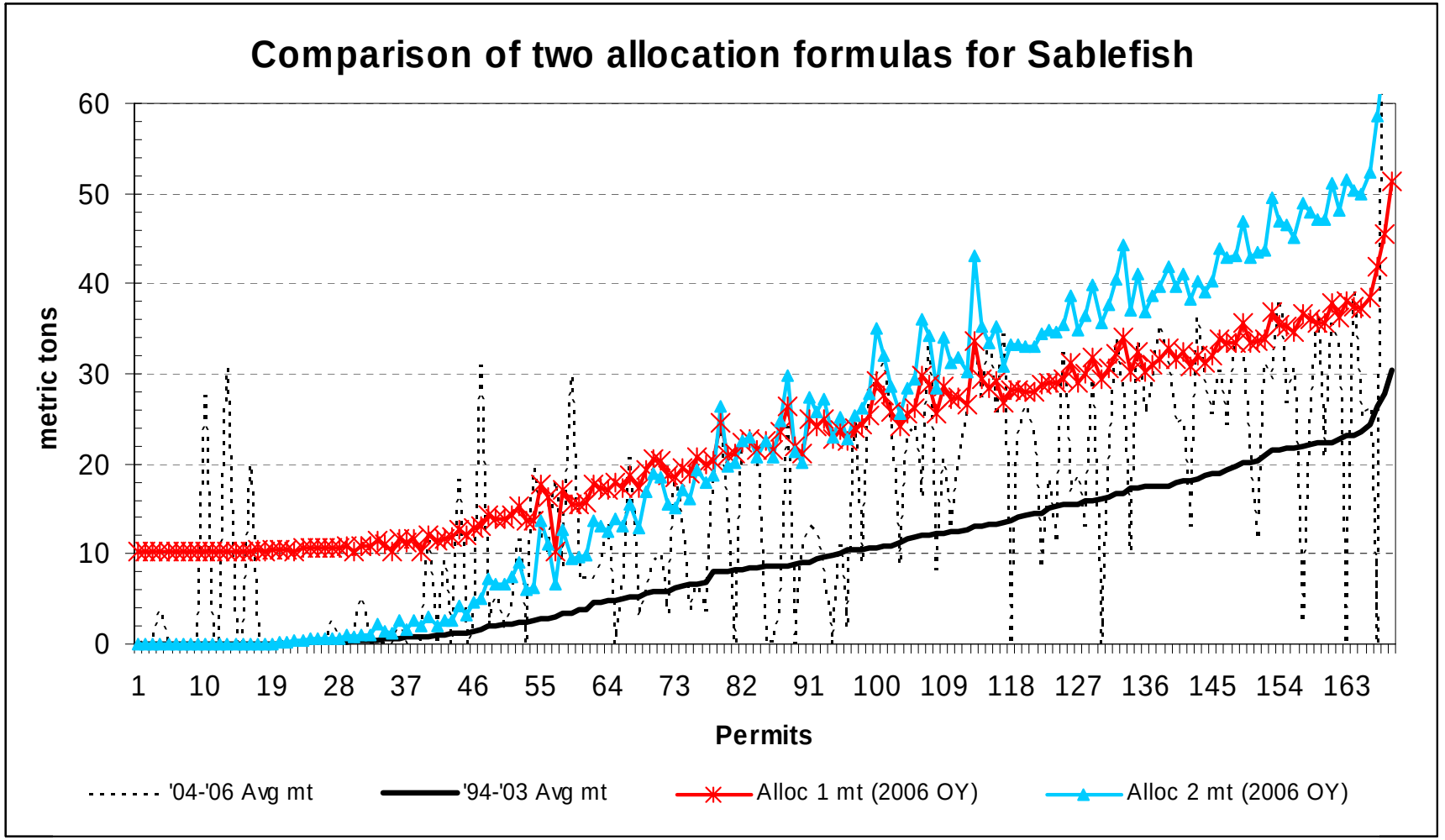
Under both formulas "relative lbs." landing history (a permit's average share of total sector landing of a species) rather than "absolute lbs." landing history is used to calculate the landing history portion of each qualifying permit's species QS. Only landing history over the period 1994-2003 is considered. Within that period, the two lowest years are dropped for whiting sector landing history, and the three lowest years are dropped for nonwhiting sector landing history.

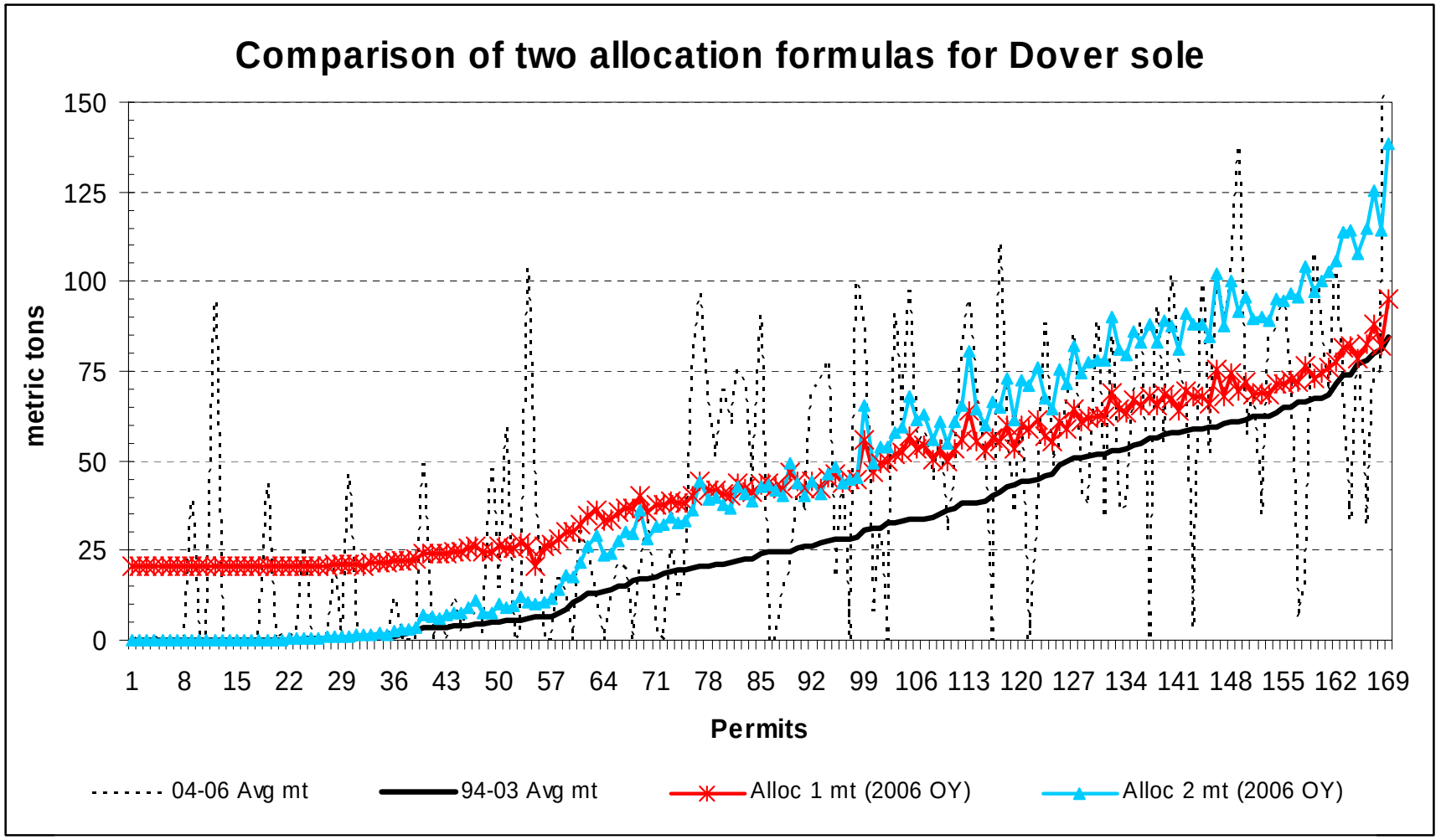
The graphs compare each permit's resulting allocation for a selected target species under the two formulas, juxtaposed against the permit's average landing history during the 1994-2003 and 2004-2006 periods. Allocations are expressed in terms of the share of the 2006 OYs.

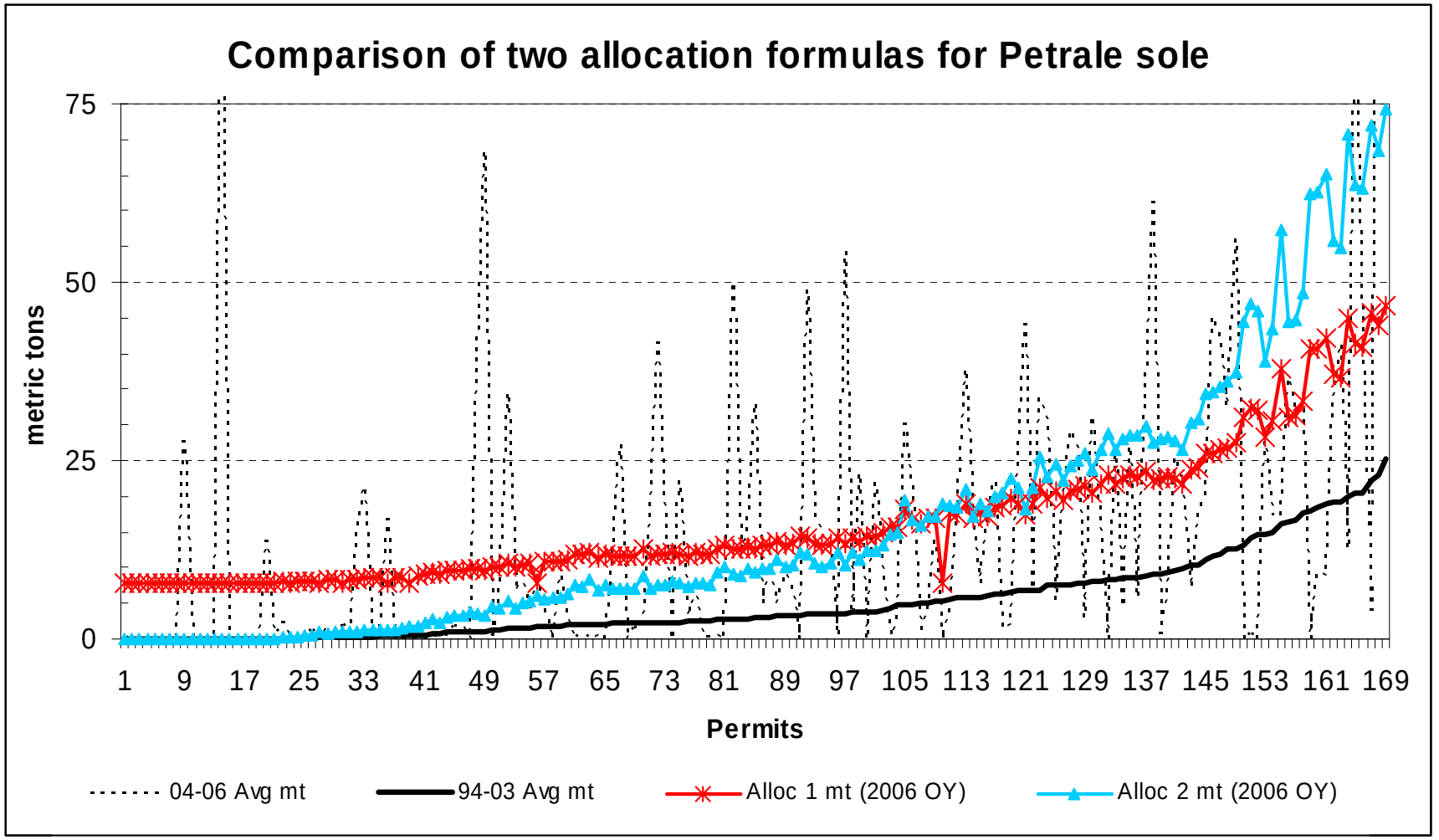
The graphs clearly show the effect of the different treatment of the buyback portion under the two formulas: The distribution of quota share is more "level" under Allocation Formula 1, with everyone getting something. Under Allocation Formula 2, the line is steeper, with some current permits getting no allocation and some getting much higher allocations than under Formula 1. The graphs also show how much the distribution of allocations based on 1994-2003 lbs. landing history diverges from more recent average performance during 2004-2006.

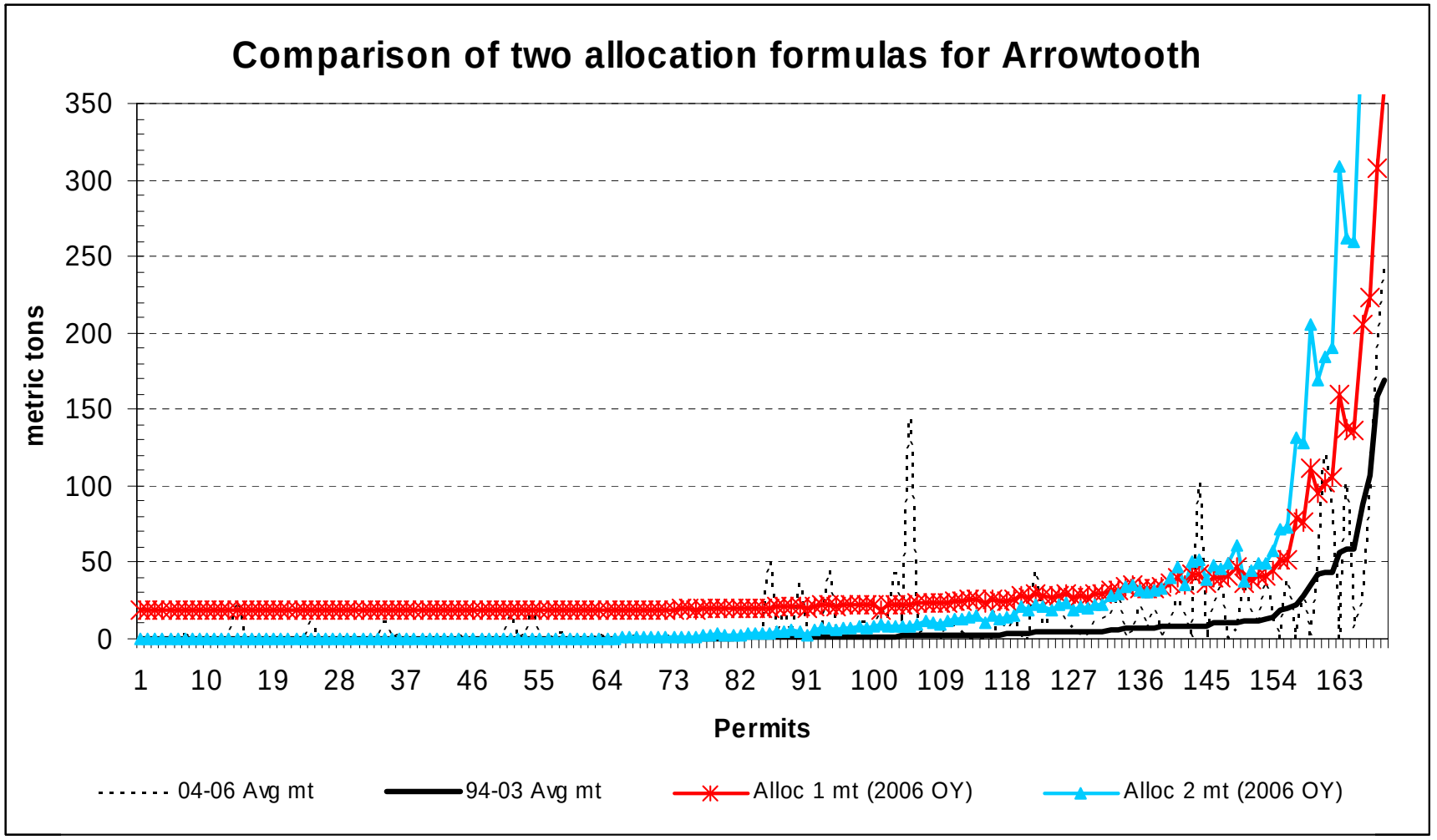
Graphs for the following sectors and species are included below:

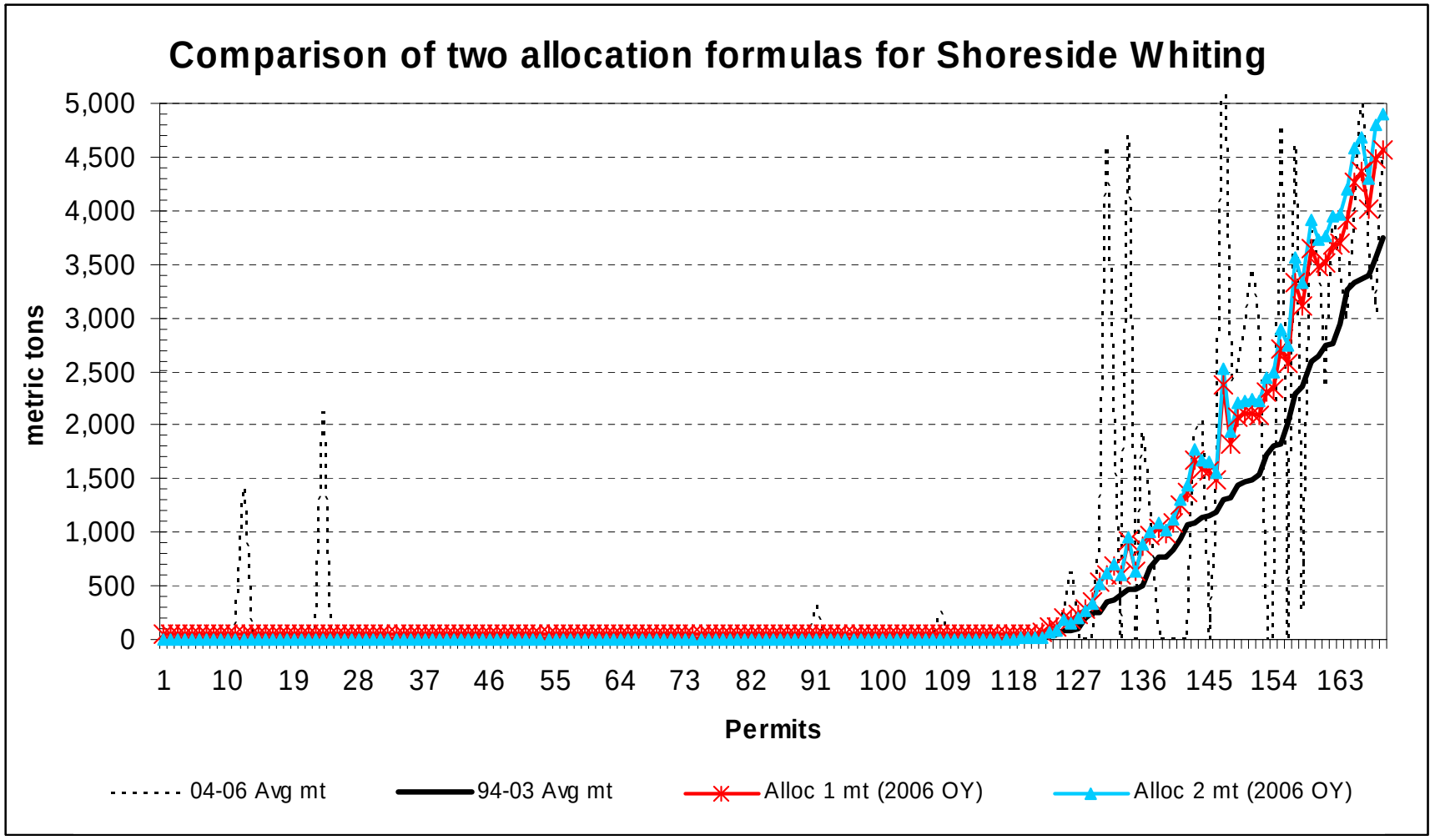
Shoreside nonwhiting	**Shoreside whiting**	**At-sea whiting CV**
Sablefish	Pacific whiting	Pacific whiting
Dover sole		
Petrale sole		
Arrowtooth flounder		

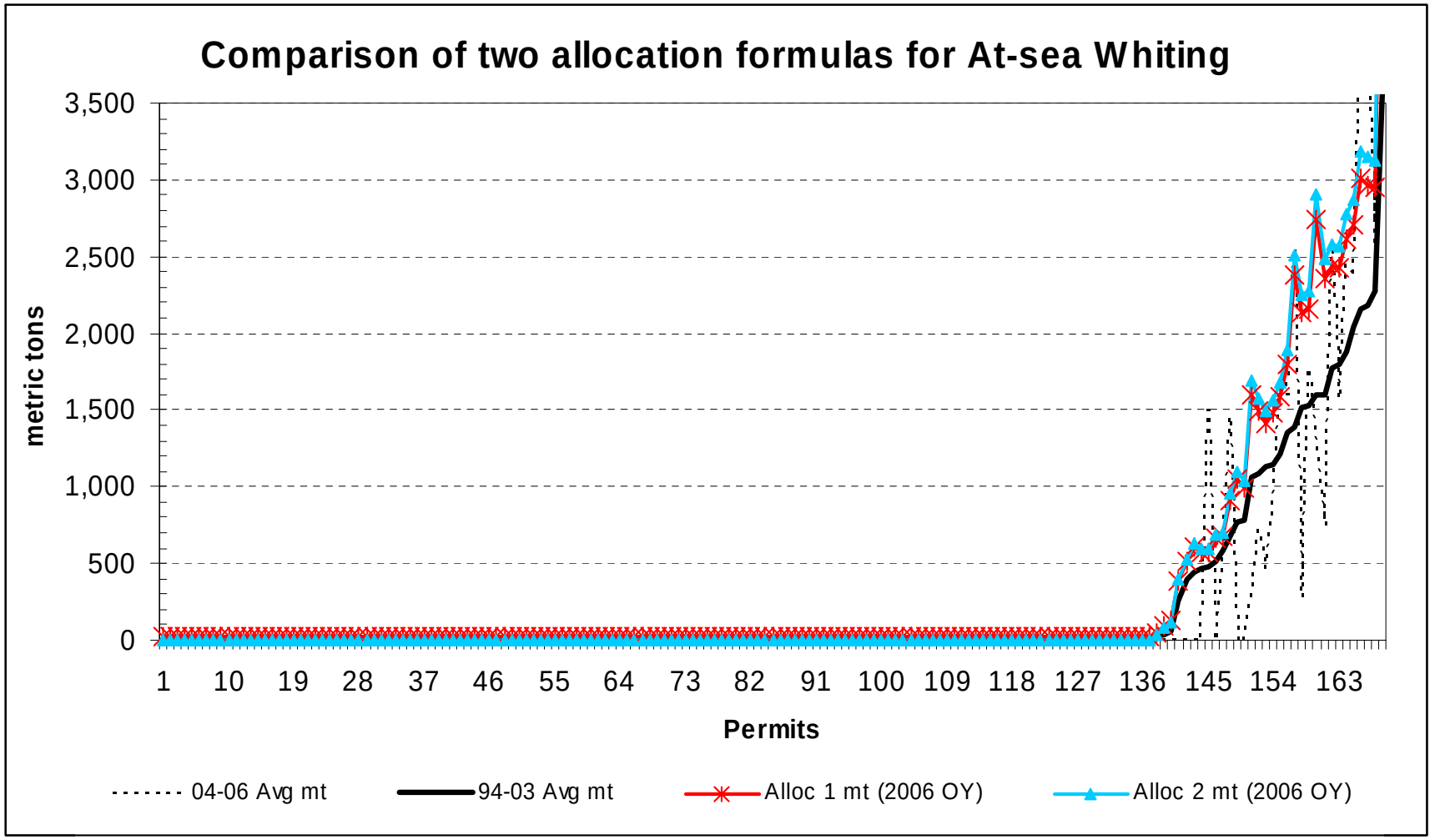

Comparison of two allocation formulas for Sablefish
metric tons
60
50
40
30
20
10
0
1
10
19
28
37
46
55
64
73
82
91
100
109
118
127
136
145
154
163
Permits
'04-'06 Avg mt
'94-'03 Avg mt
Alloc 1 mt (2006 OY)
Alloc 2 mt (2006 OY)


Comparison of two allocation formulas for Dover sole
metric tons
150
125
100
75
50
25
0
1 8 15 22 29 36 43 50 57 64 71 78 85 92 99 106 113 120 127 134 141 148 155 162 169
Permits
04-06 Avg mt
94-03 Avg mt
Alloc 1 mt (2006 OY)
Alloc 2 mt (2006 OY)


Comparison of two allocation formulas for Petrale sole
75
50
25
0
metric tons
1
9
17
25
33
41
49
57
65
73
81
89
97
105
113
121
129
137
145
153
161
169
Permits
04-06 Avg mt
94-03 Avg mt
Alloc 1 mt (2006 OY)
Alloc 2 mt (2006 OY)


Comparison of two allocation formulas for Arrowtooth
metric tons
350
300
250
200
150
100
50
0
1
10
19
28
37
46
55
64
73
82
91
100
109
118
127
136
145
154
163
Permits
04-06 Avg mt
94-03 Avg mt
Alloc 1 mt (2006 OY)
Alloc 2 mt (2006 OY)


Comparison of two allocation formulas for Shoreside Whiting
metric tons
5,000
4,500
4,000
3,500
3,000
2,500
2,000
1,500
1,000
500
0
1
10
19
28
37
46
55
64
73
82
91
100
109
118
127
136
145
154
163
Permits
04-06 Avg mt
94-03 Avg mt
Alloc 1 mt (2006 OY)
Alloc 2 mt (2006 OY)


Comparison of two allocation formulas for At-sea Whiting
metric tons
3,500
3,000
2,500
2,000
1,500
1,000
500
0
1
10
19
28
37
46
55
64
73
82
91
100
109
118
127
136
145
154
163
Permits
04-06 Avg mt
94-03 Avg mt
Alloc 1 mt (2006 OY)
Alloc 2 mt (2006 OY)

Comparison of Attachment 3 Results On Formulas With Equal Sharing to Results on Formulas Without Equal Sharing

This presentation compares results under two different versions of the permit allocation formula. In the first case, recent participation (5 landings) is required and the buyback portion is equally divided among the 169 valid trawl permits (the formula used in Attachment 3). In the second case, recent participation is not required and the buyback portion is allocated only to permits with sector landing history for that particular species.

Summary of the key elements of the quota share allocation formulas:

1. *Allocation is based on landing history (1994-2003) with provisions to drop the three worst years for the non-whiting sector, and drop the two worst years for the whiting sectors.* ***There are 168 existing non-CP permits with at least some landing history from 1994 to 2003.***
2. *Landing history is measured using "relative pounds" (% of annual totals).*
3. *There are* ***169 valid non-CP groundfish trawl permits.*** *Under the first allocation formula, recent participation of at least five landings or deliveries between 1998 and 2003 is required to receive a base allocation.* ***There are 162 total non-CP permits with some landing history during 1998-2003; 161 of these qualify under the 5-delivery criterion****. For the second allocation formula, the recent participation requirement is dropped, so all 169 permits are eligible to receive base allocations, depending on their landing history.*
4. *In the first case, the landing portion attributed to buyback permits is equally divided among the 169 permits. In the second case, the buyback portion is allocated to permits based only on landing history.*
5. *100% of the QS is allocated to permits (No processor allocation).*

Allocation Formula:

"Relative lbs." landing history (a permit's average share of total sector landing of a species) rather than "absolute lbs." landing history is used to calculate the landing history portion of each qualifying permit's species QS.

The landing history portion of the allocation is based on a permit's relative lbs. landing history over the period 1994-2003. Within that period, the two lowest years are dropped for whiting sector landing history, and the three lowest years are dropped for nonwhiting sector landing history.

Recent Participation:

In the case of the first allocation formula, it is assumed that only non-catcher processor permits with at least five groundfish landings or deliveries during 1998-2003 in any or all of the three fishery sectors (shoreside nonwhiting, shoreside whiting, or at-sea whiting catcher vessel) are eligible to receive an allocation based on permit landing history. There are 161 permits with at least five groundfish deliveries during the recent participation period. Under the first allocation formula, these 161 permits are qualified to receive a landing-history based allocation.

In the case of the second allocation formula, the recent participation requirement is waived. So all 169 permits are potentially eligible to receive base allocations, depending on their landing histories for each species in each sector.

Buyback Permits' Landing History:

The 91 trawl permits bought back in December 2003 accounted for 43.62% of total groundfish roundweight landed in the non-whiting sector during 1994-2003. The 20 buyback permits participating in the shoreside whiting fishery landed about 7% of total groundfish in that sector; and the three at-sea catcher vessel buyback permits accounted for about 2% of total groundfish delivered in that sector.

This "buyback portion" of landing history is treated differently under the two allocation schemes:

Under the first allocation formula, any current, non CP groundfish trawl permit is eligible to receive an equal share of the buyback aggregate landing history, regardless of whether the permit had landing history during 1994-2003 or during the 1998-2003 recent participation period. Under this formula there are 169 current permits each eligible to receive a 1/169 (0.59%) share of the buyback permits' landing history for each species.

Under the second allocation formula, the buyback portion is allocated to permits based only on landing history in the sector, i.e., the same as their base allocation. So permits with no landing history in, say, the at sea whiting sector will not receive allocation shares for that sector's species, and permits with greater relative lbs landing shares will receive proportionately greater shares of the buyback landing history.

Tables and Graphs:

The following tables and graphs summarize and compare allocations resulting from the formulas described above against the permits' 2006 revenues for selected species. The question being addressed is: "Compared with fleet experience in 2006, how would an equivalent amount of total QS landings be distributed among recipients under the two allocation formulas?"

Each page of tables and graphs examines results under one of the two allocation formulas for a single sector and species category. Facing pages display results for the same sector and species under the two allocation formulas. The upper panels of the tables compare revenues in 2006 with revenues under the allocation formula, and indicate the number of "winners" (those who, when 2006 harvest levels and prices are applied to the allocation, would gain revenue compared with 2006) and "losers" (those who would receive less revenue than in 2006). In addition, the tables show the total and average QS amounts for all permits receiving a share of the buyback portion, and the same information for permits whose only allocation received under the formula is from equal sharing of the buyback portion (i.e., under the first allocation formula).

The lower panel in each table aggregates the change in projected revenues from 2006 levels by "principle port." Principle ports were assigned to each permit in order to geographically aggregate actual revenues received in 2006 and revenues projected to be allocated under the allocation formulas. Whiting and nonwhiting principle ports were identified for each permit as the PacFIN port code (PCID) receiving the largest share of each permit's whiting and nonwhiting deliveries, respectively, during the most recent three year period, 2004-2006. In cases where a permit made no shoreside deliveries during 2004-2006, the permit holder's address was used to

assign a principle port area. Nonwhiting principle ports are used to aggregate the nonwhiting sector's species groups. Whiting principle ports are used for the shoreside whiting and at-sea whiting sectors' species groups. Allocations of whiting sectors' species groups received by permits that do not have a whiting principle port (i.e., no whiting deliveries during the period) were assigned to the "Not Indicated" category.

Each point on the graphs (scatterplots) represents a given permit. Each scatterplot shows the correlation of a permit's 2006 revenue (x-axis) against the revenue that would be earned by the permit if it delivered its entire allocation share of 2006 landing at 2006 prices (y-axis). Again the graphs on facing pages show the results under the two different allocation formulas. If allocated revenue were distributed exactly the same as actual 2006 revenue, then each scatterplot would trace a 45° line emanating from the origin (A 45° line is included for comparison). Points above the 45° line indicate an allocation greater than the value of landings in 2006 (i.e., "winners"). Points falling below the 45° line indicate an allocation less than the value of what was landed in 2006 (i.e., "losers"). Note that for most scatterplots, it was necessary to truncate the axes somewhat to preserve confidentiality.

The list of sectors and species groups examined in the following tables and graphs is shown below. For this analysis, species QS allocated from a given sector is assumed to remain in that sector. Therefore a yellowtail rockfish allocation received from the nonwhiting sector is separate from any yellowtail rockfish allocations from the whiting sectors.

Shoreside nonwhiting	**Shoreside whiting**	**At-sea whiting CV**
1. Total groundfish	1. Pacific whiting	1. Pacific whiting
2. DTS	2. Yellowtail rockfish	2. Yellowtail rockfish
3. Sablefish	3. Widow rockfish	3. Widow rockfish
4. Dover sole	4. Canary rockfish	4. Canary rockfish
5. Petrale sole		
6. Yellowtail rockfish		
7. Arrowtooth flounder		
8. Other flatfish		
9. Lingcod		
10. Pacific Ocean perch		
11. Darkblotched rockfish		
12. Canary rockfish		
13. Yelloweye rockfish		

Recent participation required; buyback portion equally shared among all permits

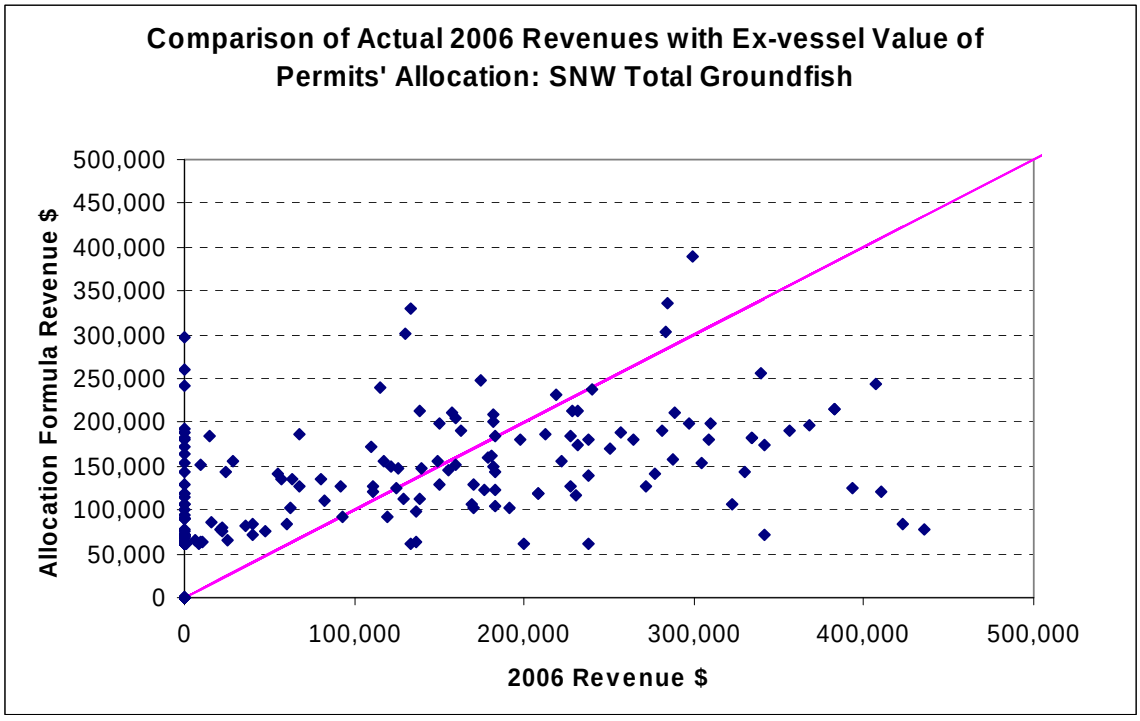
Shoreside Nonwhiting Sector: Total Groundfish

Shift in Ex-vessel Revenue Value of Allocation compared with 2006
Total and Average Shift

				Buyback Portion QS Allocated to:	
	2006 REV	Drop 3 REV	Change	All Recipients	Recips. receiving only buyback QS
TOTAL	$23,650,939	$23,650,939	+$0	$10,484,475	$806,498
Average	$192,284	$139,946	-$52,338	$62,038	$62,038
Total # of Permits	123	169	+ 46	169	13
# Winners		99			
$ average for winners	$50,632	$132,051	+$81,419		
Percent change			+160.80%		
# Losers		70			
$ average for losers	$266,262	$151,112	-$115,150		
Percent change			-43.25%		
Total # of Permits Affected		169			

Geographic Shift (based on "principle port")

Port Code	$ change
BLAINE	+90,658
BELLINGHAM BAY	-272,215
SEATTLE AREA	+837,776
NEAH BAY	+199,391
WESTPORT	+445,730
ILWACO/CHINOOK	+242,001
ASTORIA	-1,919,854
TILLAMOOK	+72,105
NEWPORT	+186,691
COOS BAY	-319,286
BROOKINGS	-165,087
CRESCENT CITY	+78,648
EUREKA	-1,457,457
FORT BRAGG	+28,217
BODEGA BAY	+62,038
SAN FRANCISCO AREA	+836,542
PRINCETON	+404,738
SANTA CRUZ	+59,523
MOSS LANDING	+363,954
MONTEREY	-66,843
MORRO BAY	+149,667
AVILA	+143,061
Total	0



Recent participation not required. Buyback portion allocated by landing history.

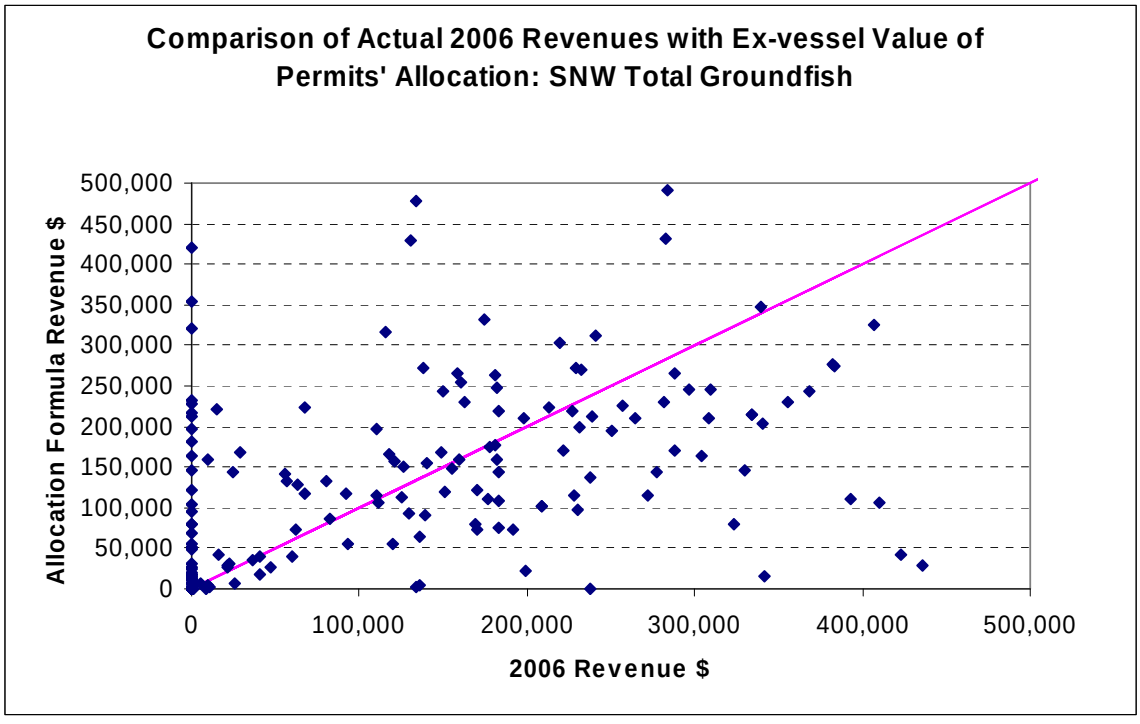
Shoreside Nonwhiting Sector: Total Groundfish

Shift in Ex-vessel Revenue Value of Allocation compared with 2006 Total and Average Shift

				Buyback Portion QS Allocated to:	
	2006 REV	Drop 3 REV	Change	All Recipients	Recips. receiving only buyback QS
TOTAL	$23,650,939	$23,650,939	+$0	$10,484,475	$0
Average	$192,284	$145,098	-$47,186	$64,322	$0
Total # of Permits	123	163	+ 40	163	0
# Winners		93			
$ average for winners	$67,404	$150,707	+$83,303		
Percent change			+123.59%		
# Losers		73			
$ average for losers	$238,114	$131,989	-$106,126		
Percent change			-44.57%		
Total # of Permits Affected		166			

Geographic Shift (based on "principle port")

Port Code	$ change
BLAINE	+287,647
BELLINGHAM BAY	-44,096
SEATTLE AREA	+833,702
NEAH BAY	+82,984
WESTPORT	+93,611
ILWACO/CHINOOK	+211,973
ASTORIA	-1,390,413
TILLAMOOK	+18,028
NEWPORT	-245,937
COOS BAY	-98,873
BROOKINGS	-181,276
CRESCENT CITY	+3,276
EUREKA	-1,649,648
FORT BRAGG	+255,813
BODEGA BAY	+2,366
SAN FRANCISCO AREA	+1,062,849
PRINCETON	+198,737
SANTA CRUZ	+129
MOSS LANDING	+455,400
MONTEREY	-96,192
MORRO BAY	+54,822
AVILA	+145,096
Total	0



Recent participation required; buyback portion equally shared among all permits

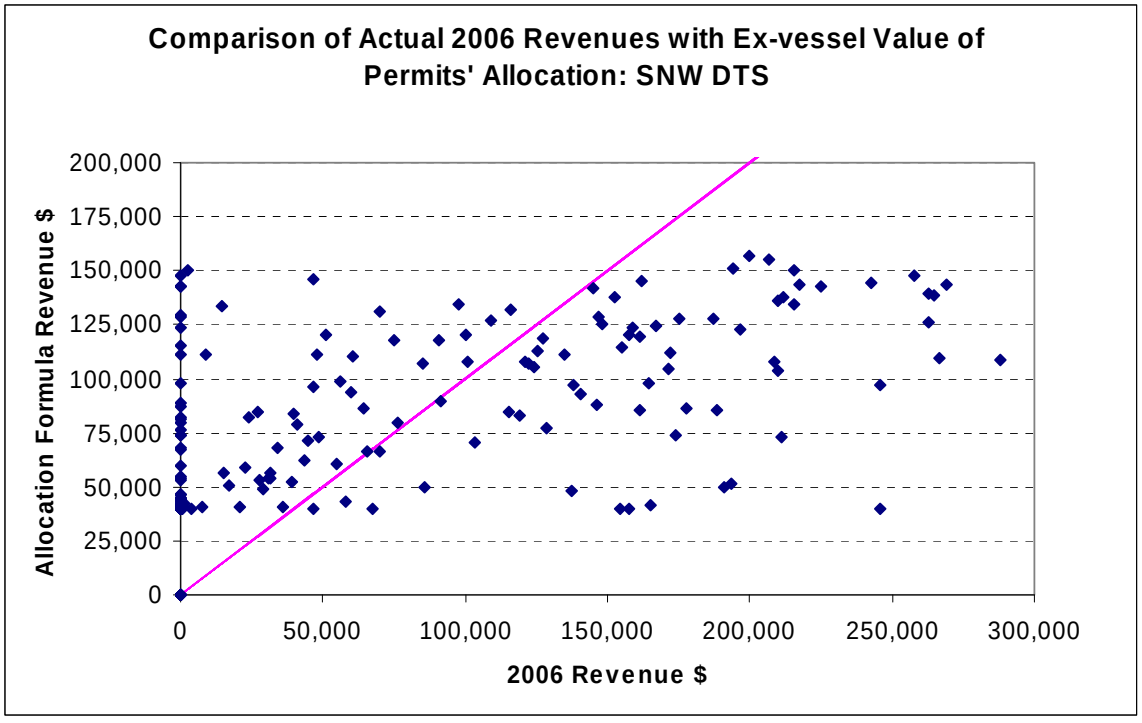
Shoreside Nonwhiting Sector: DTS

Shift in Ex-vessel Revenue Value of Allocation compared with 2006
Total and Average Shift

				Buyback Portion QS Allocated to:	
	2006 REV	Drop 3 REV	Change	All Recipients	Recips. receiving only buyback QS
TOTAL	$14,594,332	$14,594,332	+$0	$6,767,627	$840,948
Average	$119,626	$86,357	-$33,269	$40,045	$40,045
Total # of Permits	122	169	+ 47	169	21
# Winners		100			
$ average for winners	$21,197	$73,157	+$51,960		
Percent change			+245.13%		
# Losers		69			
$ average for losers	$180,792	$105,487	-$75,304		
Percent change			-41.65%		
Total # of Permits Affected		169			

Geographic Shift (based on "principle port")

Port Code	$ change
BLAINE	+3,521
BELLINGHAM BAY	-306,417
SEATTLE AREA	+470,080
NEAH BAY	+141,229
WESTPORT	+339,026
ILWACO/CHINOOK	+120,916
ASTORIA	-591,699
TILLAMOOK	+46,351
NEWPORT	-446,653
COOS BAY	-238,979
BROOKINGS	-244,668
CRESCENT CITY	+122,553
EUREKA	-821,497
FORT BRAGG	-110,036
BODEGA BAY	+40,045
SAN FRANCISCO AREA	+567,447
PRINCETON	+317,666
SANTA CRUZ	+40,044
MOSS LANDING	+230,667
MONTEREY	+33,987
MORRO BAY	+171,224
AVILA	+115,193
Total	0



Recent participation <u>not</u> required. Buyback portion allocated by landing history.

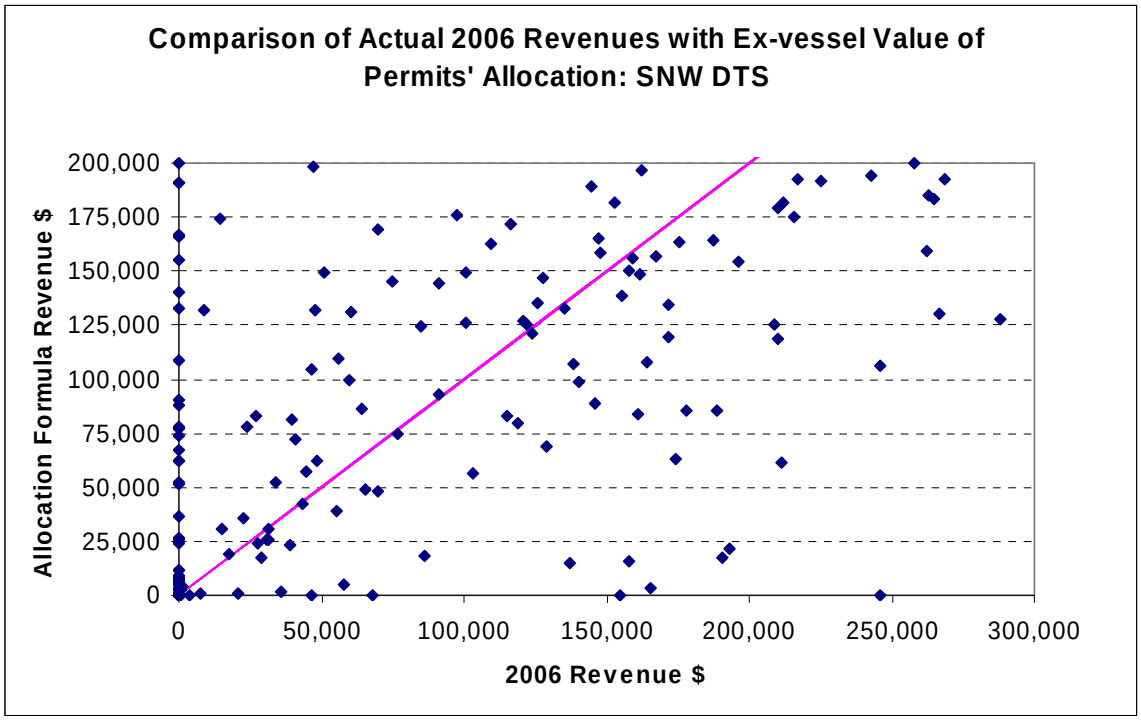
Shoreside Nonwhiting Sector: DTS

Shift in Ex-vessel Revenue Value of Allocation compared with 2006
Total and Average Shift

				Buyback Portion QS Allocated to:	
	2006 REV	Drop 3 REV	Change	All Recipients	Recips. receiving only buyback QS
TOTAL	$14,594,332	$14,594,332	-$0	$6,767,627	$0
Average	$119,626	$94,157	-$25,469	$43,662	$0
Total # of Permits	122	155	+ 33	155	0
# Winners		89			
$ average for winners	$40,044	$89,617	+$49,573		
Percent change			+123.80%		
# Losers		72			
$ average for losers	$153,200	$91,923	-$61,277		
Percent change			-40.00%		
Total # of Permits Affected		161			

Geographic Shift (based on "principle port")

Port Code	$ change
BLAINE	-2,057
BELLINGHAM BAY	-282,087
SEATTLE AREA	+427,840
NEAH BAY	-23,540
WESTPORT	+118,488
ILWACO/CHINOOK	+76,813
ASTORIA	-362,204
TILLAMOOK	+11,740
NEWPORT	-791,912
COOS BAY	+34,817
BROOKINGS	-150,623
CRESCENT CITY	+127,365
EUREKA	-836,347
FORT BRAGG	+238,805
BODEGA BAY	+1,024
SAN FRANCISCO AREA	+660,621
PRINCETON	+86,779
SANTA CRUZ	+4
MOSS LANDING	+296,391
MONTEREY	+17,993
MORRO BAY	+210,187
AVILA	+139,904
Total	0



Recent participation required; buyback portion equally shared among all permits

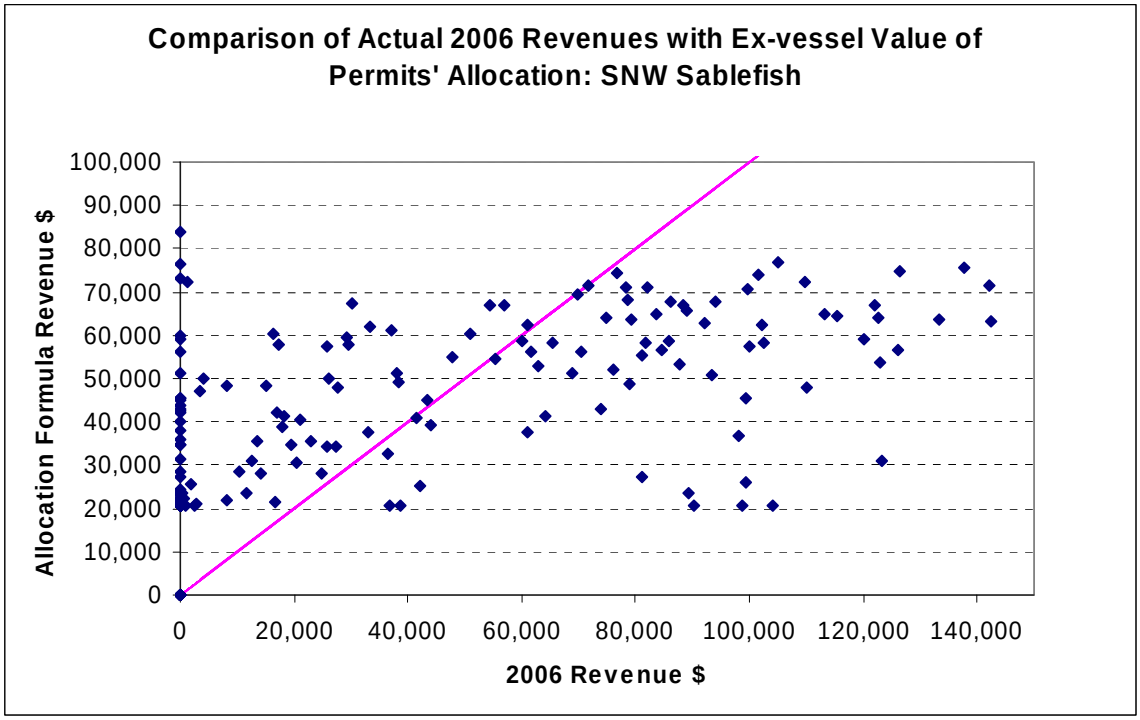
Shoreside Nonwhiting Sector: Sablefish

Shift in Ex-vessel Revenue Value of Allocation compared with 2006
Total and Average Shift

				Buyback Portion QS Allocated to:	
	2006 REV	Drop 3 REV	Change	All Recipients	Recips. receiving only buyback QS
TOTAL	$7,546,640	$7,546,640	+$0	$3,508,091	$456,675
Average	$65,057	$44,655	-$20,403	$20,758	$20,758
Total # of Permits	116	169	+ 53	169	22
# Winners		100			
$ average for winners	$10,394	$37,286	+$26,892		
Percent change			+258.74%		
# Losers		69			
$ average for losers	$94,308	$55,334	-$38,975		
Percent change			-41.33%		
Total # of Permits Affected		169			

Geographic Shift (based on "principle port")

Port Code	$ change
BLAINE	+13,239
BELLINGHAM BAY	-195,275
SEATTLE AREA	+266,074
NEAH BAY	+87,731
WESTPORT	+198,342
ILWACO/CHINOOK	+64,851
ASTORIA	-378,935
TILLAMOOK	+21,381
NEWPORT	-403,189
COOS BAY	-108,375
BROOKINGS	-98,575
CRESCENT CITY	+75,470
EUREKA	-248,810
FORT BRAGG	+57,043
BODEGA BAY	+20,758
SAN FRANCISCO AREA	+212,348
PRINCETON	+164,642
SANTA CRUZ	+20,758
MOSS LANDING	+90,724
MONTEREY	+18,635
MORRO BAY	+78,768
AVILA	+42,396
Total	0



Recent participation <u>not</u> required. Buyback portion allocated by landing history.

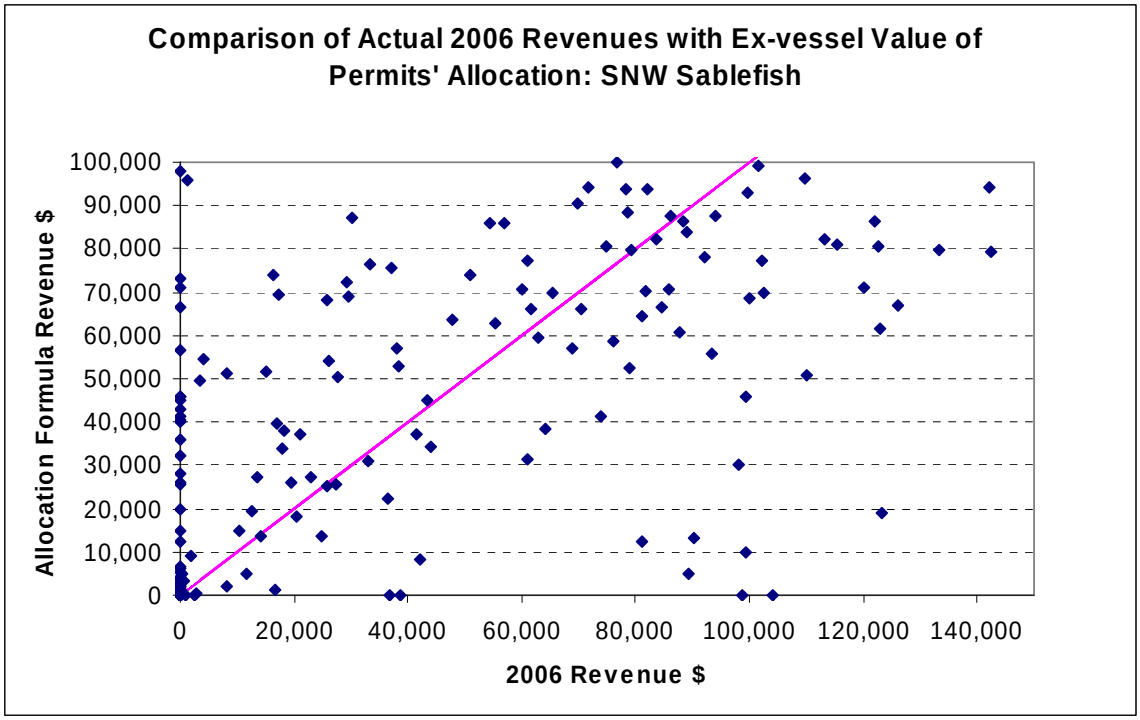
Shoreside Nonwhiting Sector: Sablefish

Shift in Ex-vessel Revenue Value of Allocation compared with 2006
Total and Average Shift

				Buyback Portion QS Allocated to:	
	2006 REV	Drop 3 REV	Change	All Recipients	Recips. receiving only buyback QS
TOTAL	$7,546,640	$7,546,640	+$0	$3,508,091	$0
Average	$65,057	$49,004	-$16,053	$22,780	$0
Total # of Permits	116	154	+ 38	154	0
# Winners		91			
$ average for winners	$19,683	$44,294	+$24,611		
Percent change			+125.03%		
# Losers		68			
$ average for losers	$84,639	$51,705	-$32,935		
Percent change			-38.91%		
Total # of Permits Affected		159			

Geographic Shift (based on "principle port")

Port Code	$ change
BLAINE	+18,969
BELLINGHAM BAY	-154,721
SEATTLE AREA	+263,700
NEAH BAY	+24,711
WESTPORT	+89,625
ILWACO/CHINOOK	+44,237
ASTORIA	-297,074
TILLAMOOK	+1,160
NEWPORT	-460,611
COOS BAY	+22,869
BROOKINGS	-42,881
CRESCENT CITY	+75,295
EUREKA	-241,946
FORT BRAGG	+203,843
BODEGA BAY	+667
SAN FRANCISCO AREA	+223,350
PRINCETON	+50,915
SANTA CRUZ	+0
MOSS LANDING	+80,804
MONTEREY	+6,867
MORRO BAY	+49,904
AVILA	+40,317
Total	0



Recent participation required; buyback portion equally shared among all permits

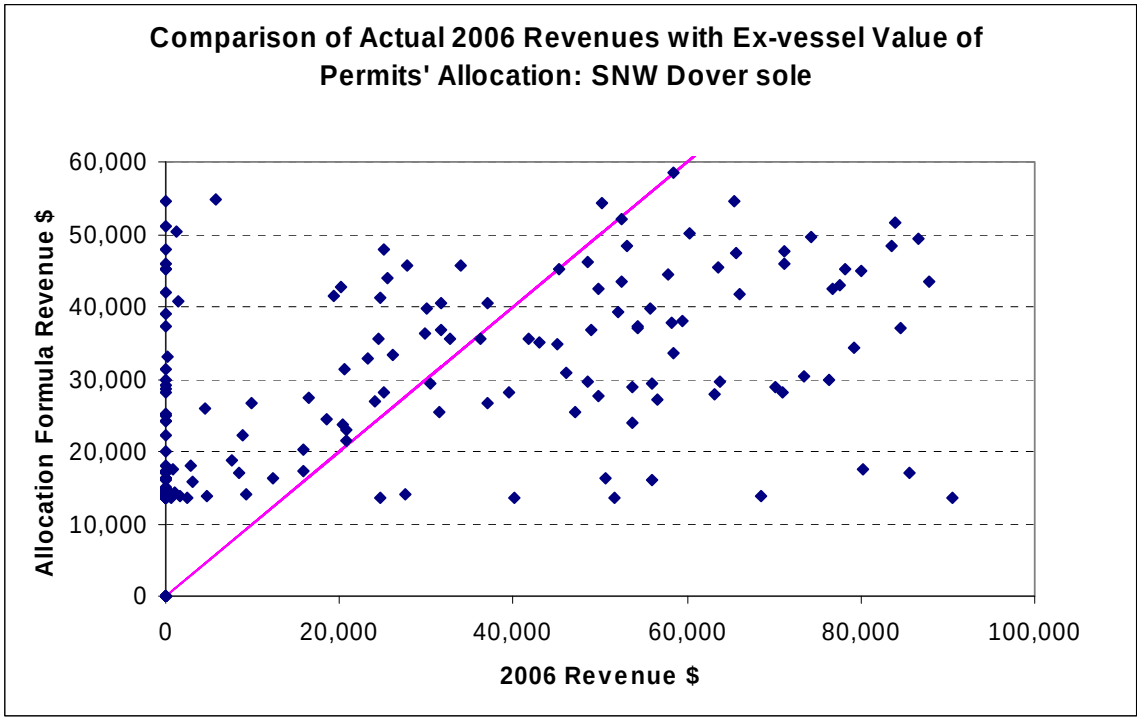
Shoreside Nonwhiting Sector: Dover sole

Shift in Ex-vessel Revenue Value of Allocation compared with 2006
Total and Average Shift

				Buyback Portion QS Allocated to:	
	2006 REV	Drop 3 REV	Change	All Recipients	Recips. receiving only buyback QS
TOTAL	$4,992,502	$4,992,502	+$0	$2,314,726	$287,629
Average	$41,260	$29,541	-$11,719	$13,697	$13,697
Total # of Permits	121	169	+ 48	169	21
# Winners		102			
$ average for winners	$8,209	$25,890	+$17,681		
Percent change			+215.40%		
# Losers		67			
$ average for losers	$62,018	$35,100	-$26,918		
Percent change			-43.40%		
Total # of Permits Affected		169			

Geographic Shift (based on "principle port")

Port Code	$ change
BLAINE	-10,228
BELLINGHAM BAY	-121,968
SEATTLE AREA	+150,461
NEAH BAY	+43,892
WESTPORT	+93,371
ILWACO/CHINOOK	+42,737
ASTORIA	-457,348
TILLAMOOK	+17,396
NEWPORT	+52,050
COOS BAY	-112,498
BROOKINGS	-71,035
CRESCENT CITY	+20,419
EUREKA	-281,085
FORT BRAGG	-8,592
BODEGA BAY	+13,697
SAN FRANCISCO AREA	+238,289
PRINCETON	+116,931
SANTA CRUZ	+13,693
MOSS LANDING	+108,224
MONTEREY	+13,506
MORRO BAY	+96,050
AVILA	+42,038
Total	0



Recent participation <u>not</u> required. Buyback portion allocated by landing history.

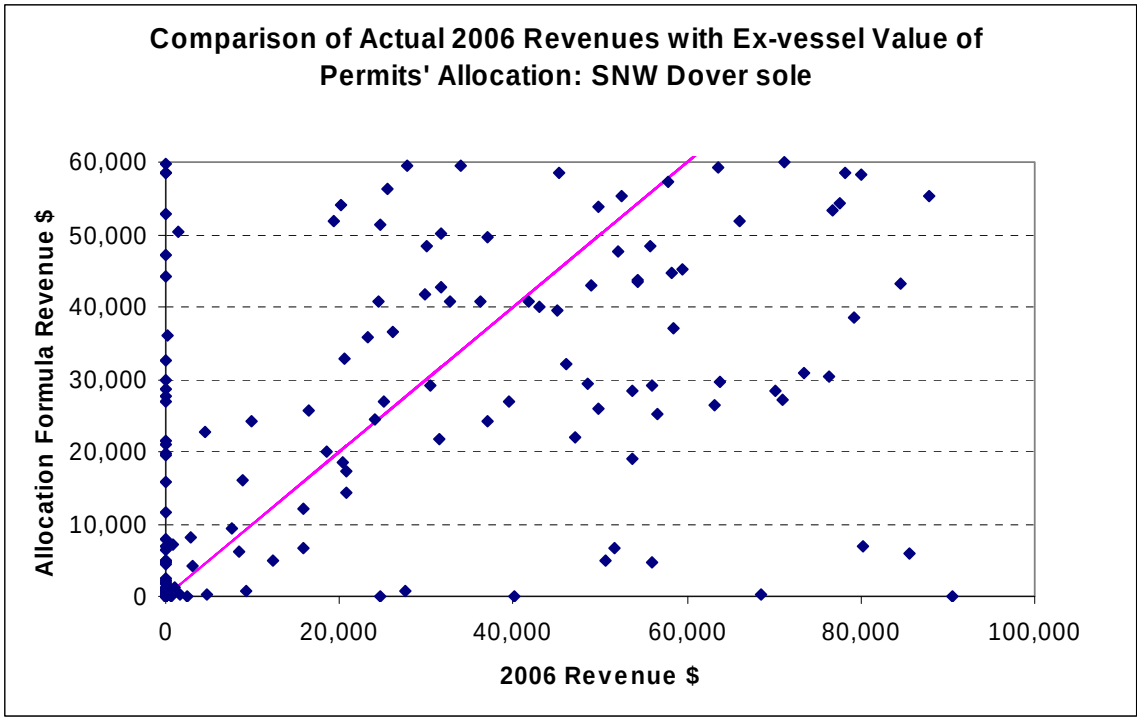
Shoreside Nonwhiting Sector: Dover sole

Shift in Ex-vessel Revenue Value of Allocation compared with 2006
Total and Average Shift

				Buyback Portion QS Allocated to:	
	2006 REV	Drop 3 REV	Change	All Recipients	Recips. receiving only buyback QS
TOTAL	$4,992,502	$4,992,502	+$0	$2,314,726	$0
Average	$41,260	$32,210	-$9,051	$14,934	$0
Total # of Permits	121	155	+ 34	155	0
# Winners		88			
$ average for winners	$13,266	$31,643	+$18,377		
Percent change			+138.53%		
# Losers		72			
$ average for losers	$53,127	$30,666	-$22,461		
Percent change			-42.28%		
Total # of Permits Affected		160			

Geographic Shift (based on "principle port")

Port Code	$ change
BLAINE	-12,692
BELLINGHAM BAY	-125,172
SEATTLE AREA	+127,080
NEAH BAY	-13,931
WESTPORT	+23,767
ILWACO/CHINOOK	+28,603
ASTORIA	-347,993
TILLAMOOK	+6,884
NEWPORT	-95,234
COOS BAY	-24,524
BROOKINGS	-48,373
CRESCENT CITY	+21,904
EUREKA	-300,760
FORT BRAGG	+107,682
BODEGA BAY	+547
SAN FRANCISCO AREA	+286,903
PRINCETON	+42,928
SANTA CRUZ	+0
MOSS LANDING	+139,211
MONTEREY	+7,257
MORRO BAY	+123,164
AVILA	+52,747
Total	0



Recent participation required; buyback portion equally shared among all permits

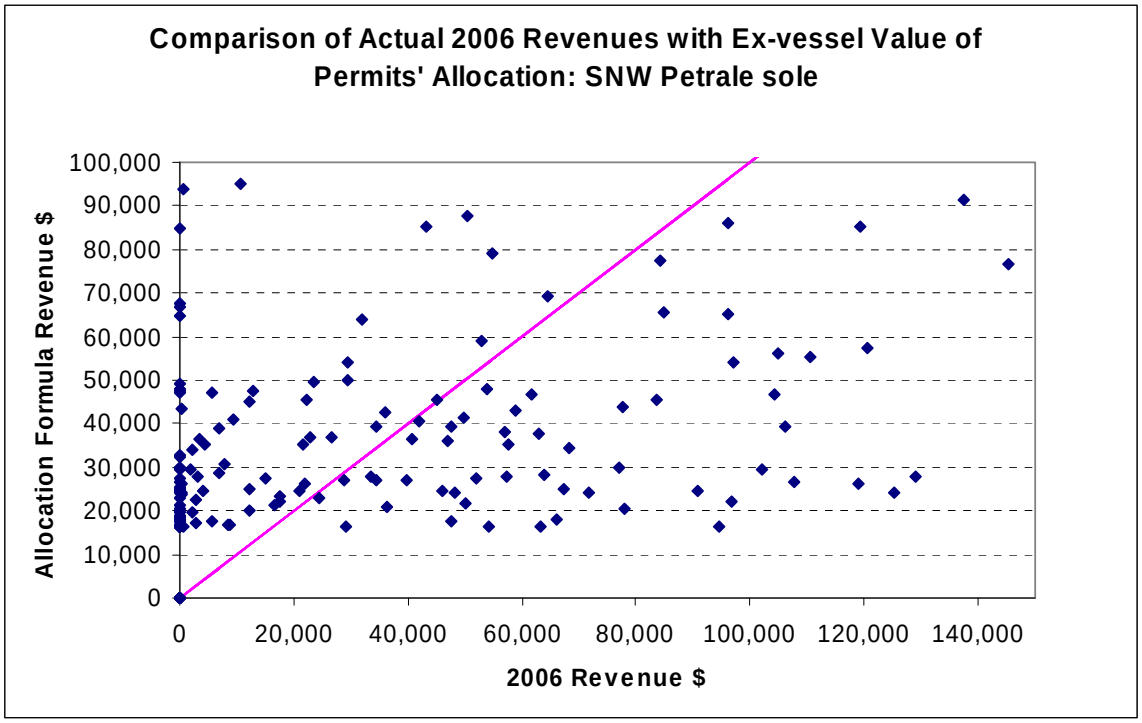
Shoreside Nonwhiting Sector: Petrale sole

Shift in Ex-vessel Revenue Value of Allocation compared with 2006
Total and Average Shift

				Buyback Portion QS Allocated to:	
	2006 REV	Drop 3 REV	Change	All Recipients	Recips. receiving only buyback QS
TOTAL	$5,761,058	$5,761,058	+$0	$2,770,864	$327,913
Average	$50,536	$34,089	-$16,446	$16,396	$16,396
Total # of Permits	114	169	+ 55	169	20
# Winners		109			
$ average for winners	$7,769	$31,848	+$24,078		
Percent change			+309.91%		
# Losers		60			
$ average for losers	$81,903	$38,161	-$43,742		
Percent change			-53.41%		
Total # of Permits Affected		169			

Geographic Shift (based on "principle port")

Port Code	$ change
BLAINE	-46,063
BELLINGHAM BAY	-110,070
SEATTLE AREA	+184,028
NEAH BAY	+91,023
WESTPORT	+90,434
ILWACO/CHINOOK	+64,208
ASTORIA	-677,644
TILLAMOOK	+27,331
NEWPORT	+268,905
COOS BAY	+16,444
BROOKINGS	+118,492
CRESCENT CITY	+15,185
EUREKA	-466,894
FORT BRAGG	+172,595
BODEGA BAY	+16,396
SAN FRANCISCO AREA	+190,183
PRINCETON	-24,714
SANTA CRUZ	+14,393
MOSS LANDING	+70,635
MONTEREY	-66,187
MORRO BAY	+26,648
AVILA	+24,672
Total	0



Recent participation not required. Buyback portion allocated by landing history.

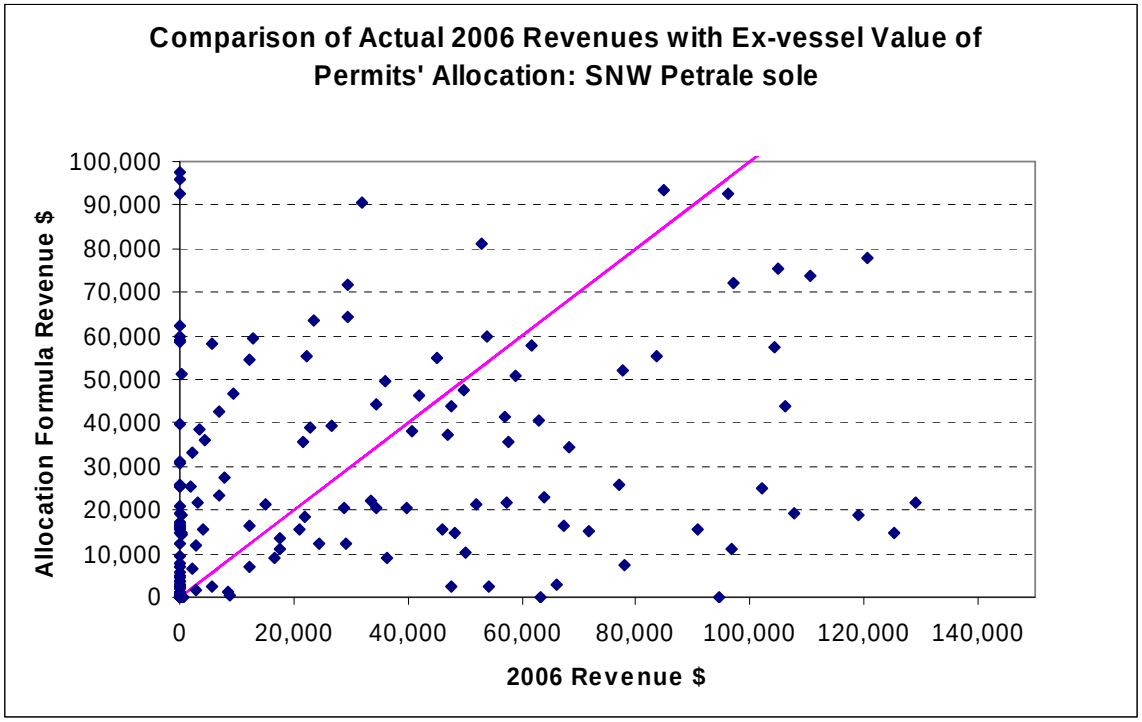
Shoreside Nonwhiting Sector: Petrale sole

Shift in Ex-vessel Revenue Value of Allocation compared with 2006 Total and Average Shift

				Buyback Portion QS Allocated to:	
	2006 REV	Drop 3 REV	Change	All Recipients	Recips. receiving only buyback QS
TOTAL	$5,761,058	$5,761,058	+$0	$2,770,864	$0
Average	$50,536	$36,930	-$13,606	$17,762	$0
Total # of Permits	114	156	+ 42	156	0
# Winners		94			
$ average for winners	$14,160	$41,503	+$27,343		
Percent change			+193.09%		
# Losers		65			
$ average for losers	$68,153	$28,612	-$39,542		
Percent change			-58.02%		
Total # of Permits Affected		159			

Geographic Shift (based on "principle port")

Port Code	$ change
BLAINE	+5,498
BELLINGHAM BAY	-64,802
SEATTLE AREA	+163,227
NEAH BAY	+56,412
WESTPORT	+22,463
ILWACO/CHINOOK	+59,869
ASTORIA	-508,256
TILLAMOOK	+20,839
NEWPORT	+113,551
COOS BAY	+209,166
BROOKINGS	+114,045
CRESCENT CITY	-4,722
EUREKA	-564,597
FORT BRAGG	+158,944
BODEGA BAY	+1,908
SAN FRANCISCO AREA	+310,759
PRINCETON	-71,804
SANTA CRUZ	-1,192
MOSS LANDING	+55,802
MONTEREY	-75,175
MORRO BAY	-17,709
AVILA	+15,771
Total	0



Recent participation required; buyback portion equally shared among all permits

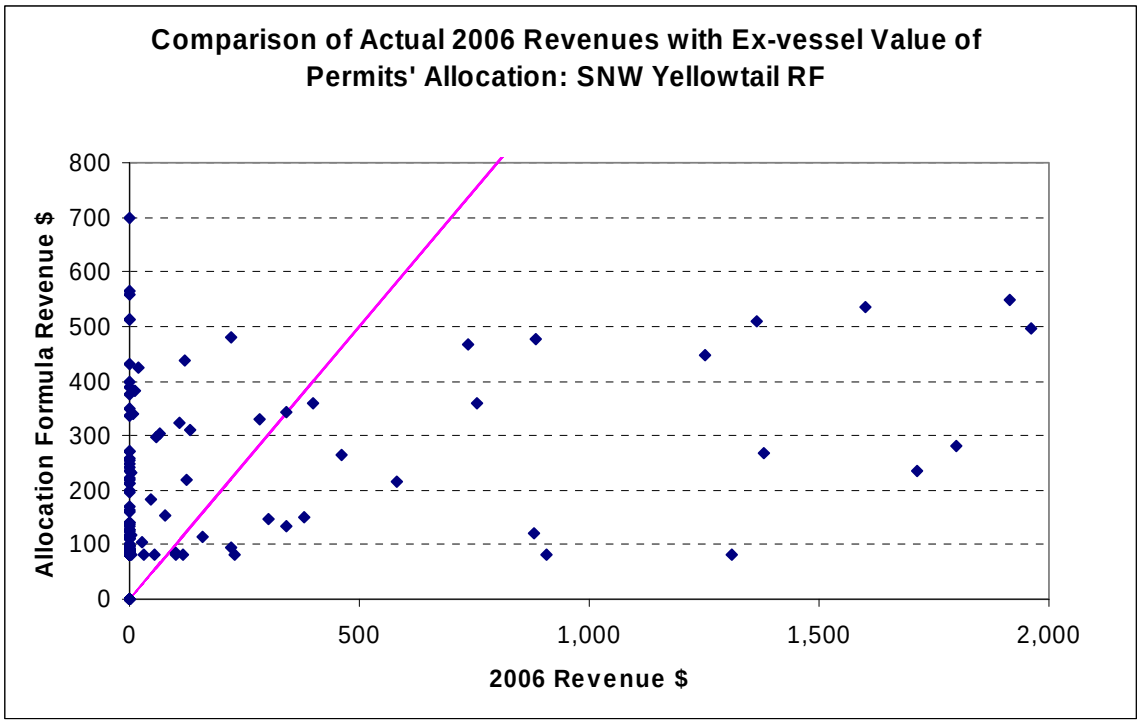
Shoreside Nonwhiting Sector: Yellowtail RF

Shift in Ex-vessel Revenue Value of Allocation compared with 2006
Total and Average Shift

				Buyback Portion QS Allocated to:	
	2006 REV	Drop 3 REV	Change	All Recipients	Recips. receiving only buyback QS
TOTAL	$30,600	$30,600	+$0	$13,570	$3,212
Average	$638	$181	-$456	$80	$80
Total # of Permits	48	169	+ 121	169	40
# Winners		141			
$ average for winners	$12	$158	+$146		
Percent change			+1180.86%		
# Losers		28			
$ average for losers	$1,031	$297	-$733		
Percent change			-71.15%		
Total # of Permits Affected		169			

Geographic Shift (based on "principle port")

Port Code	$ change
BLAINE	-1,365
BELLINGHAM BAY	-731
SEATTLE AREA	+1,557
NEAH BAY	-2,459
WESTPORT	+661
ILWACO/CHINOOK	+319
ASTORIA	-9,831
TILLAMOOK	+83
NEWPORT	+4,494
COOS BAY	+2,183
BROOKINGS	+918
CRESCENT CITY	+333
EUREKA	+1,191
FORT BRAGG	+704
BODEGA BAY	+80
SAN FRANCISCO AREA	+996
PRINCETON	+562
SANTA CRUZ	+80
MOSS LANDING	-341
MONTEREY	+80
MORRO BAY	+406
AVILA	+80
Total	0



Recent participation not required. Buyback portion allocated by landing history.

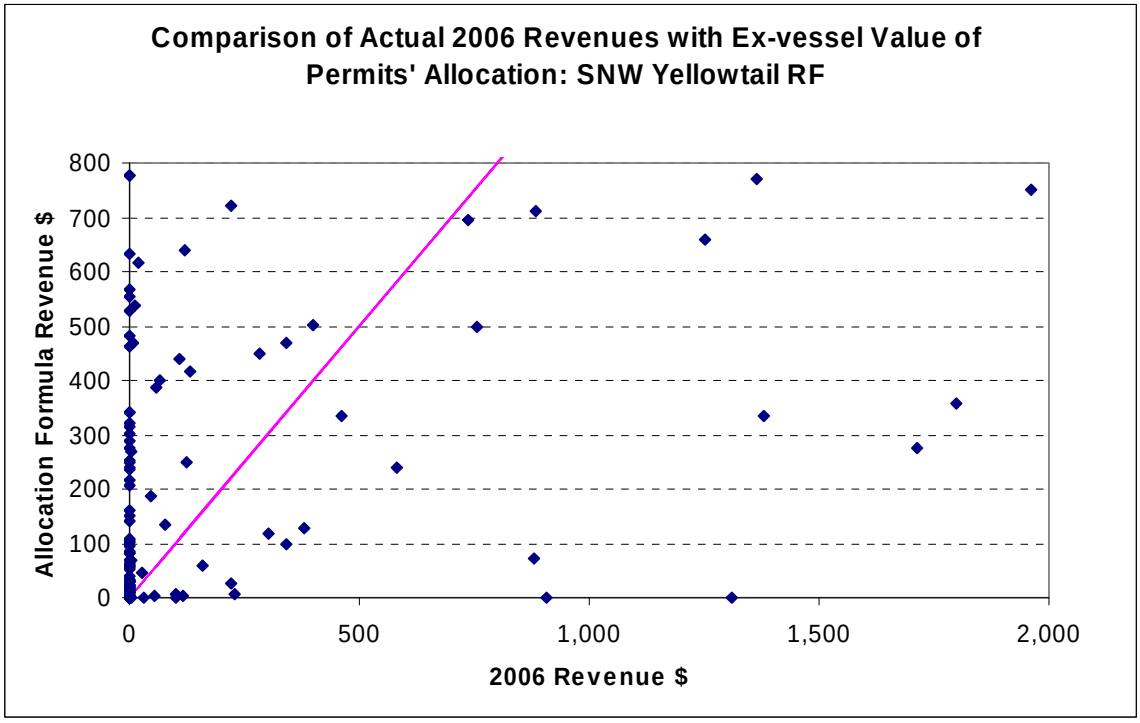
Shoreside Nonwhiting Sector: Yellowtail RF

Shift in Ex-vessel Revenue Value of Allocation compared with 2006 Total and Average Shift

				Buyback Portion QS Allocated to:	
	2006 REV	Drop 3 REV	Change	All Recipients	Recips. receiving only buyback QS
TOTAL	$30,600	$30,600	+$0	$13,570	$0
Average	$638	$230	-$407	$102	$0
Total # of Permits	48	133	+ 85	133	0
# Winners		107			
$ average for winners	$19	$189	+$170		
Percent change			+884.31%		
# Losers		30			
$ average for losers	$952	$347	-$605		
Percent change			-63.53%		
Total # of Permits Affected		137			

Geographic Shift (based on "principle port")

Port Code	$ change
BLAINE	-1,073
BELLINGHAM BAY	-393
SEATTLE AREA	+1,929
NEAH BAY	-2,130
WESTPORT	+257
ILWACO/CHINOOK	+330
ASTORIA	-6,422
TILLAMOOK	+5
NEWPORT	+4,497
COOS BAY	+1,702
BROOKINGS	+638
CRESCENT CITY	+22
EUREKA	+606
FORT BRAGG	+110
BODEGA BAY	+0
SAN FRANCISCO AREA	+526
PRINCETON	+0
SANTA CRUZ	+0
MOSS LANDING	-613
MONTEREY	+0
MORRO BAY	+8
AVILA	+0
Total	0



Recent participation required; buyback portion equally shared among all permits

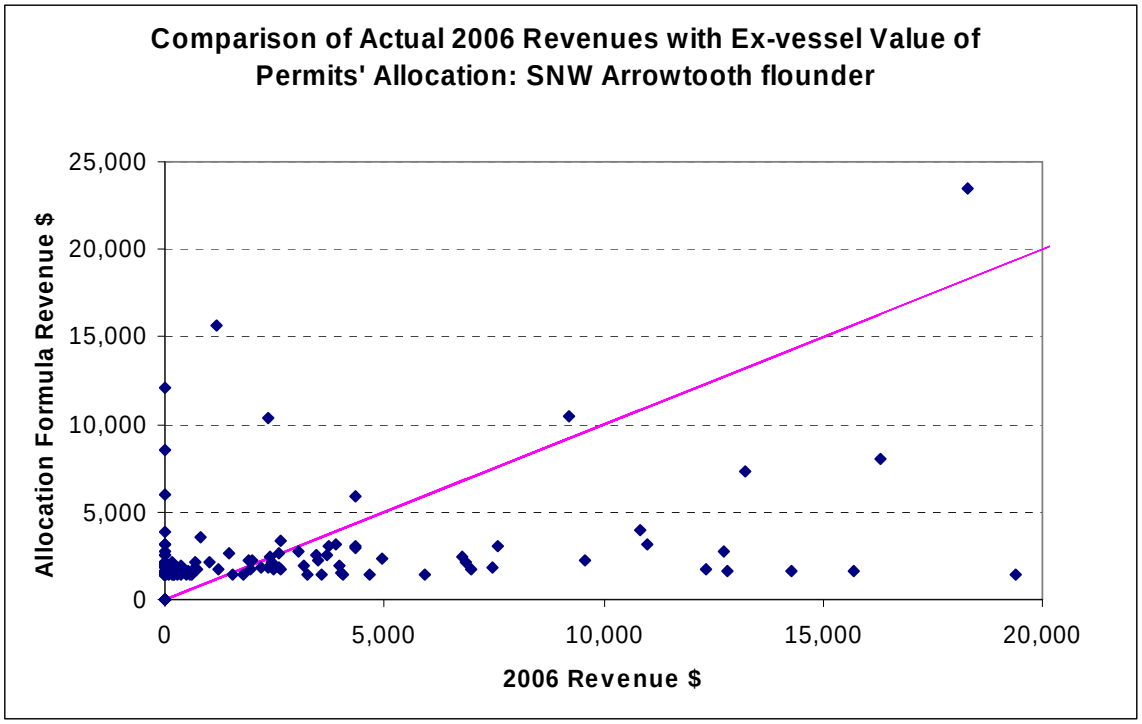
Shoreside Nonwhiting Sector: Arrowtooth flounder

Shift in Ex-vessel Revenue Value of Allocation compared with 2006
Total and Average Shift

				Buyback Portion QS Allocated to:	
	2006 REV	Drop 3 REV	Change	All Recipients	Recips. receiving only buyback QS
TOTAL	$441,018	$441,018	+$0	$240,797	$56,993
Average	$4,742	$2,610	-$2,133	$1,425	$1,425
Total # of Permits	93	169	+ 76	169	40
# Winners		124			
$ average for winners	$679	$2,530	+$1,851		
Percent change			+272.68%		
# Losers		45			
$ average for losers	$7,929	$2,828	-$5,102		
Percent change			-64.34%		
Total # of Permits Affected		169			

Geographic Shift (based on "principle port")

Port Code	$ change
BLAINE	+2,505
BELLINGHAM BAY	-13,247
SEATTLE AREA	+24,494
NEAH BAY	-5,078
WESTPORT	+13,969
ILWACO/CHINOOK	+5,328
ASTORIA	-132,299
TILLAMOOK	+1,542
NEWPORT	+5,691
COOS BAY	+6,131
BROOKINGS	+9,781
CRESCENT CITY	+3,852
EUREKA	+21,508
FORT BRAGG	+12,524
BODEGA BAY	+1,425
SAN FRANCISCO AREA	+14,559
PRINCETON	+9,975
SANTA CRUZ	+1,425
MOSS LANDING	+5,921
MONTEREY	+1,425
MORRO BAY	+7,144
AVILA	+1,425
Total	0



Recent participation not required. Buyback portion allocated by landing history.

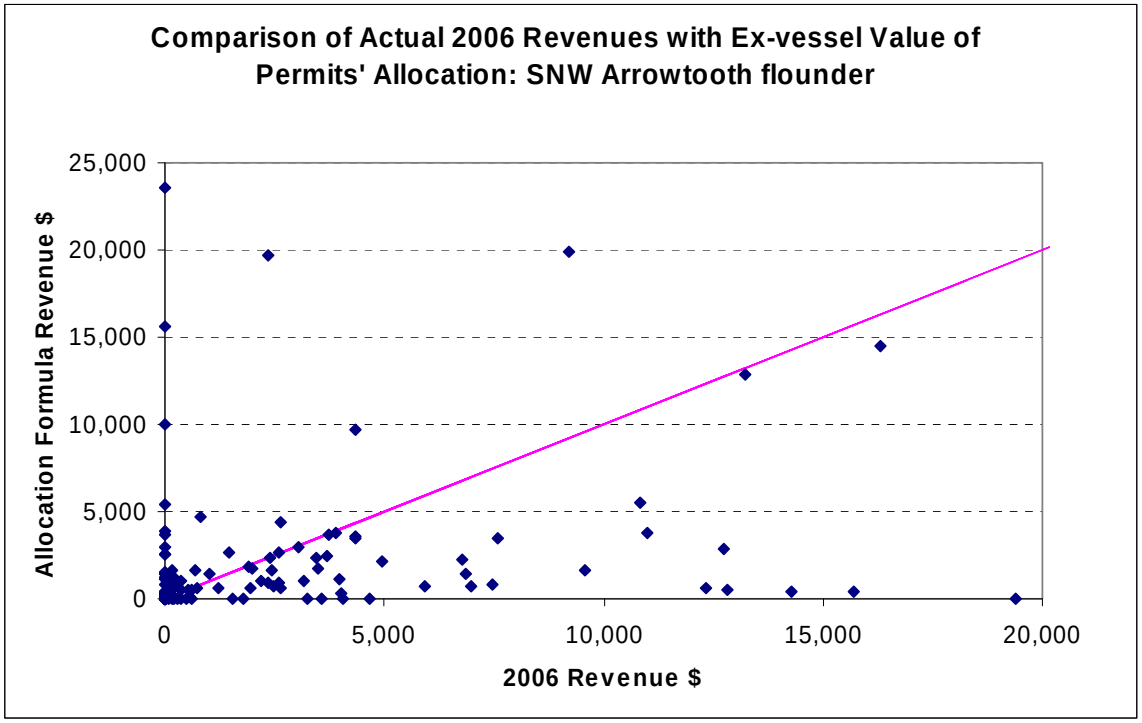
Shoreside Nonwhiting Sector: Arrowtooth flounder

Shift in Ex-vessel Revenue Value of Allocation compared with 2006 Total and Average Shift

				Buyback Portion QS Allocated to:	
	2006 REV	Drop 3 REV	Change	All Recipients	Recips. receiving only buyback QS
TOTAL	$441,018	$441,018	+$0	$240,797	$0
Average	$4,742	$3,341	-$1,401	$1,824	$0
Total # of Permits	93	132	+ 39	132	0
# Winners		78			
$ average for winners	$1,309	$4,199	+$2,890		
Percent change			+220.76%		
# Losers		62			
$ average for losers	$5,466	$1,831	-$3,635		
Percent change			-66.50%		
Total # of Permits Affected		140			

Geographic Shift (based on "principle port")

Port Code	$ change
BLAINE	+32,340
BELLINGHAM BAY	+8,274
SEATTLE AREA	+35,064
NEAH BAY	-9,799
WESTPORT	+6,636
ILWACO/CHINOOK	+5,451
ASTORIA	-72,840
TILLAMOOK	+258
NEWPORT	-18,218
COOS BAY	-8,065
BROOKINGS	+757
CRESCENT CITY	-1,382
EUREKA	+14,871
FORT BRAGG	+2,844
BODEGA BAY	+0
SAN FRANCISCO AREA	+4,281
PRINCETON	+2
SANTA CRUZ	+0
MOSS LANDING	-519
MONTEREY	+0
MORRO BAY	+44
AVILA	+0
Total	0



Recent participation required; buyback portion equally shared among all permits

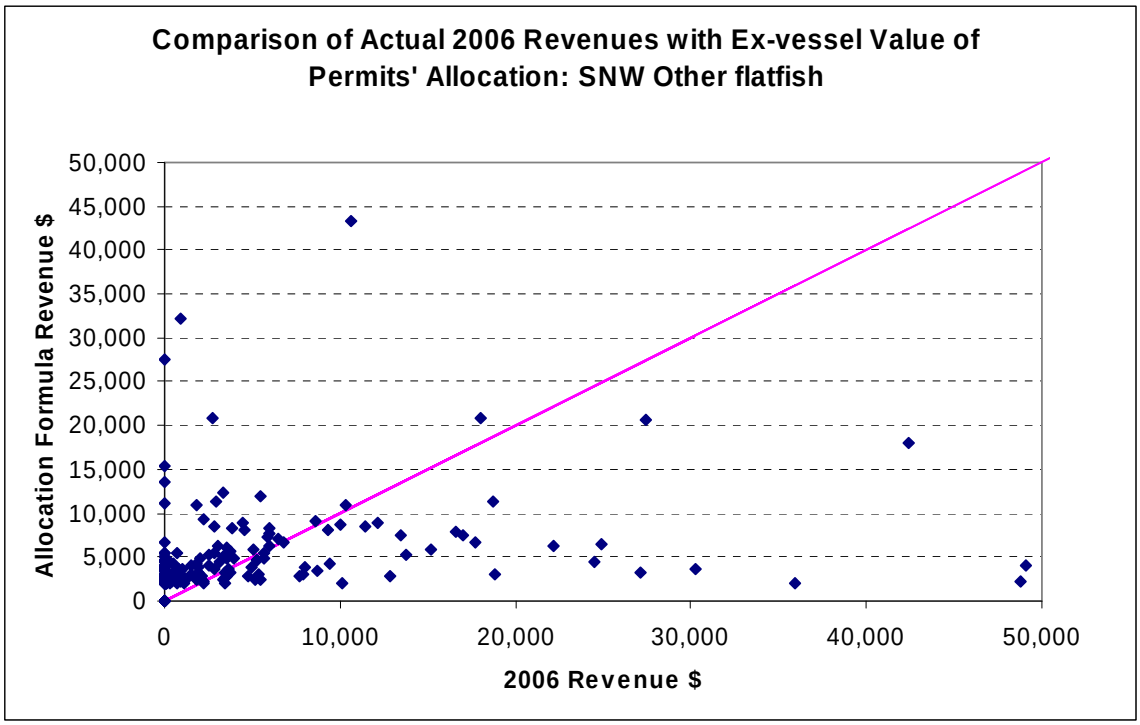
Shoreside Nonwhiting Sector: Other flatfish

Shift in Ex-vessel Revenue Value of Allocation compared with 2006
Total and Average Shift

				Buyback Portion QS Allocated to:	
	2006 REV	Drop 3 REV	Change	All Recipients	Recips. receiving only buyback QS
TOTAL	$981,866	$981,866	+$0	$333,472	$39,464
Average	$8,321	$5,810	-$2,511	$1,973	$1,973
Total # of Permits	118	169	+ 51	169	20
# Winners		120			
$ average for winners	$1,774	$6,051	+$4,277		
Percent change			+241.08%		
# Losers		49			
$ average for losers	$15,693	$5,219	-$10,474		
Percent change			-66.74%		
Total # of Permits Affected		169			

Geographic Shift (based on "principle port")

Port Code	$ change
BLAINE	+1,844
BELLINGHAM BAY	+7,890
SEATTLE AREA	+16,232
NEAH BAY	-1,099
WESTPORT	+14,864
ILWACO/CHINOOK	+4,228
ASTORIA	-381,318
TILLAMOOK	+2,999
NEWPORT	+45,680
COOS BAY	+60,545
BROOKINGS	+1,427
CRESCENT CITY	-11,831
EUREKA	-43,272
FORT BRAGG	+20,645
BODEGA BAY	+1,973
SAN FRANCISCO AREA	+78,642
PRINCETON	+96,555
SANTA CRUZ	+2,486
MOSS LANDING	+61,270
MONTEREY	-603
MORRO BAY	+15,387
AVILA	+5,456
Total	0



Recent participation not required. Buyback portion allocated by landing history.

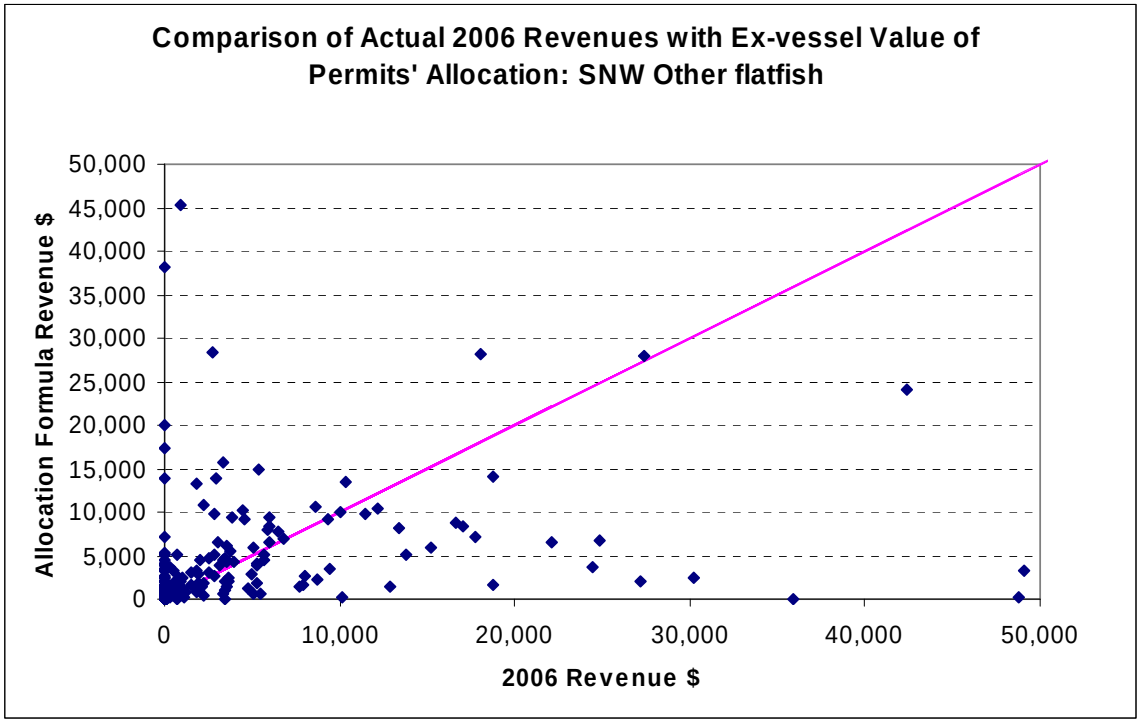
Shoreside Nonwhiting Sector: Other flatfish

Shift in Ex-vessel Revenue Value of Allocation compared with 2006 Total and Average Shift

				Buyback Portion QS Allocated to:	
	2006 REV	Drop 3 REV	Change	All Recipients	Recips. receiving only buyback QS
TOTAL	$981,866	$981,866	+$0	$333,472	$0
Average	$8,321	$6,294	-$2,027	$2,138	$0
Total # of Permits	118	156	+ 38	156	0
# Winners		98			
$ average for winners	$2,444	$7,927	+$5,483		
Percent change			+224.32%		
# Losers		61			
$ average for losers	$12,169	$3,360	-$8,809		
Percent change			-72.39%		
Total # of Permits Affected		159			

Geographic Shift (based on "principle port")

Port Code	$ change
BLAINE	+232
BELLINGHAM BAY	+1,762
SEATTLE AREA	+6,578
NEAH BAY	-7,472
WESTPORT	+3,421
ILWACO/CHINOOK	+422
ASTORIA	-396,250
TILLAMOOK	+1,537
NEWPORT	+7,645
COOS BAY	+74,845
BROOKINGS	-6,029
CRESCENT CITY	-15,863
EUREKA	-56,276
FORT BRAGG	+18,835
BODEGA BAY	+136
SAN FRANCISCO AREA	+114,104
PRINCETON	+153,062
SANTA CRUZ	+1,214
MOSS LANDING	+83,360
MONTEREY	-1,214
MORRO BAY	+10,735
AVILA	+5,216
Total	0



Recent participation required; buyback portion equally shared among all permits

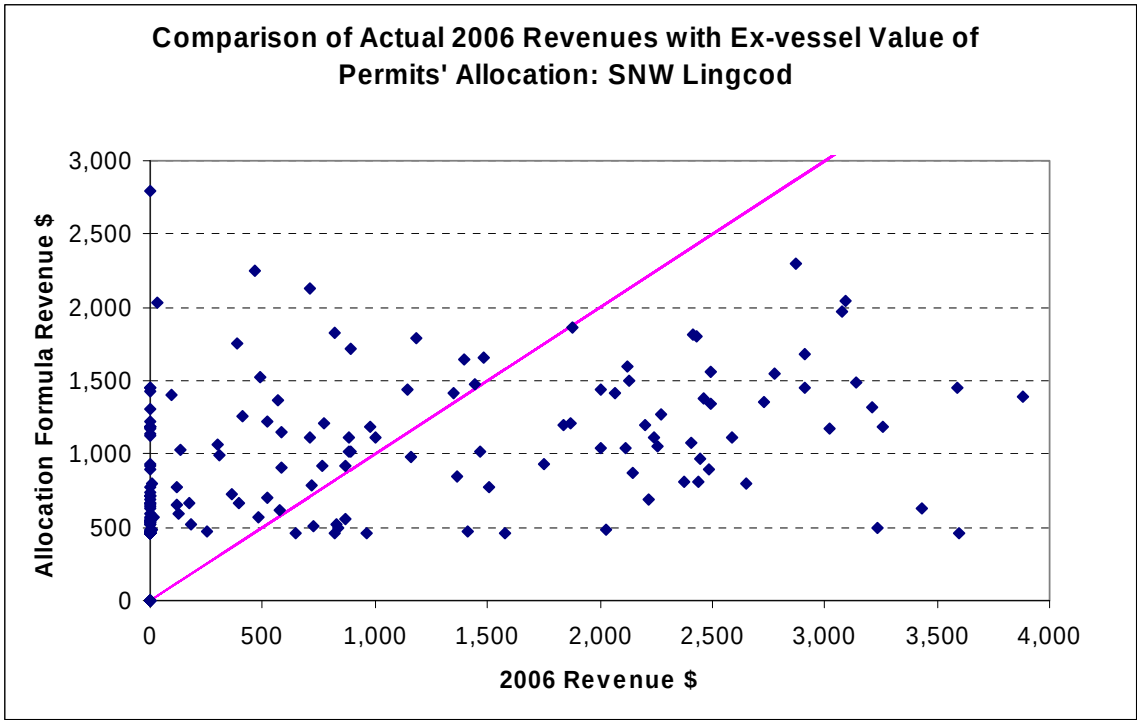
Shoreside Nonwhiting Sector: Lingcod

Shift in Ex-vessel Revenue Value of Allocation compared with 2006
Total and Average Shift

				Buyback Portion QS Allocated to:	
	2006 REV	Drop 3 REV	Change	All Recipients	Recips. receiving only buyback QS
TOTAL	$172,711	$172,711	+$0	$78,224	$9,720
Average	$1,599	$1,022	-$577	$463	$463
Total # of Permits	108	169	+ 61	169	21
# Winners		108			
$ average for winners	$261	$926	+$665		
Percent change			+255.11%		
# Losers		61			
$ average for losers	$2,370	$1,192	-$1,178		
Percent change			-49.70%		
Total # of Permits Affected		169			

Geographic Shift (based on "principle port")

Port Code	$ change
BLAINE	-1,233
BELLINGHAM BAY	-2,285
SEATTLE AREA	+6,301
NEAH BAY	-2,818
WESTPORT	+569
ILWACO/CHINOOK	+1,631
ASTORIA	-28,781
TILLAMOOK	+566
NEWPORT	+11,916
COOS BAY	+3,703
BROOKINGS	+1,910
CRESCENT CITY	+238
EUREKA	-6,660
FORT BRAGG	+7,456
BODEGA BAY	+463
SAN FRANCISCO AREA	+1,136
PRINCETON	+2,150
SANTA CRUZ	-940
MOSS LANDING	+1,834
MONTEREY	-516
MORRO BAY	+2,824
AVILA	+536
Total	0



Recent participation not required. Buyback portion allocated by landing history.

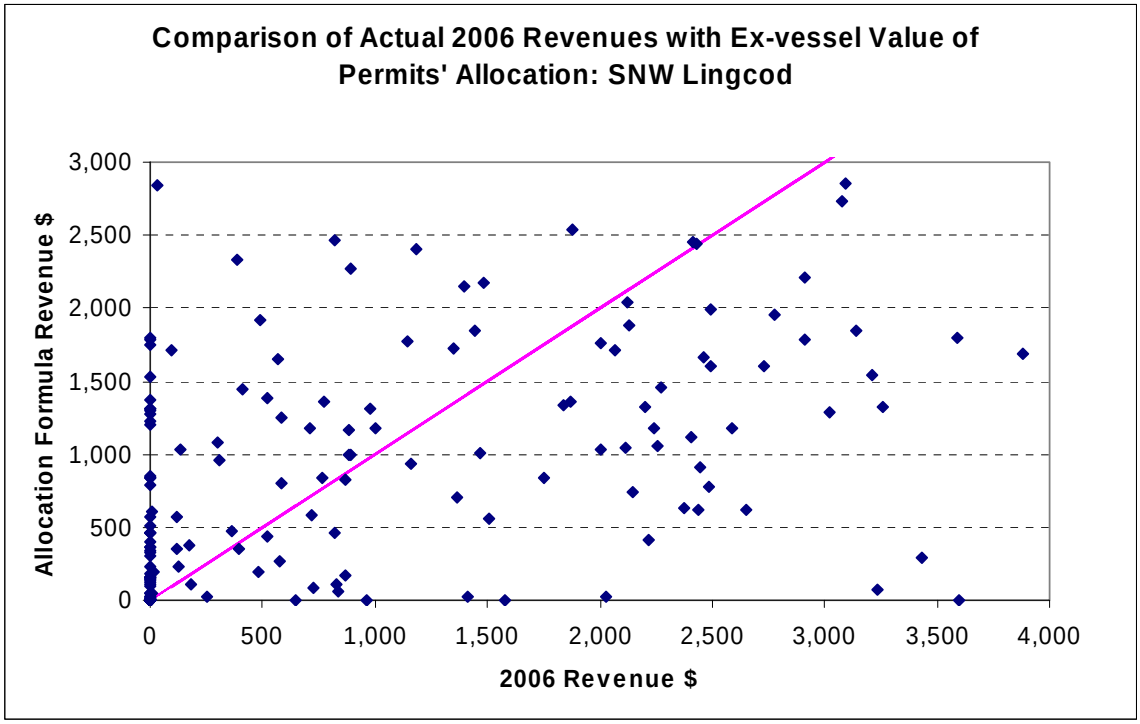
Shoreside Nonwhiting Sector: Lingcod

Shift in Ex-vessel Revenue Value of Allocation compared with 2006 Total and Average Shift

				Buyback Portion QS Allocated to:	
	2006 REV	Drop 3 REV	Change	All Recipients	Recips. receiving only buyback QS
TOTAL	$172,711	$172,711	+$0	$78,224	$0
Average	$1,599	$1,114	-$485	$505	$0
Total # of Permits	108	155	+ 47	155	0
# Winners		93			
$ average for winners	$404	$1,135	+$732		
Percent change			+181.31%		
# Losers		64			
$ average for losers	$2,112	$1,049	-$1,063		
Percent change			-50.35%		
Total # of Permits Affected		157			

Geographic Shift (based on "principle port")

Port Code	$ change
BLAINE	-705
BELLINGHAM BAY	-507
SEATTLE AREA	+6,385
NEAH BAY	-2,411
WESTPORT	-1,598
ILWACO/CHINOOK	+1,278
ASTORIA	-23,812
TILLAMOOK	+186
NEWPORT	+12,126
COOS BAY	+5,475
BROOKINGS	+1,314
CRESCENT CITY	-593
EUREKA	-8,602
FORT BRAGG	+8,768
BODEGA BAY	+48
SAN FRANCISCO AREA	+2,120
PRINCETON	-708
SANTA CRUZ	-1,391
MOSS LANDING	+1,813
MONTEREY	-664
MORRO BAY	+1,347
AVILA	+133
Total	0



Recent participation required; buyback portion equally shared among all permits

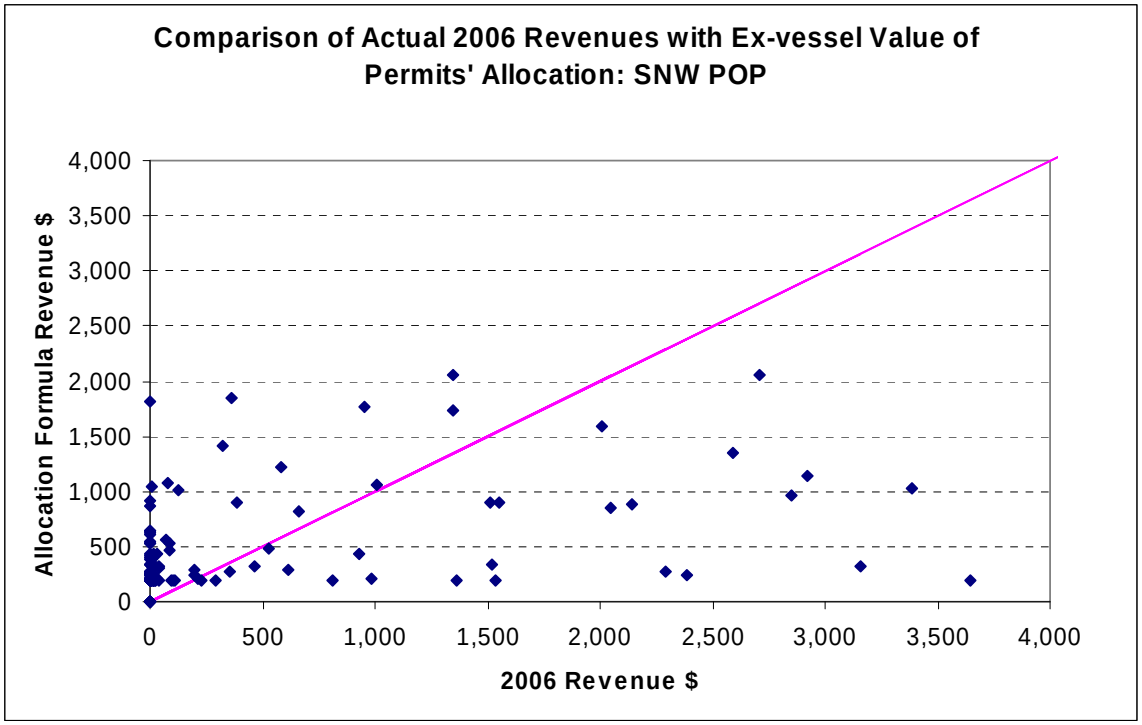
Shoreside Nonwhiting Sector: POP

Shift in Ex-vessel Revenue Value of Allocation compared with 2006
Total and Average Shift

				Buyback Portion QS Allocated to:	
	2006 REV	Drop 3 REV	Change	All Recipients	Recips. receiving only buyback QS
TOTAL	$68,976	$68,976	+$0	$31,729	$8,261
Average	$852	$408	-$443	$188	$188
Total # of Permits	81	169	+ 88	169	44
# Winners		140			
$ average for winners	$63	$361	+$298		
Percent change			+475.45%		
# Losers		29			
$ average for losers	$2,076	$635	-$1,440		
Percent change			-69.38%		
Total # of Permits Affected		169			

Geographic Shift (based on "principle port")

Port Code	$ change
BLAINE	-1,241
BELLINGHAM BAY	-6,651
SEATTLE AREA	+3,521
NEAH BAY	+1,252
WESTPORT	+1,978
ILWACO/CHINOOK	+1,100
ASTORIA	-14,847
TILLAMOOK	+192
NEWPORT	-3,191
COOS BAY	+4,168
BROOKINGS	+1,409
CRESCENT CITY	+759
EUREKA	+3,571
FORT BRAGG	+1,693
BODEGA BAY	+188
SAN FRANCISCO AREA	+2,139
PRINCETON	+1,314
SANTA CRUZ	+188
MOSS LANDING	+1,134
MONTEREY	+188
MORRO BAY	+951
AVILA	+188
Total	0



Recent participation not required. Buyback portion allocated by landing history.

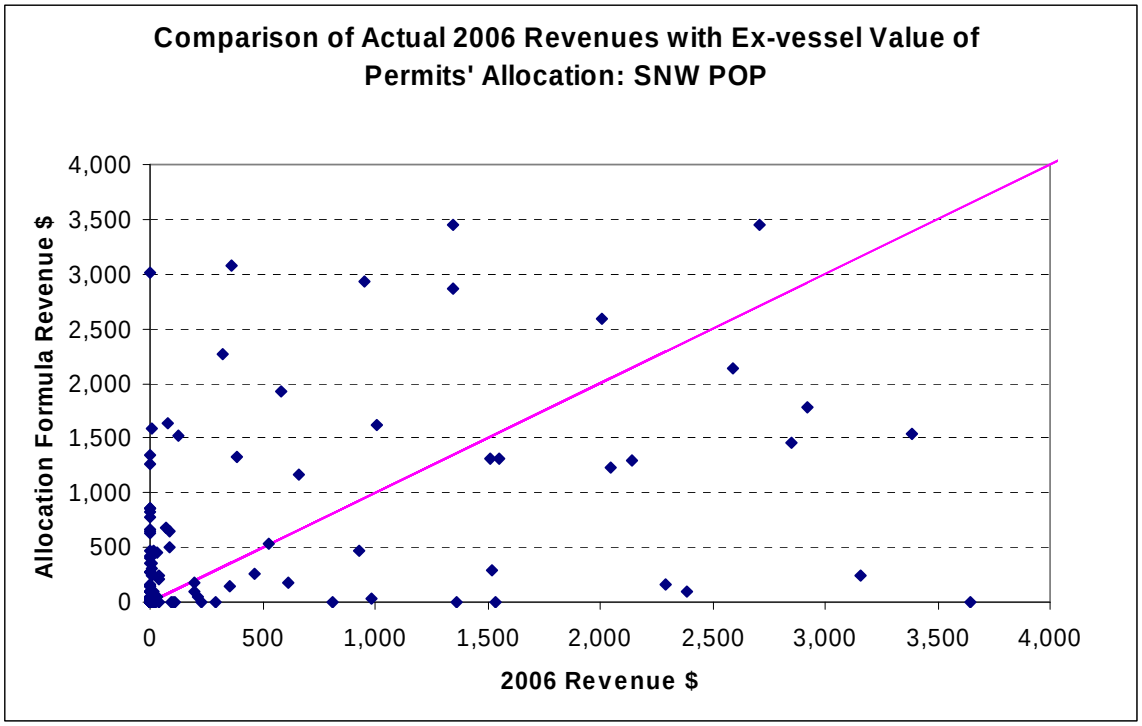
Shoreside Nonwhiting Sector: POP

Shift in Ex-vessel Revenue Value of Allocation compared with 2006 Total and Average Shift

				Buyback Portion QS Allocated to:	
	2006 REV	Drop 3 REV	Change	All Recipients	Recips. receiving only buyback QS
TOTAL	$68,976	$68,976	+$0	$31,729	$0
Average	$852	$543	-$308	$250	$0
Total # of Permits	81	127	+ 46	127	0
# Winners		94			
$ average for winners	$138	$544	+$406		
Percent change			+294.18%		
# Losers		40			
$ average for losers	$1,400	$446	-$954		
Percent change			-68.17%		
Total # of Permits Affected		134			

Geographic Shift (based on "principle port")

Port Code	$ change
BLAINE	-442
BELLINGHAM BAY	-5,287
SEATTLE AREA	+4,434
NEAH BAY	+605
WESTPORT	+892
ILWACO/CHINOOK	+1,342
ASTORIA	-6,240
TILLAMOOK	+7
NEWPORT	-1,745
COOS BAY	+2,494
BROOKINGS	+216
CRESCENT CITY	+14
EUREKA	+1,888
FORT BRAGG	+353
BODEGA BAY	+0
SAN FRANCISCO AREA	+840
PRINCETON	+0
SANTA CRUZ	+0
MOSS LANDING	+607
MONTEREY	+0
MORRO BAY	+23
AVILA	+0
Total	0



Recent participation required; buyback portion equally shared among all permits

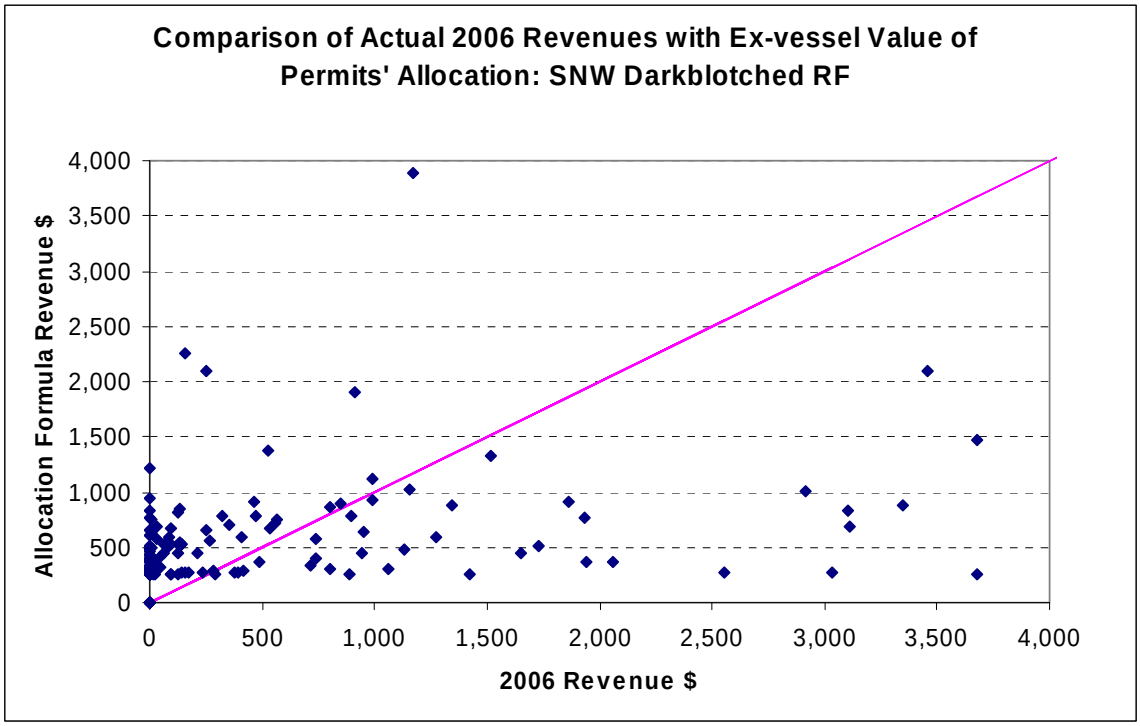
Shoreside Nonwhiting Sector: Darkblotched RF

Shift in Ex-vessel Revenue Value of Allocation compared with 2006
Total and Average Shift

				Buyback Portion QS Allocated to:	
	2006 REV	Drop 3 REV	Change	All Recipients	Recips. receiving only buyback QS
TOTAL	$89,246	$89,246	-$0	$43,667	$5,684
Average	$911	$528	-$383	$258	$258
Total # of Permits	98	169	+ 71	169	22
# Winners		129			
$ average for winners	$101	$495	+$393		
Percent change			+388.52%		
# Losers		40			
$ average for losers	$1,905	$636	-$1,269		
Percent change			-66.61%		
Total # of Permits Affected		169			

Geographic Shift (based on "principle port")

Port Code	$ change
BLAINE	-111
BELLINGHAM BAY	+1,926
SEATTLE AREA	+2,299
NEAH BAY	+1,209
WESTPORT	+2,381
ILWACO/CHINOOK	+633
ASTORIA	-7,010
TILLAMOOK	+262
NEWPORT	+4,153
COOS BAY	-7,468
BROOKINGS	+1,314
CRESCENT CITY	+1,643
EUREKA	-6,528
FORT BRAGG	-2,129
BODEGA BAY	+258
SAN FRANCISCO AREA	+2,863
PRINCETON	+1,475
SANTA CRUZ	+258
MOSS LANDING	+982
MONTEREY	+44
MORRO BAY	+1,110
AVILA	+434
Total	0



Recent participation not required. Buyback portion allocated by landing history.

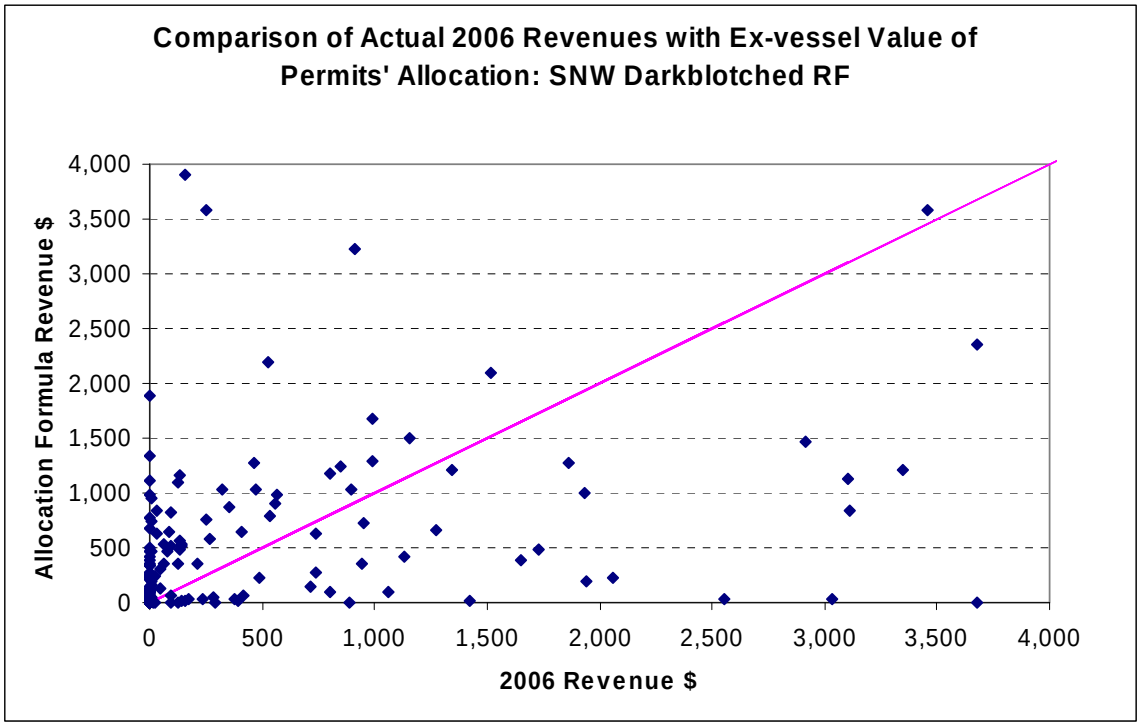
Shoreside Nonwhiting Sector: Darkblotched RF

Shift in Ex-vessel Revenue Value of Allocation compared with 2006 Total and Average Shift

				Buyback Portion QS Allocated to:	
	2006 REV	Drop 3 REV	Change	All Recipients	Recips. receiving only buyback QS
TOTAL	$89,246	$89,246	+$0	$43,667	$0
Average	$911	$583	-$327	$285	$0
Total # of Permits	98	153	+ 55	153	0
# Winners		112			
$ average for winners	$176	$616	+$440		
Percent change			+249.32%		
# Losers		45			
$ average for losers	$1,544	$450	-$1,094		
Percent change			-70.85%		
Total # of Permits Affected		157			

Geographic Shift (based on "principle port")

Port Code	$ change
BLAINE	-258
BELLINGHAM BAY	+2,458
SEATTLE AREA	+1,463
NEAH BAY	-31
WESTPORT	+614
ILWACO/CHINOOK	+227
ASTORIA	-8,241
TILLAMOOK	+7
NEWPORT	+5,974
COOS BAY	-2,105
BROOKINGS	+1,015
CRESCENT CITY	+1,206
EUREKA	-6,747
FORT BRAGG	+1,671
BODEGA BAY	+2
SAN FRANCISCO AREA	+2,522
PRINCETON	-292
SANTA CRUZ	+0
MOSS LANDING	+454
MONTEREY	-197
MORRO BAY	-86
AVILA	+342
Total	0



Recent participation required; buyback portion equally shared among all permits

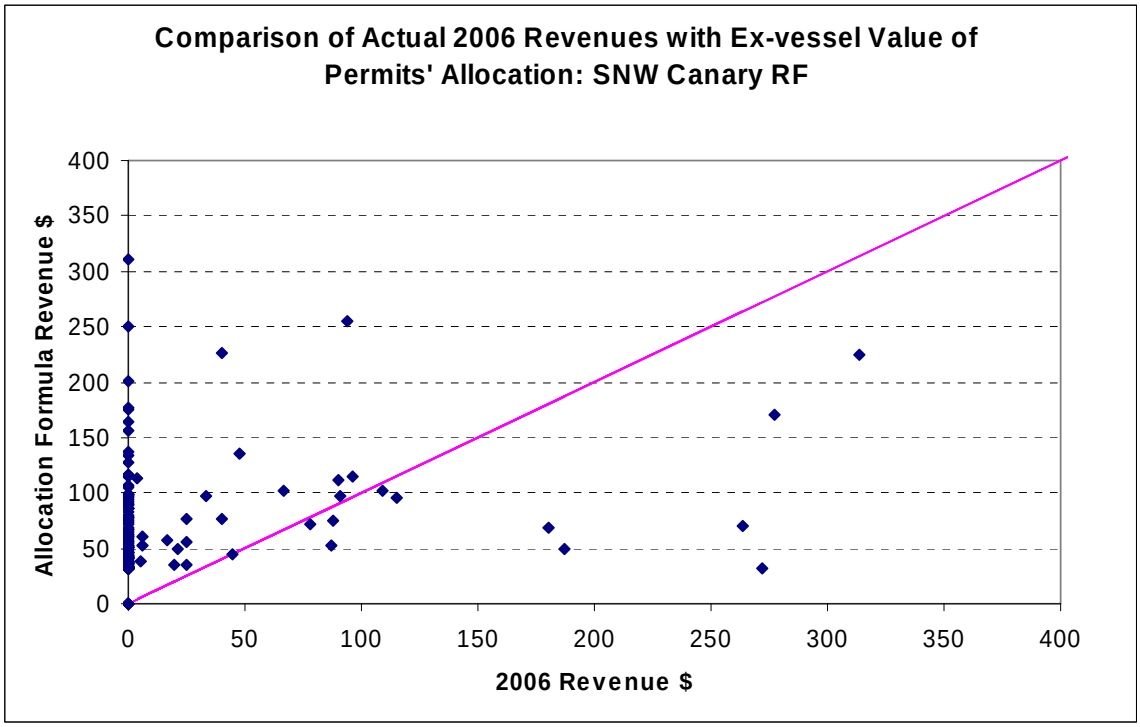
Shoreside Nonwhiting Sector: Canary RF

Shift in Ex-vessel Revenue Value of Allocation compared with 2006
Total and Average Shift

				Buyback Portion QS Allocated to:	
	2006 REV	Drop 3 REV	Change	All Recipients	Recips. receiving only buyback QS
TOTAL	$11,704	$11,704	+$0	$5,308	$628
Average	$334	$69	-$265	$31	$31
Total # of Permits	35	169	+ 134	169	20
# Winners		153			
$ average for winners	$5	$66	+$61		
Percent change			+1242.10%		
# Losers		16			
$ average for losers	$684	$100	-$585		
Percent change			-85.41%		
Total # of Permits Affected		169			

Geographic Shift (based on "principle port")

Port Code	$ change
BLAINE	+186
BELLINGHAM BAY	+474
SEATTLE AREA	+407
NEAH BAY	-44
WESTPORT	+317
ILWACO/CHINOOK	+141
ASTORIA	+1,675
TILLAMOOK	+33
NEWPORT	-3,703
COOS BAY	+1,066
BROOKINGS	+380
CRESCENT CITY	+173
EUREKA	-1,522
FORT BRAGG	+380
BODEGA BAY	+31
SAN FRANCISCO AREA	-687
PRINCETON	+246
SANTA CRUZ	+31
MOSS LANDING	+193
MONTEREY	+15
MORRO BAY	+176
AVILA	+32
Total	0



Recent participation not required. Buyback portion allocated by landing history.

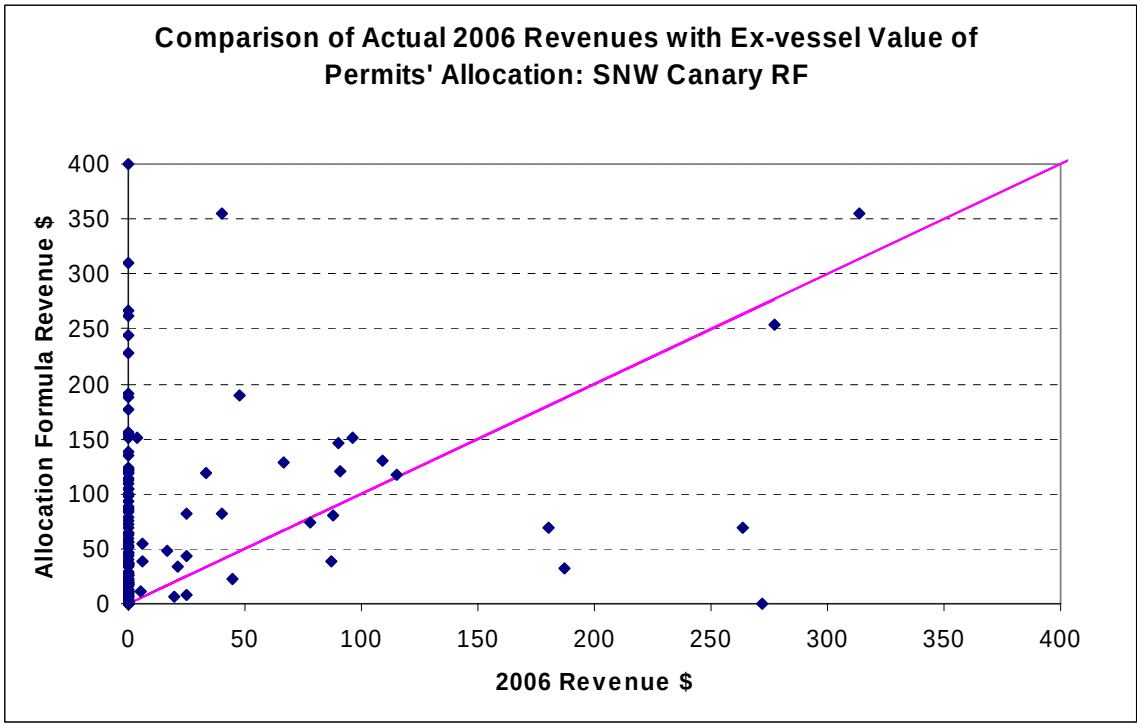
Shoreside Nonwhiting Sector: Canary RF

Shift in Ex-vessel Revenue Value of Allocation compared with 2006 Total and Average Shift

				Buyback Portion QS Allocated to:	
	2006 REV	Drop 3 REV	Change	All Recipients	Recips. receiving only buyback QS
TOTAL	$11,704	$11,704	+$0	$5,308	$0
Average	$334	$75	-$259	$34	$0
Total # of Permits	35	156	+ 121	156	0
# Winners		141			
$ average for winners	$9	$73	+$64		
Percent change			+725.70%		
# Losers		15			
$ average for losers	$697	$94	-$603		
Percent change			-86.46%		
Total # of Permits Affected		156			

Geographic Shift (based on "principle port")

Port Code	$ change
BLAINE	+315
BELLINGHAM BAY	+715
SEATTLE AREA	+399
NEAH BAY	+3
WESTPORT	+121
ILWACO/CHINOOK	+146
ASTORIA	+1,941
TILLAMOOK	+2
NEWPORT	-3,209
COOS BAY	+1,252
BROOKINGS	+307
CRESCENT CITY	+87
EUREKA	-1,689
FORT BRAGG	+273
BODEGA BAY	+0
SAN FRANCISCO AREA	-833
PRINCETON	+47
SANTA CRUZ	+0
MOSS LANDING	+99
MONTEREY	-13
MORRO BAY	+34
AVILA	+1
Total	0



Recent participation required; buyback portion equally shared among all permits

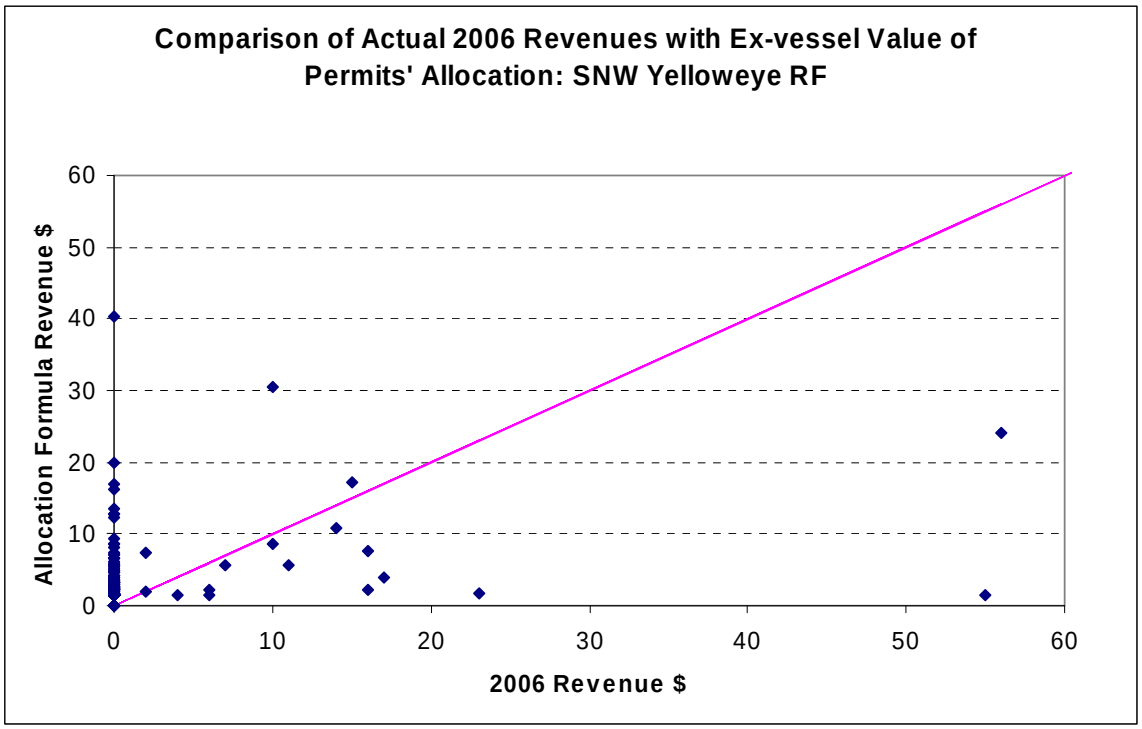
Shoreside Nonwhiting Sector: Yelloweye RF

Shift in Ex-vessel Revenue Value of Allocation compared with 2006 Total and Average Shift

				Buyback Portion QS Allocated to:	
	2006 REV	Drop 3 REV	Change	All Recipients	Recips. receiving only buyback QS
TOTAL	$669	$669	+$0	$233	$39
Average	$35	$4	-$31	$1.38	$1.38
Total # of Permits	19	169	+ 150	169	28
# Winners		154			
$ average for winners	$0	$4	+$4		
Percent change			+1923.93%		
# Losers		15			
$ average for losers	$43	$5	-$37		
Percent change			-87.18%		
Total # of Permits Affected		169			

Geographic Shift (based on "principle port")

Port Code	$ change
BLAINE	+2
BELLINGHAM BAY	-31
SEATTLE AREA	+17
NEAH BAY	-309
WESTPORT	+13
ILWACO/CHINOOK	+14
ASTORIA	-80
TILLAMOOK	+1
NEWPORT	+131
COOS BAY	+112
BROOKINGS	+17
CRESCENT CITY	+9
EUREKA	+18
FORT BRAGG	+16
BODEGA BAY	+1
SAN FRANCISCO AREA	+29
PRINCETON	+10
SANTA CRUZ	+1
MOSS LANDING	+14
MONTEREY	+1
MORRO BAY	+9
AVILA	+1
Total	0



Recent participation not required. Buyback portion allocated by landing history.

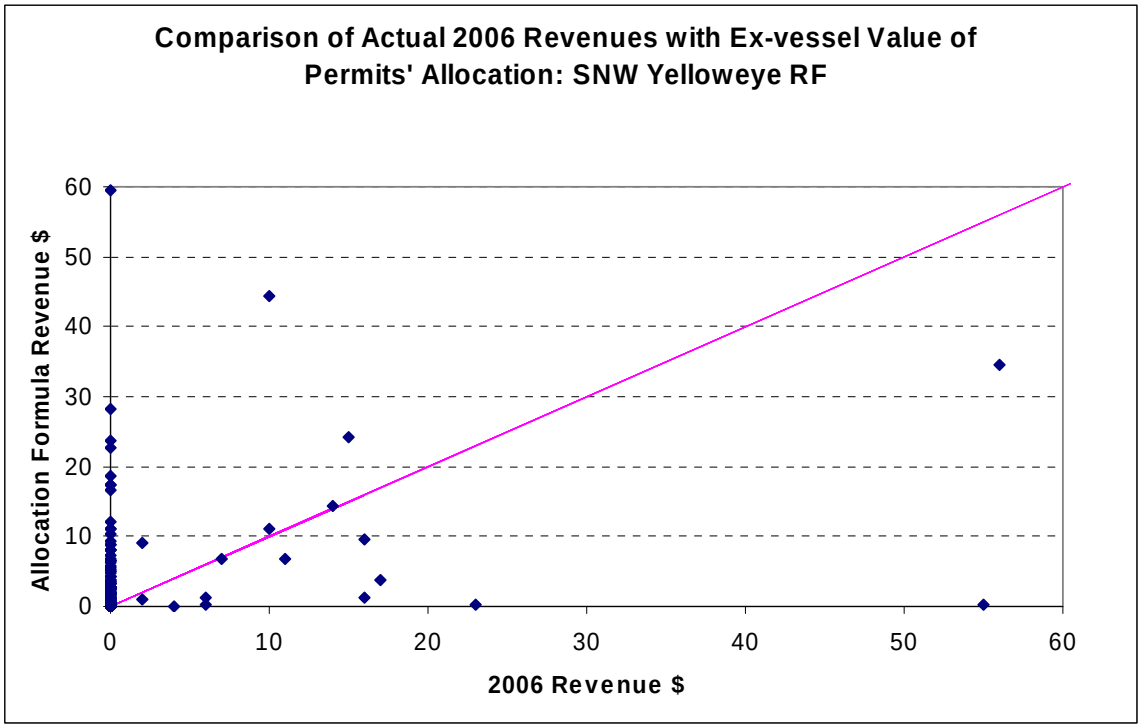
Shoreside Nonwhiting Sector: Yelloweye RF

Shift in Ex-vessel Revenue Value of Allocation compared with 2006
Total and Average Shift

				Buyback Portion QS Allocated to:	
	2006 REV	Drop 3 REV	Change	All Recipients	Recips. receiving only buyback QS
TOTAL	$669	$669	+$0	$233	$0
Average	$35	$5	-$31	$2	$0
Total # of Permits	19	146	+ 127	146	0
# Winners		132			
$ average for winners	$0	$5	+$4		
Percent change			+1075.82%		
# Losers		14			
$ average for losers	$44	$5	-$39		
Percent change			-88.78%		
Total # of Permits Affected		146			

Geographic Shift (based on "principle port")

Port Code	$ change
BLAINE	+9
BELLINGHAM BAY	-18
SEATTLE AREA	+13
NEAH BAY	-314
WESTPORT	+3
ILWACO/CHINOOK	+17
ASTORIA	-93
TILLAMOOK	+0
NEWPORT	+158
COOS BAY	+152
BROOKINGS	+11
CRESCENT CITY	+5
EUREKA	+7
FORT BRAGG	+7
BODEGA BAY	+0
SAN FRANCISCO AREA	+26
PRINCETON	+1
SANTA CRUZ	+0
MOSS LANDING	+11
MONTEREY	+0
MORRO BAY	+4
AVILA	+0
Total	0



Recent participation required; buyback portion equally shared among all permits

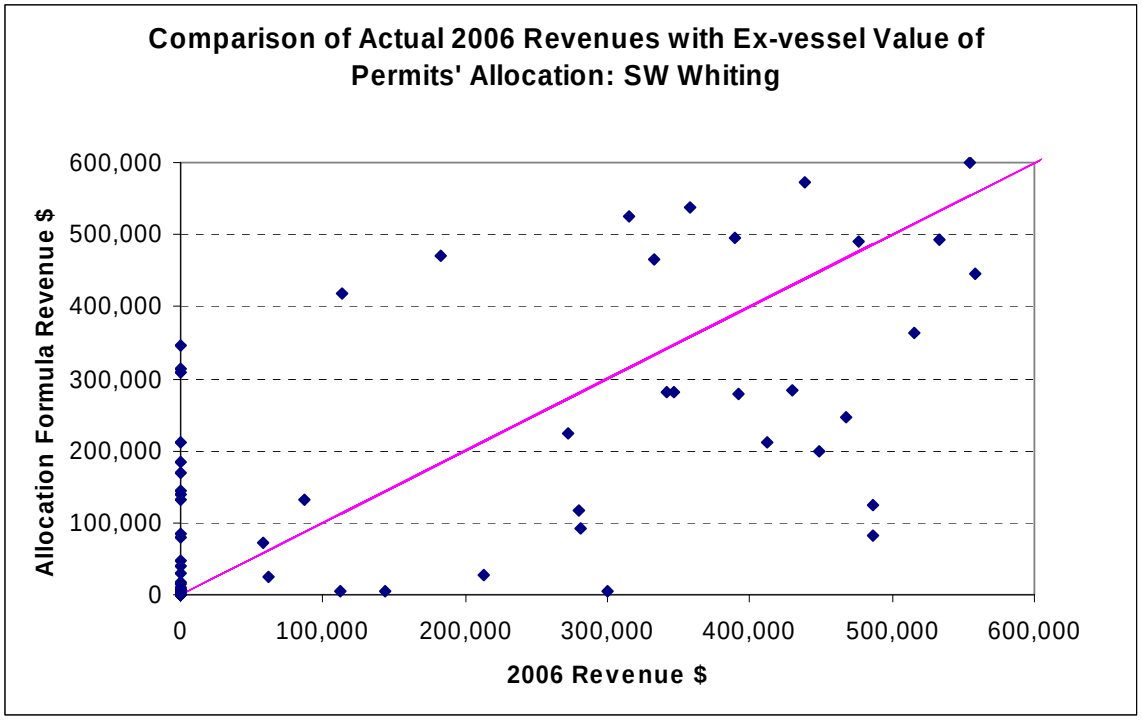
Shoreside Whiting Sector: Pacific whiting

Shift in Ex-vessel Revenue Value of Allocation compared with 2006
Total and Average Shift

				Buyback Portion QS Allocated to:	
	2006 REV	Drop 2 REV	Change	All Recipients	Recips. receiving only buyback QS
TOTAL	$13,078,482	$13,078,482	-$0	$1,016,060	$667,353
Average	$373,671	$77,387	-$296,283	$6,012	$6,012
Total # of Permits	35	169	+ 134	169	111
# Winners		146			
$ average for winners	$26,646	$57,338	+$30,692		
Percent change			+115.18%		
# Losers		23			
$ average for losers	$399,484	$204,657	-$194,827		
Percent change			-48.77%		
Total # of Permits Affected		169			

Geographic Shift (based on "principle port")

PCID	$ change
SEATTLE	+1,069,267
WESTPORT	-551,506
ILWACO/CHINOOK	-733,345
ASTORIA	-548,223
NEWPORT	-250,939
COOS BAY	-512,650
EUREKA	-23,063
SAN FRANCISCO AREA	+13,064
MOSS LANDING	+6,012
MONTEREY	+6,012
(Not Indicated)	+1,525,371
Total	0



Recent participation not required. Buyback portion allocated by landing history.

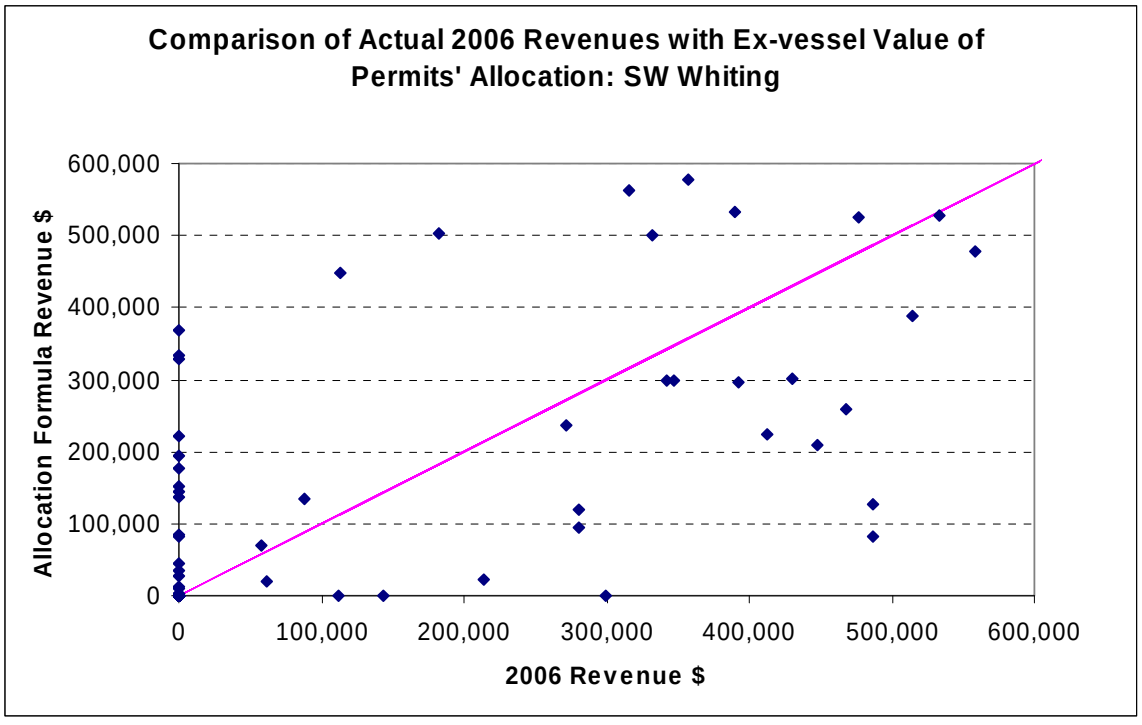
Shoreside Whiting Sector: Pacific whiting

Shift in Ex-vessel Revenue Value of Allocation compared with 2006
Total and Average Shift

				Buyback Portion QS Allocated to:	
	2006 REV	Drop 2 REV	Change	All Recipients	Recips. receiving only buyback QS
TOTAL	$13,078,482	$13,078,482	+$0	$1,016,060	$0
Average	$373,671	$225,491	-$148,180	$17,518	$0
Total # of Permits	35	58	+ 23	58	0
# Winners		39			
$ average for winners	$99,752	$208,328	+$108,576		
Percent change			+108.85%		
# Losers		23			
$ average for losers	$399,484	$215,378	-$184,106		
Percent change			-46.09%		
Total # of Permits Affected		62			

Geographic Shift (based on "principle port")

PCID	$ change
SEATTLE	+1,120,224
WESTPORT	-400,559
ILWACO/CHINOOK	-724,832
ASTORIA	-422,068
NEWPORT	+73,130
COOS BAY	-536,252
EUREKA	-28,025
SAN FRANCISCO AREA	+1,127
MOSS LANDING	+0
MONTEREY	+0
(Not Indicated)	+917,254
Total	0



Recent participation required; buyback portion equally shared among all permits

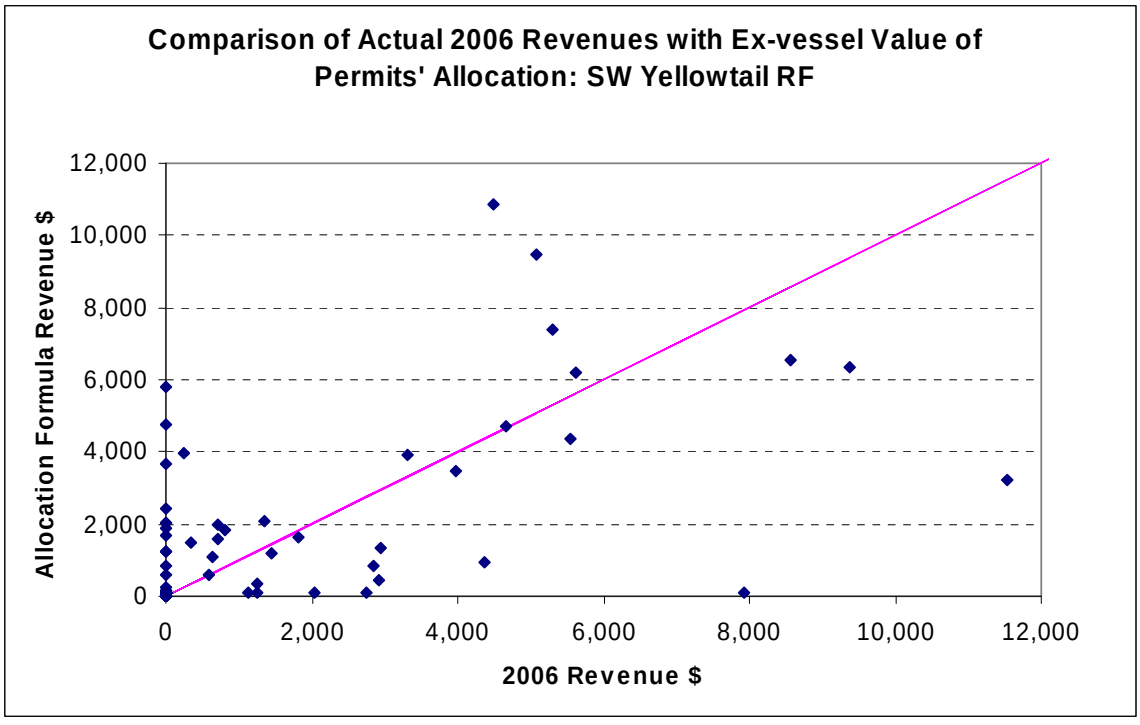
Shoreside Whiting Sector: Yellowtail RF

Shift in Ex-vessel Revenue Value of Allocation compared with 2006
Total and Average Shift

				Buyback Portion QS Allocated to:	
	2006 REV	Drop 2 REV	Change	All Recipients	Recips. receiving only buyback QS
TOTAL	$134,005	$134,005	+$0	$18,288	$12,769
Average	$3,941	$793	-$3,148	$108	$108
Total # of Permits	34	169	+ 135	169	118
# Winners		149			
$ average for winners	$223	$662	+$438		
Percent change			+196.39%		
# Losers		20			
$ average for losers	$5,038	$1,772	-$3,265		
Percent change			-64.82%		
Total # of Permits Affected		169			

Geographic Shift (based on "principle port")

PCID	$ change
SEATTLE	+16,757
WESTPORT	-8,236
ILWACO/CHINOOK	-12,919
ASTORIA	-7,345
NEWPORT	-2,641
COOS BAY	-2,796
EUREKA	-1,019
SAN FRANCISCO AREA	+377
MOSS LANDING	+108
MONTEREY	+108
(Not Indicated)	+17,605
Total	0



Recent participation not required. Buyback portion allocated by landing history.

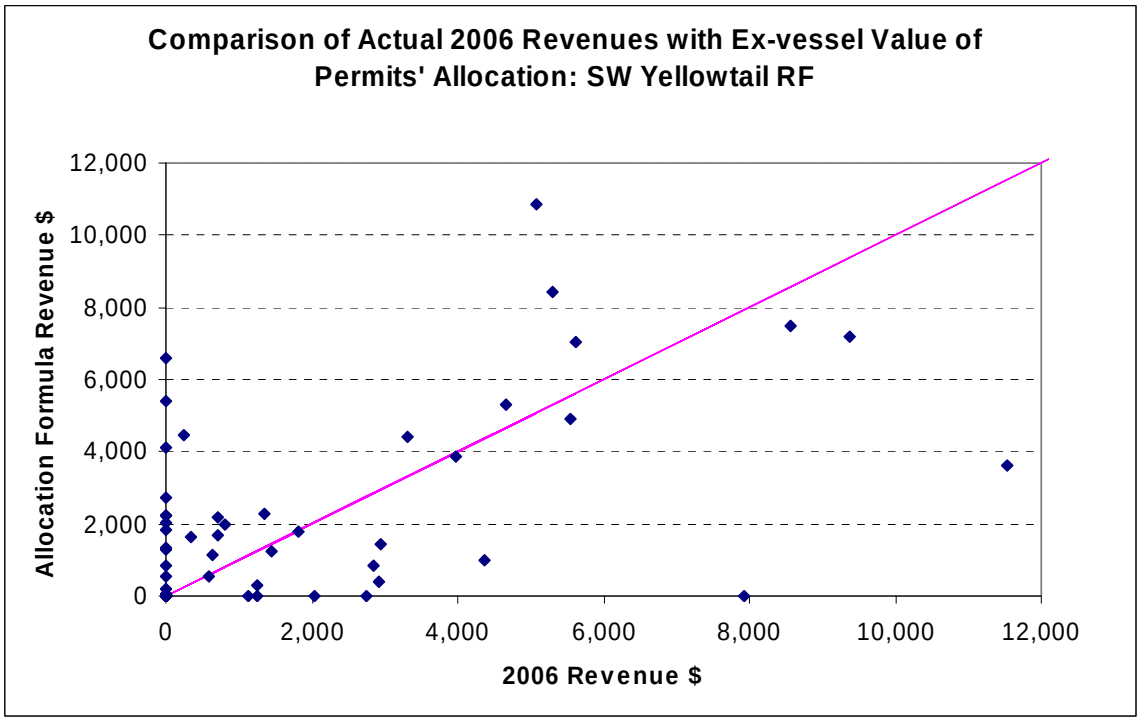
Shoreside Whiting Sector: Yellowtail RF

Shift in Ex-vessel Revenue Value of Allocation compared with 2006
Total and Average Shift

				Buyback Portion QS Allocated to:	
	2006 REV	Drop 2 REV	Change	All Recipients	Recips. receiving only buyback QS
TOTAL	$134,005	$134,005	+$0	$18,288	$0
Average	$3,941	$2,628	-$1,314	$359	$0
Total # of Permits	34	51	+ 17	51	0
# Winners		35			
$ average for winners	$950	$2,728	+$1,778		
Percent change			+187.08%		
# Losers		20			
$ average for losers	$5,038	$1,927	-$3,111		
Percent change			-61.75%		
Total # of Permits Affected		55			

Geographic Shift (based on "principle port")

PCID	$ change
SEATTLE	+18,653
WESTPORT	-1,486
ILWACO/CHINOOK	-12,473
ASTORIA	-4,389
NEWPORT	-2,032
COOS BAY	-3,454
EUREKA	-1,232
SAN FRANCISCO AREA	+186
MOSS LANDING	+0
MONTEREY	+0
(Not Indicated)	+6,227
Total	0



Recent participation required; buyback portion equally shared among all permits

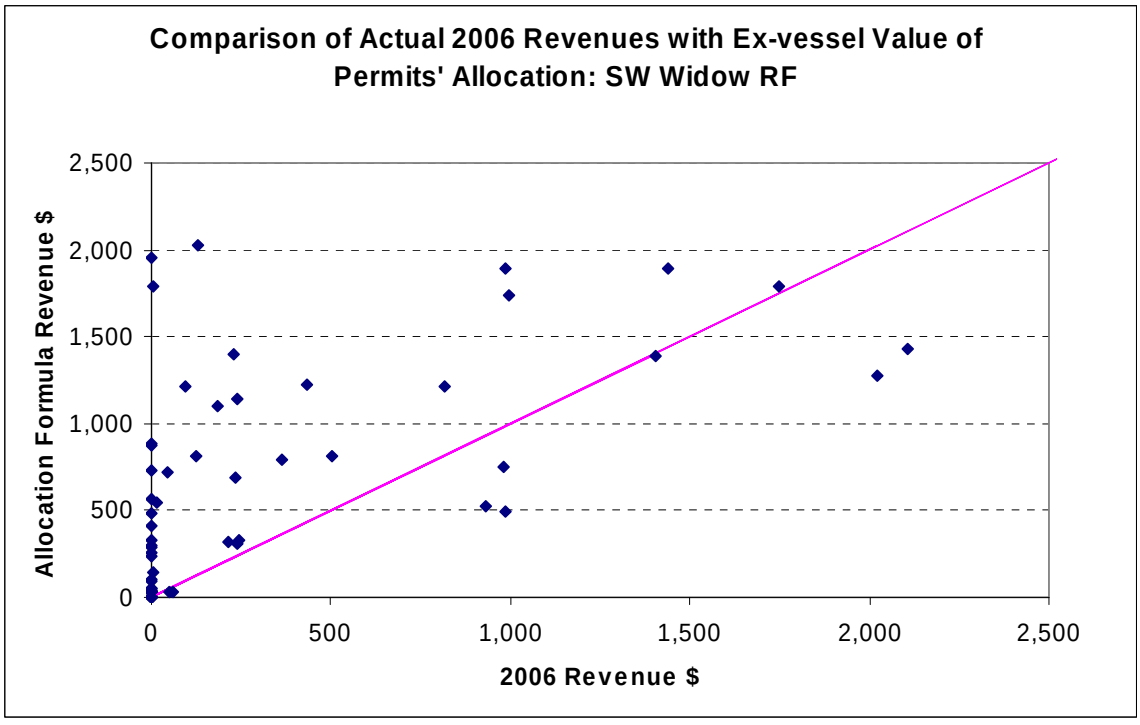
Shoreside Whiting Sector: Widow RF

Shift in Ex-vessel Revenue Value of Allocation compared with 2006
Total and Average Shift

				Buyback Portion QS Allocated to:	
	2006 REV	Drop 2 REV	Change	All Recipients	Recips. receiving only buyback QS
TOTAL	$44,630	$44,630	-$0	$5,317	$3,744
Average	$1,313	$264	-$1,049	$31	$31
Total # of Permits	34	169	+ 135	169	119
# Winners		158			
$ average for winners	$64	$239	+$176		
Percent change			+276.27%		
# Losers		11			
$ average for losers	$3,145	$623	-$2,521		
Percent change			-80.18%		
Total # of Permits Affected		169			

Geographic Shift (based on "principle port")

PCID	$ change
SEATTLE	+4,711
WESTPORT	+2,806
ILWACO/CHINOOK	-21,709
ASTORIA	+2,732
NEWPORT	+3,274
COOS BAY	+2,505
EUREKA	+161
SAN FRANCISCO AREA	+63
MOSS LANDING	+31
MONTEREY	+31
(Not Indicated)	+5,394
Total	0



Recent participation not required. Buyback portion allocated by landing history.

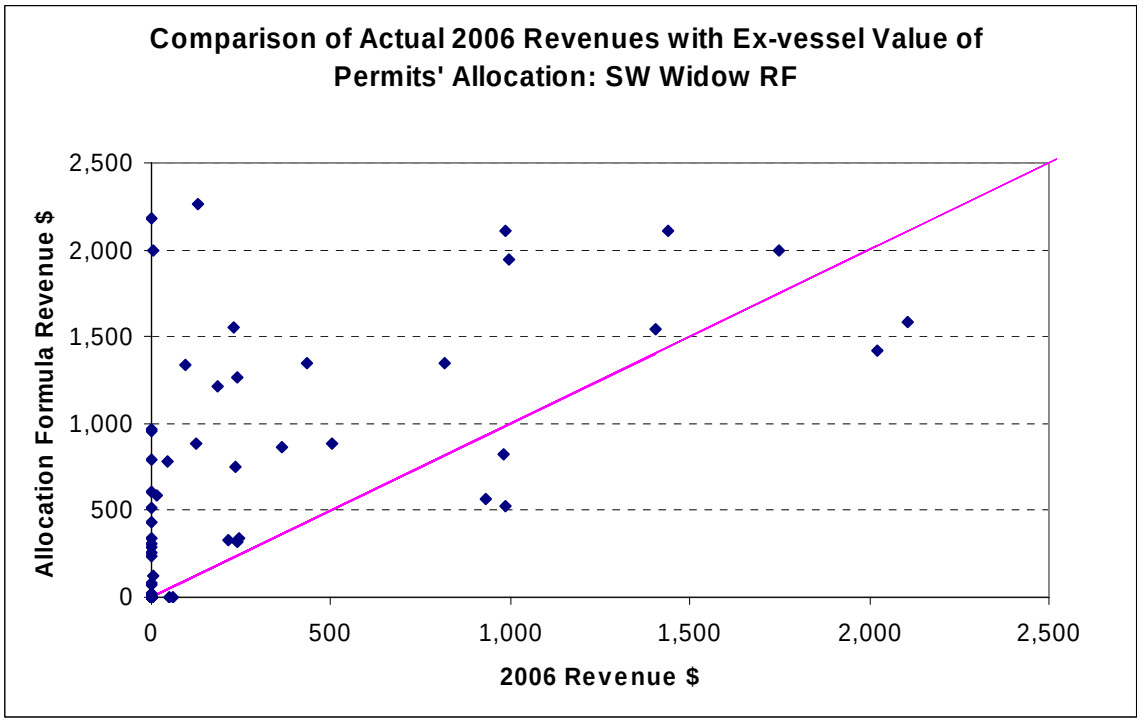
Shoreside Whiting Sector: Widow RF

Shift in Ex-vessel Revenue Value of Allocation compared with 2006
Total and Average Shift

				Buyback Portion QS Allocated to:	
	2006 REV	Drop 2 REV	Change	All Recipients	Recips. receiving only buyback QS
TOTAL	$44,630	$44,630	+$0	$5,317	$0
Average	$1,313	$893	-$420	$106	$0
Total # of Permits	34	50	+ 16	50	0
# Winners		44			
$ average for winners	$260	$881	+$621		
Percent change			+238.96%		
# Losers		10			
$ average for losers	$3,319	$585	-$2,734		
Percent change			-82.39%		
Total # of Permits Affected		54			

Geographic Shift (based on "principle port")

PCID	$ change
SEATTLE	+5,134
WESTPORT	+3,622
ILWACO/CHINOOK	-21,531
ASTORIA	+3,159
NEWPORT	+4,547
COOS BAY	+2,807
EUREKA	+176
SAN FRANCISCO AREA	+0
MOSS LANDING	+0
MONTEREY	+0
(Not Indicated)	+2,087
Total	0



Recent participation required; buyback portion equally shared among all permits

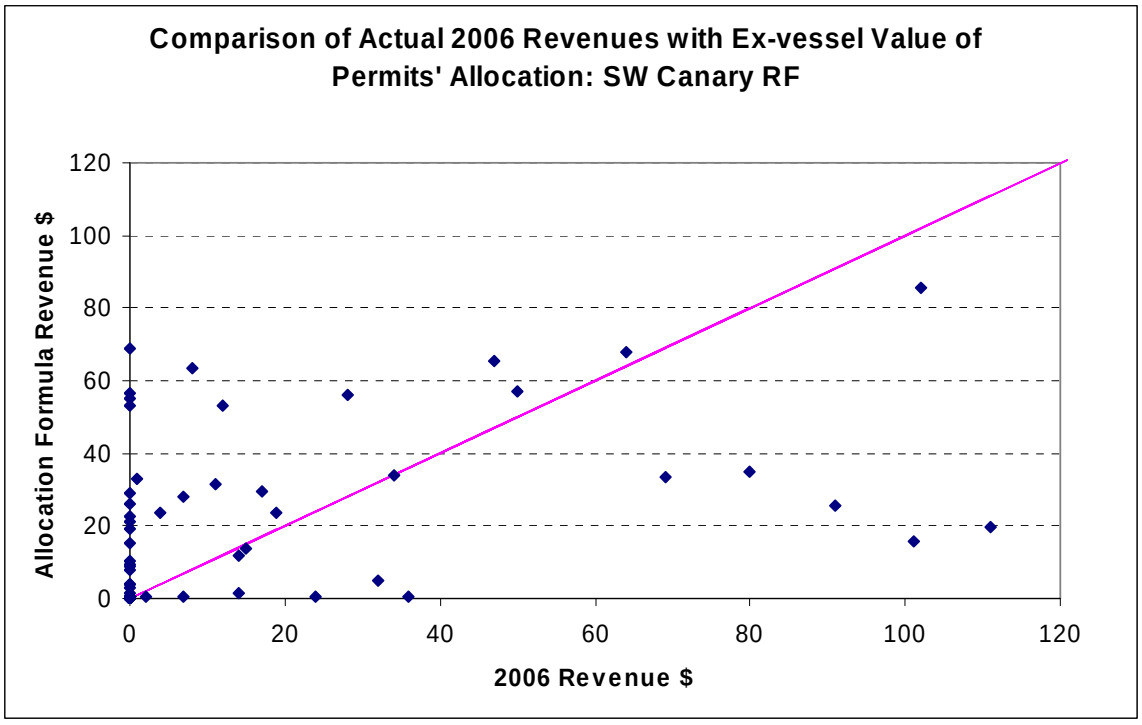
Shoreside Whiting Sector: Canary RF

Shift in Ex-vessel Revenue Value of Allocation compared with 2006
Total and Average Shift

				Buyback Portion QS Allocated to:	
	2006 REV	Drop 2 REV	Change	All Recipients	Recips. receiving only buyback QS
TOTAL	$1,618	$1,618	+$0	$97	$69
Average	$51	$10	-$41	$0.57	$0.57
Total # of Permits	32	169	+ 137	169	121
# Winners		151			
$ average for winners	$2	$8	+$6		
Percent change			+277.66%		
# Losers		18			
$ average for losers	$72	$24	-$48		
Percent change			-66.86%		
Total # of Permits Affected		169			

Geographic Shift (based on "principle port")

PCID	$ change
SEATTLE	+124
WESTPORT	+51
ILWACO/CHINOOK	-87
ASTORIA	+124
NEWPORT	-317
COOS BAY	-87
EUREKA	-4
SAN FRANCISCO AREA	+11
MOSS LANDING	+1
MONTEREY	+1
(Not Indicated)	+183
Total	0



Recent participation <u>not</u> required. Buyback portion allocated by landing history.

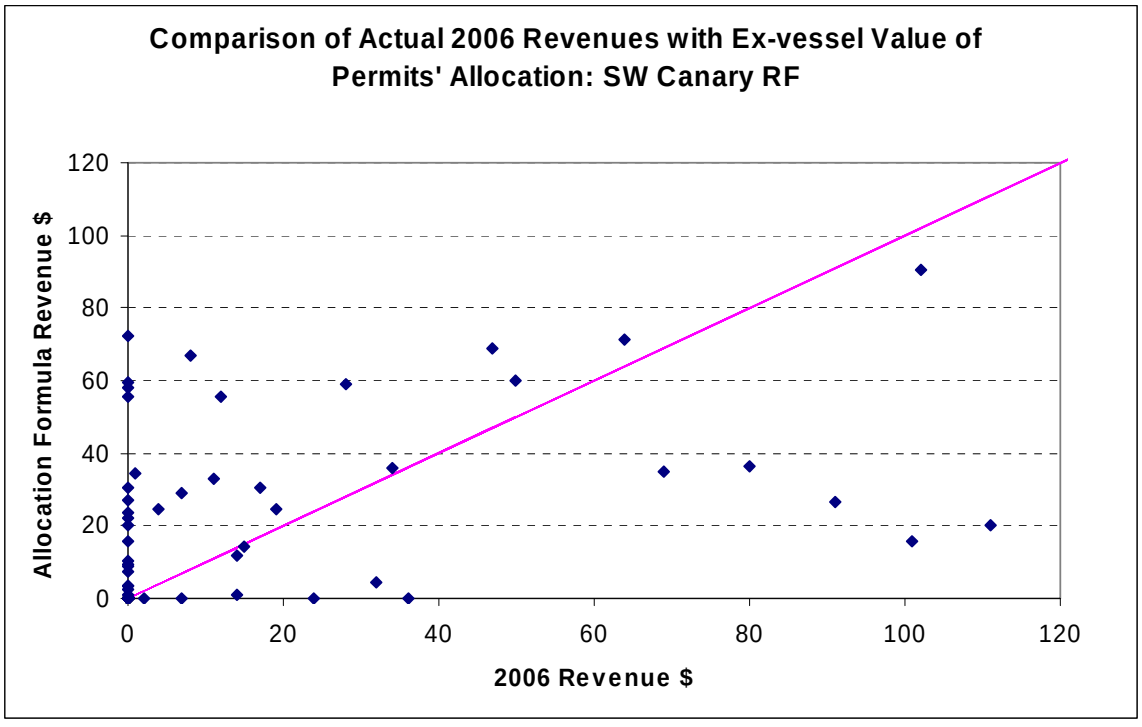
Shoreside Whiting Sector: Canary RF

Shift in Ex-vessel Revenue Value of Allocation compared with 2006

Total and Average Shift				Buyback Portion QS Allocated to:	
	2006 REV	Drop 2 REV	Change	All Recipients	Recips. receiving only buyback QS
TOTAL	$1,618	$1,618	+$0	$97	$0
Average	$51	$34	-$17	$2	$0
Total # of Permits	32	48	+ 16	48	0
# Winners		33			
$ average for winners	$10	$35	+$26		
Percent change			+272.39%		
# Losers		18			
$ average for losers	$72	$25	-$48		
Percent change			-65.59%		
Total # of Permits Affected		51			

Geographic Shift (based on "principle port")

PCID	$ change
SEATTLE	+128
WESTPORT	+64
ILWACO/CHINOOK	-87
ASTORIA	+141
NEWPORT	-296
COOS BAY	-82
EUREKA	-5
SAN FRANCISCO AREA	+10
MOSS LANDING	+0
MONTEREY	+0
(Not Indicated)	+126
Total	0



Recent participation required; buyback portion equally shared among all permits

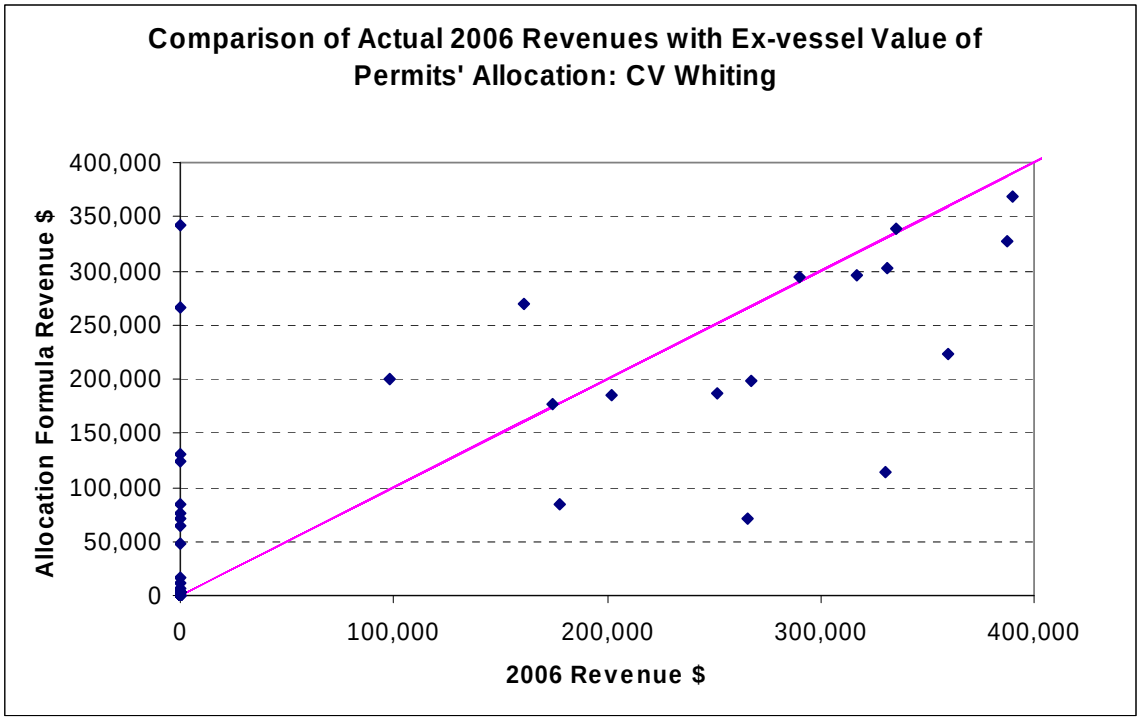
At-sea Whiting CV Sector: Pacific whiting

Shift in Ex-vessel Revenue Value of Allocation compared with 2006
Total and Average Shift

				Buyback Portion QS Allocated to:	
	2006 REV	Drop 2 REV	Change	All Recipients	Recips. receiving only buyback QS
TOTAL	$6,952,372	$6,952,372	-$0	$438,338	$355,339
Average	$347,619	$41,138	-$306,480	$2,594	$2,594
Total # of Permits	20	169	+ 149	169	137
# Winners		155			
$ average for winners	$9,349	$22,861	+$13,512		
Percent change			+144.52%		
# Losers		14			
$ average for losers	$393,089	$243,495	-$149,594		
Percent change			-38.06%		
Total # of Permits Affected		169			

Geographic Shift (based on "principle port")

PCID	$ change
SEATTLE	-136,248
WESTPORT	-570,666
ILWACO/CHINOOK	+139,668
ASTORIA	+136,061
NEWPORT	-632,016
COOS BAY	+18,156
EUREKA	+5,187
SAN FRANCISCO AREA	+620,950
MOSS LANDING	+2,594
MONTEREY	+2,594
(Not Indicated)	+413,720
Total	0



Recent participation not required. Buyback portion allocated by landing history.

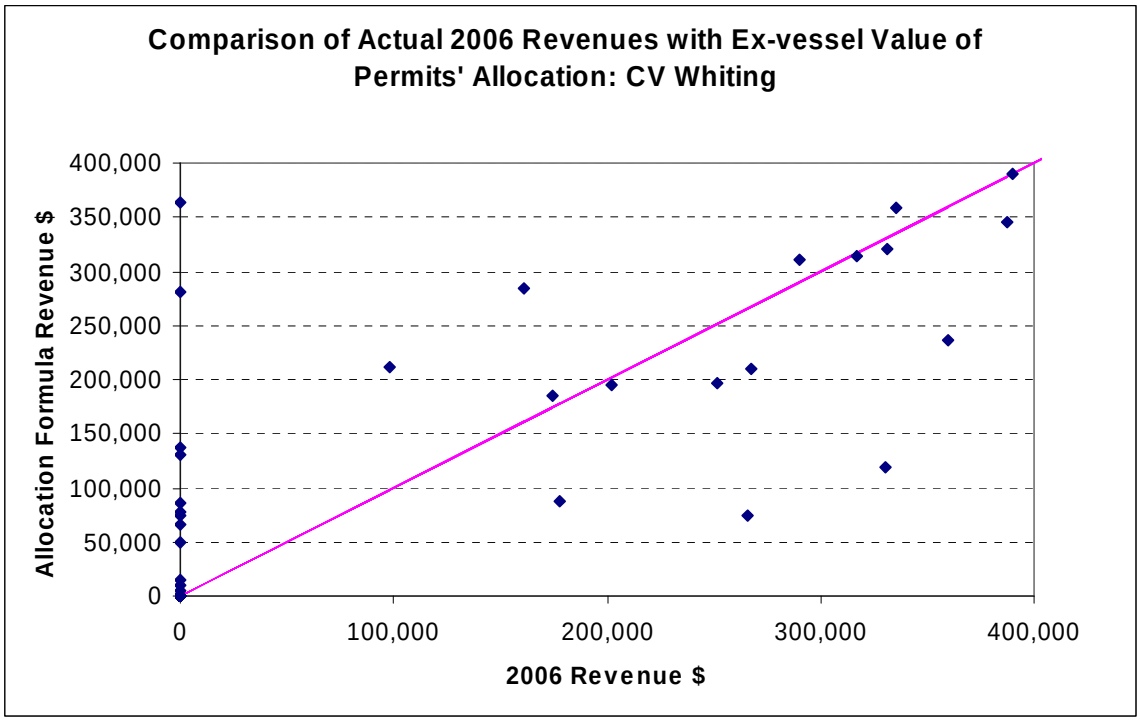
At-sea Whiting CV Sector: Pacific whiting

Shift in Ex-vessel Revenue Value of Allocation compared with 2006

Total and Average Shift				Buyback Portion QS Allocated to:	
	2006 REV	Drop 2 REV	Change	All Recipients	Recips. receiving only buyback QS
TOTAL	$6,952,372	$6,952,372	+$0	$438,338	$0
Average	$347,619	$217,262	-$130,357	$13,698	$0
Total # of Permits	20	32	+ 12	32	0
# Winners		19			
$ average for winners	$96,784	$196,984	+$100,200		
Percent change			+103.53%		
# Losers		13			
$ average for losers	$393,345	$246,899	-$146,446		
Percent change			-37.23%		
Total # of Permits Affected		32			

Geographic Shift (based on "principle port")

PCID	$ change
SEATTLE	-76,033
WESTPORT	-529,087
ILWACO/CHINOOK	+140,762
ASTORIA	+171,674
NEWPORT	-519,502
COOS BAY	+0
EUREKA	+0
SAN FRANCISCO AREA	+683,439
MOSS LANDING	+0
MONTEREY	+0
(Not Indicated)	+128,747
Total	0



Recent participation required; buyback portion equally shared among all permits

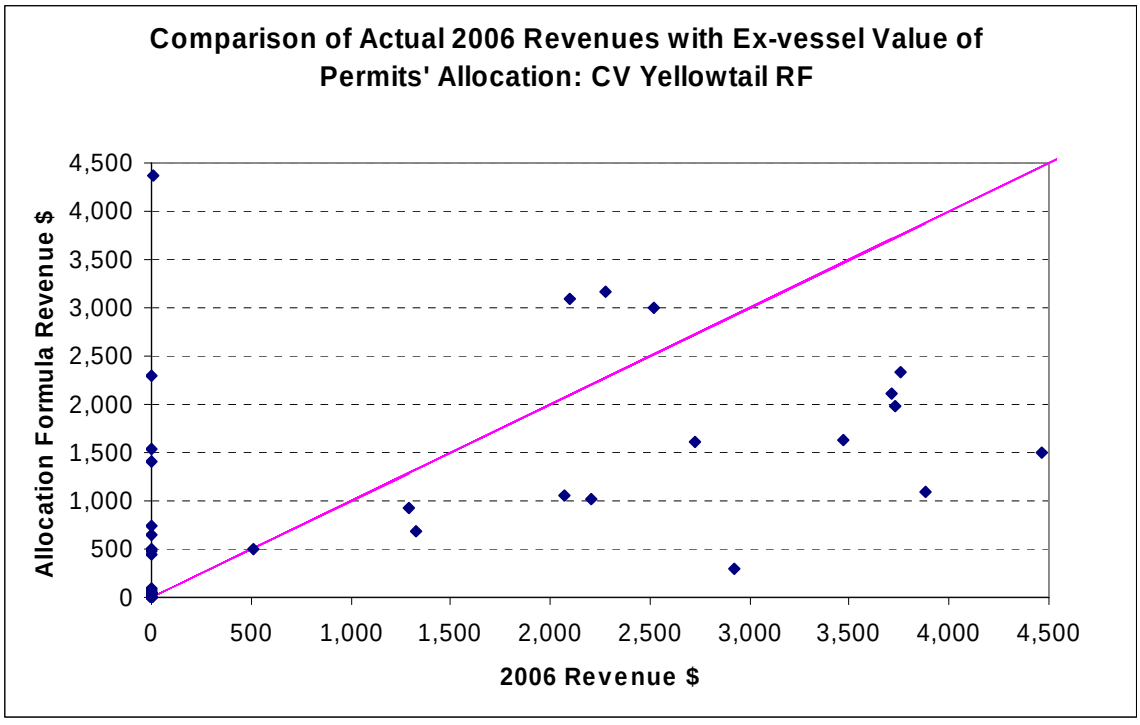
At-sea Whiting CV Sector: Yellowtail RF

Shift in Ex-vessel Revenue Value of Allocation compared with 2006
Total and Average Shift

				Buyback Portion QS Allocated to:	
	2006 REV	Drop 2 REV	Change	All Recipients	Recips. receiving only buyback QS
TOTAL	$54,335	$54,335	-$0	$5,821	$4,719
Average	$2,717	$322	-$2,395	$34	$34
Total # of Permits	20	169	+ 149	169	137
# Winners		154			
$ average for winners	$45	$214	+$169		
Percent change			+377.05%		
# Losers		15			
$ average for losers	$3,162	$1,427	-$1,735		
Percent change			-54.87%		
Total # of Permits Affected		169			

Geographic Shift (based on "principle port")

PCID	$ change
SEATTLE	-5,768
WESTPORT	-1,843
ILWACO/CHINOOK	+1,474
ASTORIA	-3,078
NEWPORT	-2,270
COOS BAY	+241
EUREKA	+69
SAN FRANCISCO AREA	+6,655
MOSS LANDING	+34
MONTEREY	+34
(Not Indicated)	+4,452
Total	0



Recent participation not required. Buyback portion allocated by landing history.

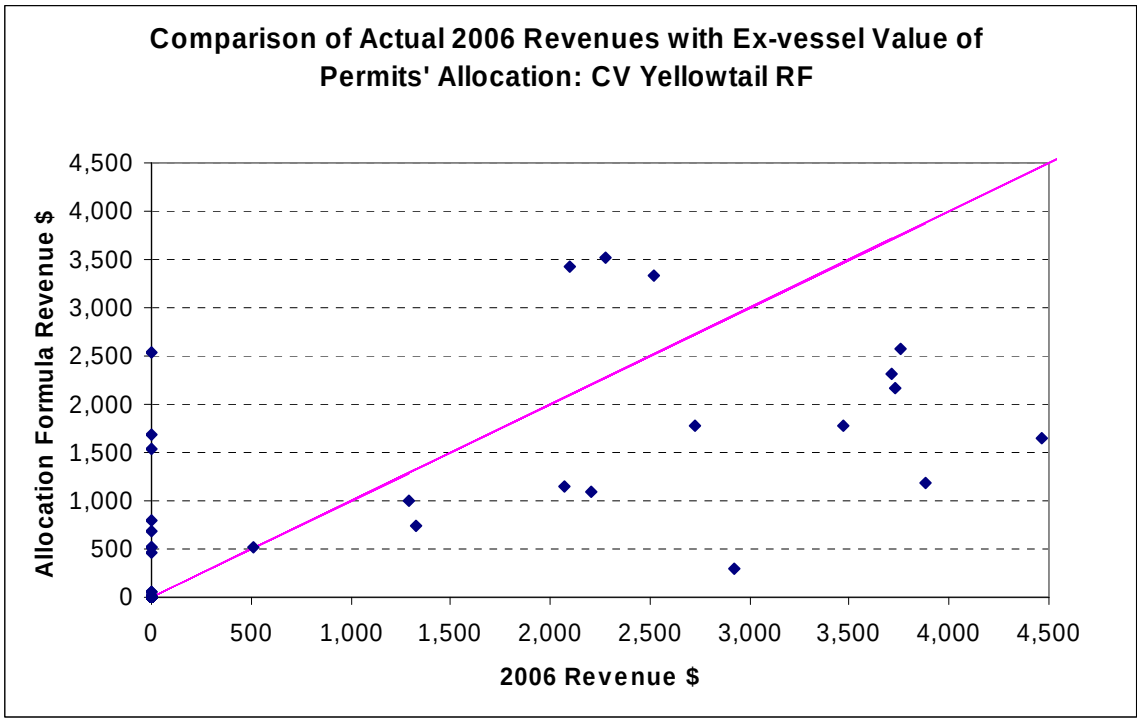
At-sea Whiting CV Sector: Yellowtail RF

Shift in Ex-vessel Revenue Value of Allocation compared with 2006

Total and Average Shift				Buyback Portion QS Allocated to:	
	2006 REV	Drop 2 REV	Change	All Recipients	Recips. receiving only buyback QS
TOTAL	$54,335	$54,335	+$0	$5,821	$0
Average	$2,717	$1,698	-$1,019	$182	$0
Total # of Permits	20	32	+ 12	32	0
# Winners		18			
$ average for winners	$412	$1,748	+$1,336		
Percent change			+324.32%		
# Losers		14			
$ average for losers	$3,352	$1,634	-$1,718		
Percent change			-51.25%		
Total # of Permits Affected		32			

Geographic Shift (based on "principle port")

PCID	$ change
SEATTLE	-4,873
WESTPORT	-1,315
ILWACO/CHINOOK	+1,535
ASTORIA	-2,649
NEWPORT	-702
COOS BAY	+0
EUREKA	+0
SAN FRANCISCO AREA	+7,377
MOSS LANDING	+0
MONTEREY	+0
(Not Indicated)	+627
Total	0



Recent participation required; buyback portion equally shared among all permits

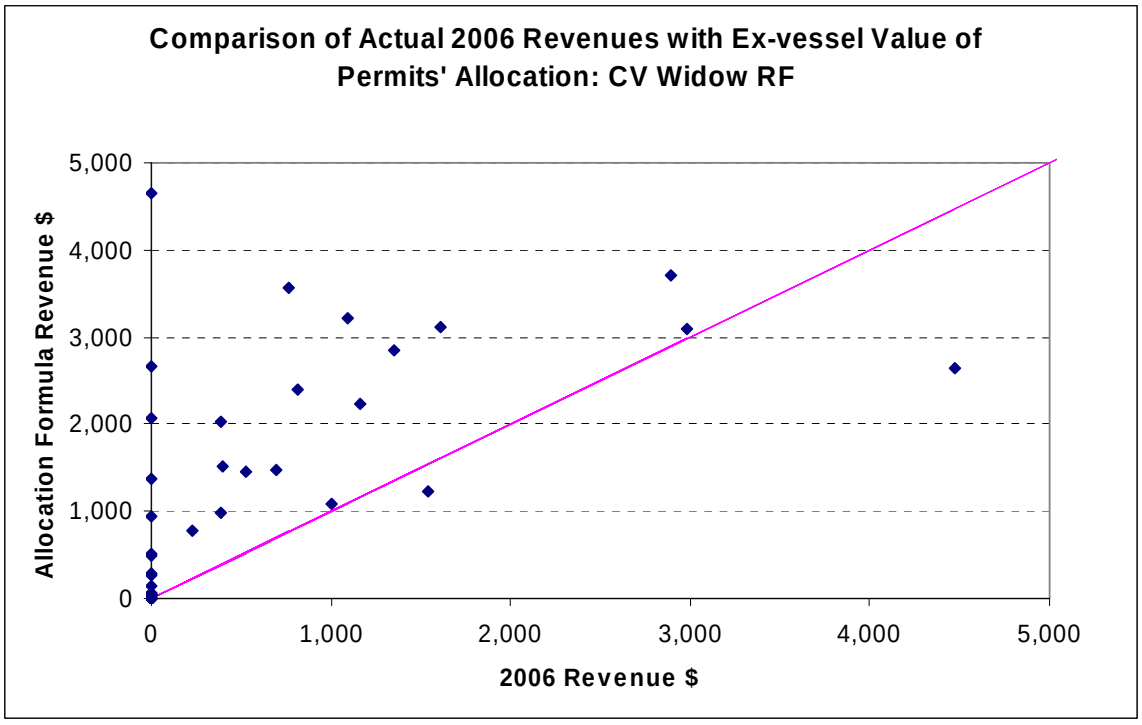
At-sea Whiting CV Sector: Widow RF

Shift in Ex-vessel Revenue Value of Allocation compared with 2006
Total and Average Shift

				Buyback Portion QS Allocated to:	
	2006 REV	Drop 2 REV	Change	All Recipients	Recips. receiving only buyback QS
TOTAL	$70,007	$70,007	+$0	$7,617	$6,175
Average	$3,500	$414	-$3,086	$45	$45
Total # of Permits	20	169	+ 149	169	137
# Winners		165			
$ average for winners	$103	$358	+$255		
Percent change			+247.90%		
# Losers		4			
$ average for losers	$13,262	$2,750	-$10,511		
Percent change			-79.26%		
Total # of Permits Affected		169			

Geographic Shift (based on "principle port")

PCID	$ change
SEATTLE	+9,801
WESTPORT	+5,545
ILWACO/CHINOOK	+1,463
ASTORIA	-14,375
NEWPORT	+8,539
COOS BAY	+315
EUREKA	+90
SAN FRANCISCO AREA	-17,128
MOSS LANDING	+45
MONTEREY	+45
(Not Indicated)	+5,659
Total	0



Recent participation not required. Buyback portion allocated by landing history.

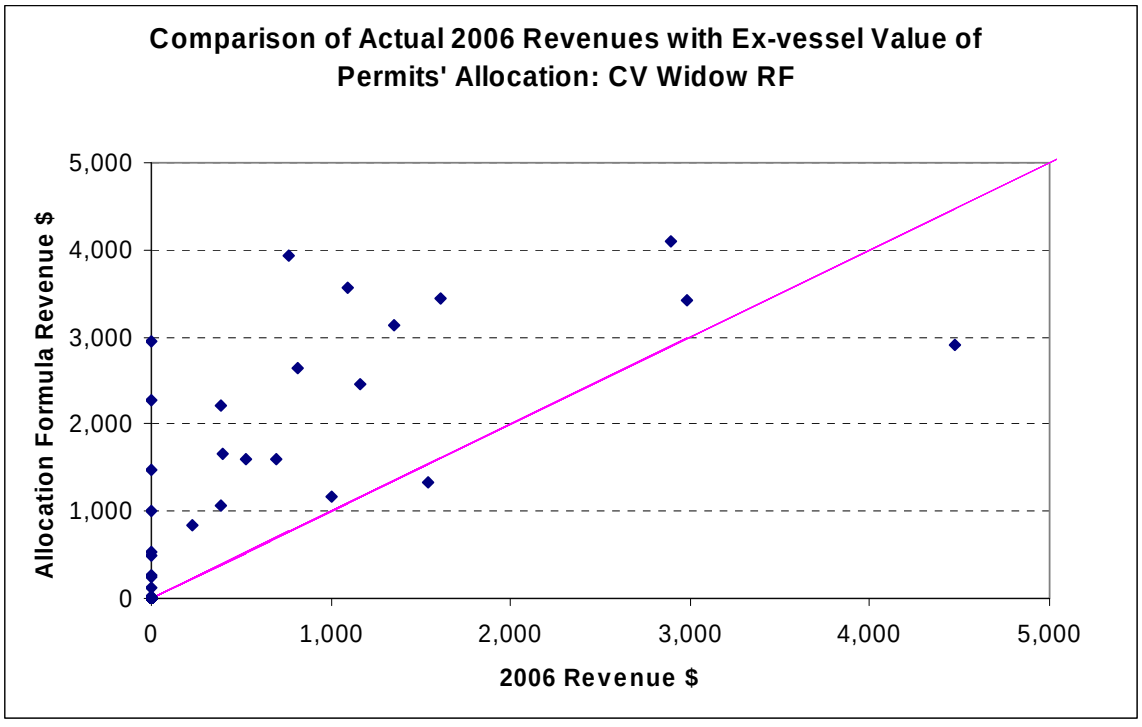
At-sea Whiting CV Sector: Widow RF

Shift in Ex-vessel Revenue Value of Allocation compared with 2006
Total and Average Shift

				Buyback Portion QS Allocated to:	
	2006 REV	Drop 2 REV	Change	All Recipients	Recips. receiving only buyback QS
TOTAL	$70,007	$70,007	+$0	$7,617	$0
Average	$3,500	$2,188	-$1,313	$238	$0
Total # of Permits	20	32	+ 12	32	0
# Winners		28			
$ average for winners	$606	$2,067	+$1,461		
Percent change			+241.17%		
# Losers		4			
$ average for losers	$13,262	$3,035	-$10,226		
Percent change			-77.11%		
Total # of Permits Affected		32			

Geographic Shift (based on "principle port")

PCID	$ change
SEATTLE	+11,515
WESTPORT	+6,227
ILWACO/CHINOOK	+1,490
ASTORIA	-13,977
NEWPORT	+10,125
COOS BAY	+0
EUREKA	+0
SAN FRANCISCO AREA	-16,017
MOSS LANDING	+0
MONTEREY	+0
(Not Indicated)	+635
Total	0



Recent participation required; buyback portion equally shared among all permits

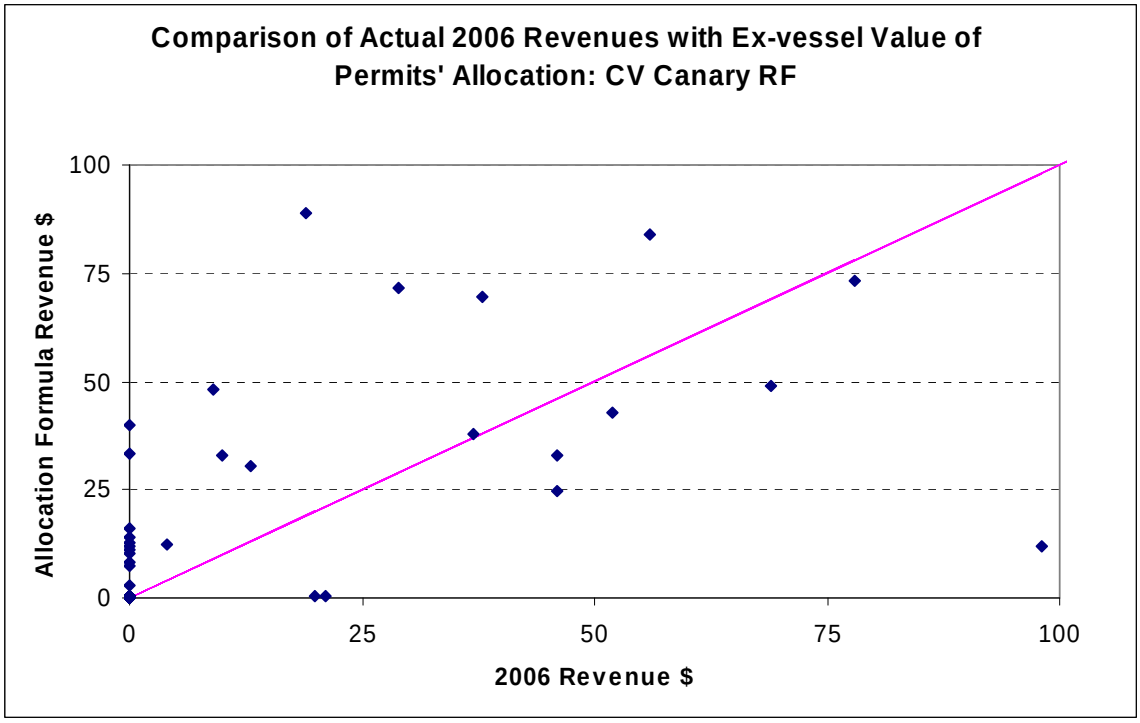
At-sea Whiting CV Sector: Canary RF

Shift in Ex-vessel Revenue Value of Allocation compared with 2006
Total and Average Shift

				Buyback Portion QS Allocated to:	
	2006 REV	Drop 2 REV	Change	All Recipients	Recips. receiving only buyback QS
TOTAL	$1,042	$1,042	+$0	$77	$64
Average	$52	$6	-$46	$0.46	$0.46
Total # of Permits	20	169	+ 149	169	140
# Winners		158			
$ average for winners	$1	$4	+$3		
Percent change			+228.91%		
# Losers		11			
$ average for losers	$75	$30	-$45		
Percent change			-59.51%		
Total # of Permits Affected		169			

Geographic Shift (based on "principle port")

PCID	$ change
SEATTLE	-44
WESTPORT	-96
ILWACO/CHINOOK	+34
ASTORIA	+26
NEWPORT	-16
COOS BAY	+3
EUREKA	+1
SAN FRANCISCO AREA	+14
MOSS LANDING	+0
MONTEREY	+0
(Not Indicated)	+77
Total	0



Recent participation <u>not</u> required. Buyback portion allocated by landing history.

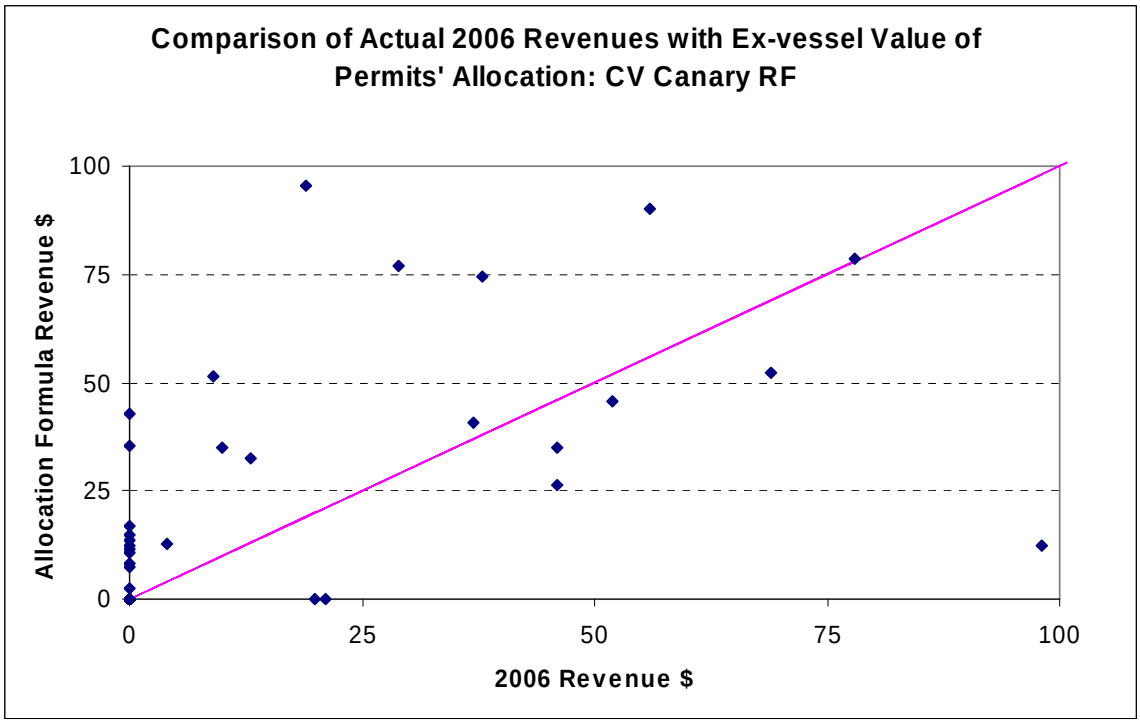
At-sea Whiting CV Sector: Canary RF

Shift in Ex-vessel Revenue Value of Allocation compared with 2006
Total and Average Shift

				Buyback Portion QS Allocated to:	
	2006 REV	Drop 2 REV	Change	All Recipients	Recips. receiving only buyback QS
TOTAL	$1,042	$1,042	+$0	$77	$0
Average	$52	$36	-$16	$3	$0
Total # of Permits	20	29	+ 9	29	0
# Winners		21			
$ average for winners	$14	$36	+$22		
Percent change			+160.84%		
# Losers		10			
$ average for losers	$75	$28	-$47		
Percent change			-62.92%		
Total # of Permits Affected		31			

Geographic Shift (based on "principle port")

PCID	$ change
SEATTLE	-32
WESTPORT	-88
ILWACO/CHINOOK	+36
ASTORIA	+33
NEWPORT	+7
COOS BAY	+0
EUREKA	+0
SAN FRANCISCO AREA	+17
MOSS LANDING	+0
MONTEREY	+0
(Not Indicated)	+28
Total	0



A Preliminary Review of Harvest Co-op Systems and their Relationship to the Council's Goals and Objectives

Executive Summary
The Pacific Fishery Management Council (Council) is considering the rationalization of the Pacific coast groundfish trawl fishery. Two alternatives exist for achieving rationalization and these are an individual fishing quota (IFQ) program and a harvest cooperative program. These systems have some differences and some similarities but in general each system can assist the Council in moving the fishery toward the goals and objectives for rationalization if correctly specified.

While harvest co-ops and IFQ systems both explicitly or implicitly grant fishing privileges in the form of a share of the allowable catch, the approach for managing the prosecution of fishery resources between the two programs can be quite different. A system of individual fishing quotas requires that an agency conduct the tracking and monitoring of individual vessel catch levels, the processing of quota transfer agreements between vessels or permits, and the enforcement of permit or vessel-level fishing activity. A system of harvest cooperatives is essentially a "hands-off" approach on the part of the agency and the prosecution of fishery resources and the enforcement of those activities is primarily done through private mutual agreement within and across the harvest cooperatives themselves.

While a hands-off approach may be less complex and burdensome for the agency, the success of a harvest co-op system depends on the harvesters in the fishery being few in number, having similar characteristics, and being able to develop agreements amongst themselves. In a fishery with more numbers and more diversity, an IFQ system may be more appropriate even though the complexity of that system may be greater. Information suggests that the characteristics, laws, and regulations of a particular fishery may determine the appropriate rationalization program. Some characteristics may make an individual fishing quota system appropriate while a harvest cooperative system may be more appropriate in another case and in some instances a hybrid between the two may be the best outcome. This document reviews some of the fundamentals of the harvest co-op programs as they exist in April 2007 and contrasts them against elements of the IFQ alternative and the Council's goals and objectives.

Introduction

The Council is considering the rationalization of the Pacific coast groundfish trawl fishery. At its March 2007 meeting, the Council adopted a motion that would analyze two different alternatives for doing so. The first alternative is an individual fishing quota (IFQ) program and the second alternative is a harvest cooperative (co-op) program for sectors of the directed whiting fishery. Both approaches essentially grant entities–or groups of entities–a share of the allowable catch and both approaches have demonstrated success in achieving many social goals including bycatch reduction and gains in economic performance.

Table 1. Summary Overview of the Council's Rationalization Alternatives

Alt 1: Status Quo	Alternative 2: Individual Fishing Quota	Alternative 3: Harvest Cooperatives for Directed Whiting Sectors
	• Establish sector allocations of groundfish species. • Assign transferable privileges to catch a portion of the allocations to entities involved in the non-whiting and whiting sectors of the trawl fishery. • Processors and limited entry (LE) trawl permit holders may receive initial allocations of harvest privileges. • All groundfish species are covered under IFQ either individually or in a complex.	<u>Catcher-Processor sector:</u> • Close the class of eligible participants and maintain the sector allocation of whiting allowable catch. • Sector's fishery closes when allocation or bycatch cap is met. <u>Mothership sector:</u> • Maintain the sector allocation of whiting allowable catch. • Assign a portion of the sector allocation to catcher-vessels based on catch history. • Establish a link between each catcher-vessel share and a mothership and close the class of motherships to new entrants. • Require that catcher-vessels fish with a cooperative or in the non-cooperative portion of the fishery. • Catcher-vessels may abandon cooperative and mothership linkages by fishing in the non-co-op fishery. • Sector is closed when allocation or bycatch cap is met. <u>Shorebased sector</u>: • Maintain the sector allocation of whiting allowable catch. • Assign a portion of the sector allocation to catcher-vessels based on catch history. • Establish processing permits that would allow processors to purchase whiting in first 2 years of program. • Require that catcher-vessel catch be delivered to specific processors based on prior landings (catcher-vessel shares may be connected to more than one processor). • Require that vessels participate in a cooperative or non-cooperative portion of the fishery. • Catcher-vessels may abandon cooperative and processor linkages by fishing in the non-co-op fishery. • Sector is closed when allocation or bycatch cap is met.

A cooperative is used to describe a collective arrangement amongst a like-minded group of individuals. Cooperatives are entities that are controlled by the people who use them. They differ from other business entities because they are member owned and operate for the benefit of members. The general activity of cooperatives being considered under the Council's rationalization program is the harvest of fish, so these types of cooperatives are best described as "harvest cooperatives" and a harvest cooperative can be defined as an entity which acts to coordinate the harvest of its members. The Council is considering harvest cooperatives that would have a privilege to harvest a share of the allowable catch.

Harvest cooperatives are organizations made up of vessels that work together to harvest a fishery resource. These organizations are sometimes made up of several vessels that negotiate catch sharing arrangements amongst themselves without needing agency involvement. Other times these organizations are created by several vessels with quota share assignments that each vessel brings to the cooperative organization. In this case, those vessels typically have the privilege to harvest that share, but can lease all or a portion of that share to another vessel through a private agreement without needing agency involvement. The administration and enforcement of harvest activities among member vessels is primarily done through the cooperative organizations and through private contracts. The regulatory activities of the agency that pertain to inseason harvest levels are generally limited to monitoring for sector or co-op catch levels and closing when a sector or co-op reaches the allocation or OY.

The first example of a harvest cooperative already exists on the West Coast. The Pacific Whiting Conservation Coop is a voluntary association of catcher-processors that have negotiated catch sharing arrangements amongst themselves without agency and Council involvement. The necessary ingredient for this cooperative to form is an allocation of whiting to the sector and a barrier to entry by other catcher-processors that are not part of the arrangement. The mothership and shorebased cooperative proposals are similar to the second example. In the mothership proposal, each mothership catcher vessel permit would have a share of the sector allocation based on their catch history and those catcher vessels would form cooperative arrangements with other catcher vessels. The cooperative organization would coordinate harvest activities of its member vessels and these activities would include leasing of shares between member vessels without agency involvement.

An IFQ system is a program that grants the privilege to harvest fishery resources in the form of a percentage of the allowable catch. These shares are given to individual entities and are privileges to harvest a portion of fishery resources. Quota can be made transferable so that they can be bought and sold on a market. Harvesting shares (IFQ) differ from processing shares (individual processing shares, or IPQ). IPQ grants a privilege to receive a portion of the catch that has been harvested. The Council is not considering IPQ but is considering the allocation of harvest shares in the form of IFQ to limited entry trawl permits and processors.

Individual fishing quota programs grant privileges to harvest a share of fishery resources to individual entities. Each individual entity is responsible for its share of the catch and an agency typically monitors and enforces individual harvest activity. Transfers of quota can be made between permits either permanently or temporarily and these transfers often occur on an open market but are not official until processed by an agency.

How Do Cooperatives and Individual Fishing Quota Programs Compare to One Another?
Harvest co-op and IFQ programs have many similarities in the manner in which they function. They also have several differences. The principal similarity between the two programs is that both programs grant the privilege to harvest fishery resources in the form of a share of the allowable catch. This type of privilege results in many of the benefits typical of Limited Access Privilege Programs including: reduced overcapitalization, reduced bycatch, more efficient use of fishery resources, safer working environment, and more economic certainty amongst other things.

Arguably the principal difference between the two programs is the coordination of harvest activity. In an IFQ program, harvest coordination occurs between members of industry with involvement and oversight on the part of government agencies. In a co-op program harvest coordination occurs between members of industry and the government is often not involved to the same degree. The reason for this difference is relatively straight-forward. In an IFQ program the enforcement burden is placed on the individual, while in a co-op program the enforcement burden is placed on the co-op organization.

In an IFQ program there are inseason transfers of quota shares that occur between different members of industry. During these inseason transfers, fishermen must coordinate with one another and agree on a transfer arrangement. When a transfer is agreed upon, the quota seller and quota purchaser submit a quota share transfer request to an agency for processing and recording and after that process occurs the quota transfer is official. Agency involvement is necessary in this case because the agency needs that information to adequately enforce the actions of individuals and their corresponding catch levels. In a co-op program the members of the cooperative coordinate the harvest among themselves without much agency involvement. Members of the cooperative either create voluntary agreements that apportion the catch to member vessels, or form a cooperative organization with pre-specified catch shares and enter into temporary leasing agreements specifying how one vessel in a co-op can harvest the share of another vessel in a co-op. In this arrangement the agency does not need to be involved in the transfer arrangements because the agency enforces the co-op organization as a whole instead of the actions of individuals. In co-op programs there can also be transfers across cooperatives (a transfer of catch privileges from one co-op to another) and these transfers are often done without agency involvement as well.

IFQ systems are focused on the individual fisherman, while co-ops are focused on the organization. In an IFQ system, the interests of individuals are protected through the allocation of harvest privileges and the enforcement of those privileges at the individual level. In a co-op system, protection for the interests of members and the organizations is achieved by holding each co-op responsible for the actions of its members and penalizing co-op organizations when necessary. If a co-op is penalized for an action, it may decide to place that burden on the vessel that acted illegally (depending on the co-op operating agreement). Members of a co-op organization are protected from the actions of other vessels by establishing individual harvest privileges that are enforced by co-op members. Co-ops are also protected through the existence of a non-co-op sector where individuals can participate without being grouped into a forced arrangement with other vessels. A forced grouping of individuals may diminish the amount of voluntary cooperation necessary for co-ops to work. Having a non-co-op sector allows vessels a way out of a cooperative if necessary and potentially protects the co-op organization by allowing for a fishery where problem vessels can participate without disrupting the co-op organizations.

This non-co-op fishery has the potential to be an irrational race-for-fish fishery because vessels do not have individual catch limits (the allowable catch for a non-co-op fishery is common to all participants in the non-co-op fishery) and this can impact other sectors if bycatch caps are common across all sectors. In an IFQ system, the potential for an irrational sector of the fishery to develop is less likely because each vessel has an individual catch amount and a high degree of accountability because of the lack of commonality. However, the irrational behavior of non-co-op fishery participants is mostly theoretical. In practice members of the non-co-op sector often continue to behave in a rational manner by communicating and negotiating catch agreements.

Some Similarities between Harvest Co-ops and IFQ Systems

The difference between co-ops and IFQ systems is often times not black and white. Coop programs can take on many characteristics of IFQ programs and vice versa. In general, the level of similarity amongst vessels in the fishery, the level of similarity among markets for participants in the fishery, and the number of vessels in a fishery may help determine the appropriate mix of commonality for a rationalization program. The purest form of a cooperative (one where a Council makes no vessel or permit-specific allocations) will most likely have a small number of vessels with similar objectives and similar constraints on their harvesting activity. Alternatively, the purest form of an IFQ program may have many participants with a wide array of vessel characteristics, markets, and regions. As participants in an IFQ program acquire similar objectives, constraints, markets, etc, that fishery may very well take on characteristics that are similar to co-op-type rationalization programs. Alternatively, as participants in a co-op program grow in number, have dissimilar markets, and have variation in the opportunities available, that fishery may very well take on characteristics that are similar to IFQ-type rationalization programs.

In the West Coast groundfish fishery several visions exist for what a rationalized groundfish fishery would look like. Some of the participants in the whiting fishery have expressed concepts that resemble elements of an IFQ-based program while some participants in the non-whiting sector have discussed concepts that resemble a co-op program. The following bullets outline some of the concepts found in the rationalization proposals, the way some of those programs are envisioned to function, and areas where those concepts and visions begin to blur the line between co-ops and IFQ systems.

- The proposal for the rationalization of the catcher-processor sector would arguably look like one of the purest forms of a harvest co-op—the sector as a whole would receive a whiting allocation, participants in that sector would be limited by closing the class, and participants in that sector would negotiate catch sharing agreements without agency involvement. Representatives of the catcher-processor sector have stated that a single co-op would be the outcome because of the similarities of vessels and companies in that sector.
- The proposal for the rationalization of the mothership sector would arguably take on some characteristics of an IFQ program. Because of the number of catcher vessels and the variation in historical harvest activity, each catcher vessel in that sector would be assigned a share of the allowable catch which must be pooled in a co-op or the non-co-op fishery. Representatives of the mothership sector have indicated that they believe somewhere on the order of 3 co-ops would exist following rationalization. These three co-ops would harvest the collective share of its member catcher vessels, but co-ops may trade allowable catch amongst themselves. The designation of shares to catcher vessels

and the transfer of allowable catch between co-ops are two characteristics that resemble the structure of an IFQ program.

- The proposal for rationalization of the non-whiting trawl fishery is an IFQ program. That fishery has a relatively large number of vessels, its participants cover a large geographic area, and its participants have many different markets and opportunities. One of the similarities faced by participants in this fishery is the common need to avoid depleted rockfish species and the common threat that one "disaster tow" could reach, meet, or exceed the allocation of that species for that sector. A disaster tow would also mean that a fisherman would need to spend substantial financial resources to acquire enough quota of a depleted species to cover that disaster tow (depleted species quota is likely to be extremely expensive). Doing so may mean going out of business. Representatives of this sector have discussed the concept of "risk pools" that would be created through private mutual agreements. Fishermen involved in a risk pool would transfer quota to another fishermen in that pool if one of them has a disaster tow. These transfers would not occur on an open market where the price of depleted species quota is likely to be extremely costly and perhaps cost-prohibitive. The concept of risk pools is a characteristic that resembles the structure of a harvest co-op program.

Relationship to the Council's Goals, Objectives, Constraints and Guiding Principles

Both IFQs and harvest co-ops can achieve the Council's goals and objectives for a rationalization program. This section describes generally the manner in which co-ops and IFQs can meet the Council's goals and objectives and also describes other considerations for a rationalization program that have been discussed such as the ability to accommodate new entrants.

At the March 2007 meeting, the Council adopted several goals, objectives, and constraints and guiding principles to help steer the development of a rationalization program.

Goals	Create and implement a capacity rationalization plan that increases net economic benefits, creates individual economic stability, provides for full utilization of the trawl sector allocation, considers environmental impacts, and achieves individual accountability of catch and bycatch.
Objectives	1. Provide a mechanism for total catch accounting. 2. Provide for a viable, profitable, and efficient groundfish fishery. 3. Promote practices that reduce bycatch and discard mortality and minimize ecological impacts. 4. Increase operational flexibility. 5. Minimize adverse effects from an IFQ program on fishing communities and other fisheries to the extent practical. 6. Promote measurable economic and employment benefits through the seafood catching, processing, distribution elements, and support sectors of the industry. 7. Provide quality product for the consumer. 8. Increase safety in the fishery.
Constraints and Guiding Principles	1. Taking into account the biological structure of the stocks including, but not limited to, populations and genetics. 2. Taking into account the need to ensure that total OYs and allowable

biological catch (ABC) are not exceeded.
3. Minimize negative impacts resulting from localized concentrations of fishing effort.
4. Accounting for total groundfish mortality.
5. Avoiding provisions where the primary intent is a change in marketing power balance between harvesting and processing sectors.
6. Avoiding excessive quota concentration.
7. Providing efficient and effective monitoring and enforcement.
8. Designing a responsive review evaluation and modification mechanism.
9. Take into account the management and administrative costs of implementing and overseeing the IFQ or co-op program and complementary catch monitoring programs and the limited state and federal resources available.

In addition to these goals, objectives, and constraints and guiding principles, the Council requested that a discussion paper be prepared by staff describing why co-ops are needed, why co-ops cannot be created without Federal regulation, the need for a closed class of processors, and how co-ops can be created without leaving anyone out.

Both IFQs and harvest co-ops can achieve the goals set forth by the Council. While specific elements may need to be implemented in order to achieve some specific goals and objectives, empirical examples have routinely shown that environmental and economic gains are achieved through rationalization. Under a rationalized fishery, the incentive to race for fish is eliminated because entities are granted a defensible share of the allowable catch and this type of fishing privilege eliminates the aspect of competition that exists in non-rationalized fisheries. A fishery being prosecuted at a more reasonable pace will have lower cost, higher product recovery, higher product quality, and will tend to use less gear to catch the same amount of fish. Less gear in the water will arguably reduce impacts on habitat. In addition, empirical reviews of rationalized programs have shown that bycatch is reduced substantially in a rationalized fishery because of the focus on profit maximization instead of catch maximization. Catching and sorting bycatch can be costly for individual fishermen.

Economic gains are realized through other means as well. The increased level of individual accountability can create an increased level of opportunity that does not exist under a command and control type of management system. This increased opportunity is directly linked to the operational flexibility provided by performance-based management of which rationalization is one example. Under a performance-based system, individuals have the incentive to modify behavior in a manner that can result in access to more target species and more utilization of under-utilized species. A rationalization program has the additional benefit of quota transferability (either in the form of quota transfers between individuals, through harvest arrangements between vessels in a co-op, or through a co-op-to-co-op transfer) which increases the flexibility of entities involved in the fishery. If, for example, one particular entity cannot access the share of catch allocated to them, they may transfer that catch to another entity that is more successful. This transferability increases the opportunity for the fishery as a whole and can result in increased access and utilization of target species.

Economic stability is achieved through a defensible allocation of harvest privileges and the perception that those are long-term. A rationalization system that protects participants from new entrants and free-riders will increase the certainty those participating entities have in future fishery activities. Increased certainty fosters the development of long-term business planning and such long term planning arrangements result in increased stability for entities directly and indirectly involved in the prosecution of the fishery.

The "stewardship effect" is an argument that has been made routinely as one mechanism that decreases the environmental impact of fishing in a rationalized fishery. The argument for this effect is that through the granting of long-term privileges to harvest a share of fishery resources, fishermen will begin to act like share-holders of a company and be interested in the long-term sustainability of the fishery resource. This perspective on the part of fishermen results in voluntary measures that minimize the negative environmental impacts that may be caused by fishing and increases the sustainability of the fishery. The National Research Council explicitly addressed this argument and makes reference to other incentives created by rationalization including the incentive to high-grade (to target and catch large fecund fish), and the incentive to misreport catches. If these incentives are greater for participants in the fishery as a whole than the stewardship effect then the rationale for engaging in voluntary behavior to encourage sustainability may not exist. The incentive to engage in misreporting and the targeting of valuable large fish can be overcome through highly effective monitoring, robust enforcement, and a high degree of scientific research and understanding. Effective monitoring and enforcement would tend to overcome the incentive to misreport catches, and a high degree of scientific research and understanding would tend to discourage the targeting of large fecund fish if there are negative repercussions to do so and the repercussions of doing so are clear. In other words, if a rationalization program is constructed with long-term fishing privileges, a high level of adequate monitoring, robust enforcement, and a high degree of scientific research and understanding on the part of fishery participants, the stewardship effect may exist.

Mechanisms necessary to achieve the conservation and economic goals the Council has set forth include, but are not limited to:

- Allocating a portion of the allowable catch:
    - In an IFQ system this means allocating long term privileges to harvest a share of the allowable catch to individual entities.
    - In a cooperative system this may mean allocating long term privileges to harvest a share of the allowable catch to individual entities, or establishing a sector allocation and "closing the class". The appropriate approach is fishery and sector specific.
- Making those allocations defensible and enforceable:
    - In an IFQ system sufficient penalties would be established for exceeding ones quota pounds in a particular year.
    - In a cooperative program the co-op entities themselves may be responsible for administering and enforcing penalties. In some cases the agency may administer and enforce penalties. The appropriate approach is case-specific.
- Adequate monitoring:
    - Adequate monitoring is necessary for determining the amount of catch that is occurring amongst participants in the fishery and ensuring that management objectives are met.

- In a co-op system with limited agency involvement, information gained from the monitoring of vessels must be made available to participants in the fishery. This is necessary for self-enforcement of co-op agreements.

- Making catch share privileges long-term or creating the perception that they are long-term:
  - A perception that catch share privileges are long term will result in long term business planning which increases economic stability.
  - A perception that catch share privileges are long term will foster the "environmental stewardship effect" if it indeed exists.

A discussion of the need for co-ops, why Federal regulation may be necessary to establish co-ops, the need for a closed class of processors, and how co-ops can be created without leaving anyone out:

The consideration of harvest co-ops as an alternative for rationalization is arguably worthwhile because of the reduced need for agency involvement (and thus agency cost) and the degree of flexibility achieved by fishery participants. This flexibility is achieved because adjustments in fishery patterns and behavior are often made quickly and collectively amongst all participants without the need for a regulatory action.

Different levels of Federal regulation may be necessary to form a harvest cooperative. In the Pacific whiting sector, the Pacific Whiting Conservation Cooperative formed without specific regulatory action. The threat to this cooperative is the possibility that new entrants may come into the catcher-processor sector and disrupt the catch sharing agreements made by existing participants. This may cause the catcher-processor cooperative to break apart. Arguably the necessary action for maintaining the catcher-processor cooperative is a limited entry system that closes the class to new entrants. In other sectors of the whiting fishery, the probability that participants will create and agree on catch sharing arrangements (as was done in the catcher-processor sector) is unlikely because of the number and diversity of participants and the variation of catch history among vessels in that sector. In the shorebased and mothership whiting sectors the formation of co-ops would therefore need a regulatory action specifying that each vessel has a pre-determined share of the allowable catch that is available to them. This is necessary to determine the amount of catch available to each co-op and the amount of catch available to each vessel if vessels in a co-op can't mutually agree on a catch-sharing arrangement.

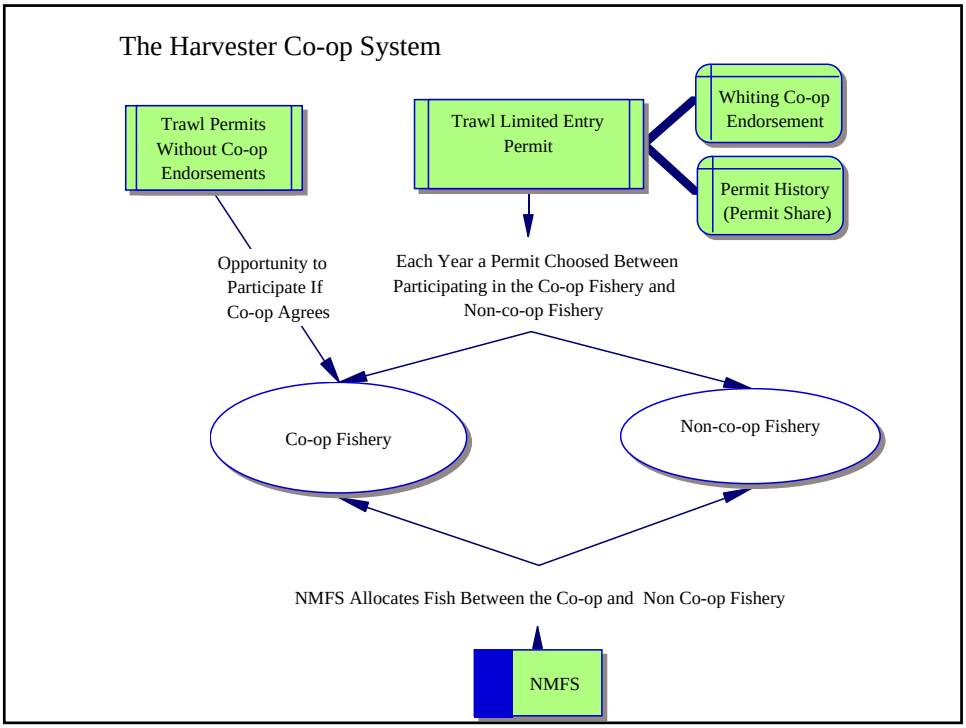
Closing the class of processors is a fairly controversial action. Several arguments exist for closing the class of processors in a co-op system and one of these arguments is because the co-ops form around the processors to which they deliver. In this type of structure, the processor or mothership acts as the centerpiece of the organization and helps to coordinate and facilitate the harvest activities of vessels in a co-op. Having an open class of processors would arguably tend to disrupt the organizational structure and coordination of harvest activities if catcher-vessels are not consistently delivering catch to a single entity. This is because motherships may begin to compete for catcher-vessels throughout a season and this could erode the stability in the CV-mothership relationship that's necessary for a co-op to function effectively if the mothership is the organizational centerpiece. Another argument for closing the class of processors is because it fosters economic stability. A system with a closed class of processors and a linkage between

catcher-vessels and processors arguably creates an organizational structure that begins to resemble a vertically integrated firm between processors and catcher-vessels. In this type of structure, profit sharing arrangements are more likely to result and the interests of the processor and catcher-vessels become more aligned. Profit sharing arrangements and a set of common goals would tend to lower the risk of strikes which can polarize industry members and cause economic harm to all sides of industry involved.

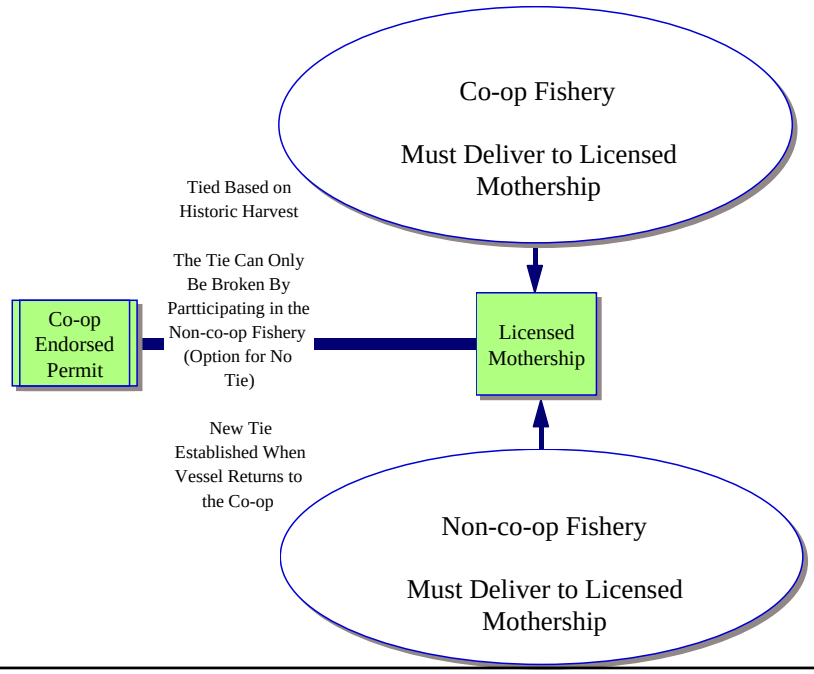
In some instances harvest cooperatives appear to have resulted in the formation of corporate-like entities and some believe this creates a barrier to entry on the part of fishermen not in a co-op or crewmembers that wish to work their way up to an owner-operator position. Depending on the sector, the perception that there is a barrier to new entry may not be accurate. In a catcher-processor sector for example, it may not be reasonable to assume a crew member could acquire enough financial assets to make their way up to a point where they own and operate a catcher-processor vessel. In this type of a sector it may be more reasonable to assume that an individual could gain employment in a fishing company, climb the corporate ladder, and eventually buy shares of the company and if this is the case, the formation of a harvest cooperative system has not necessarily created any new barriers to entry. In a sector with less capital necessary to engage in the fishery it may be more appropriate to assume that an individual could make their way up to a point where they own and operate a vessel and eventually acquire shares or a permit necessary to join a co-op. However, in all co-op proposals the price of a CP, mothership, or shorebased sector permit is likely to be fairly costly and this means that substantial capital assets may need to be invested in order to purchase a permit and enter the sector.

Trawl Rationalization Alternatives

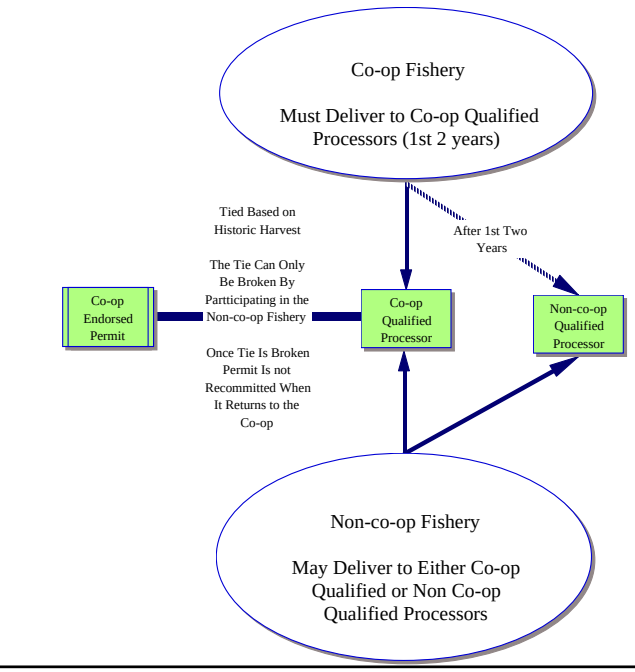
- Review Co-op Alternative Basics
- Review Major New IFQ Provisions
  - Adaptive Management
  - Processor Measures
  - Halibut IBQ
- Review IFQ Alternatives Focusing on GAC Proposed Changes
- Review Preliminary Quantitative Analysis
- Challenges to Managing Overfished Species with IFQs

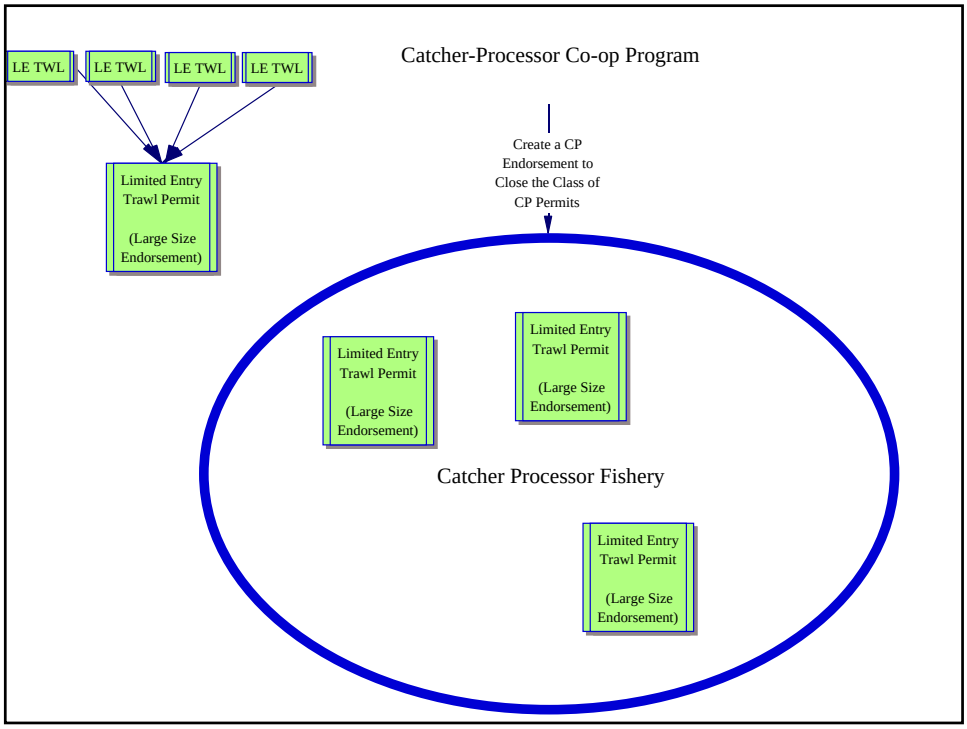


Mothership Co-op Program: Processor Ties



Shoreside Co-op Program: Processor Ties





Whiting Co-op Alternative Bycatch Management

- Option 1: A single pool for all whiting sections
  - SubOption 1: Close on attainment of pool cap
  - SupOption 2: Same as Suboption 1 plus seasonal releases of the bycatch pool.
- Option 2: A separate bycatch pool for each whiting sector
  - SubOption 1: Rollover on full attainment of whiting allocation or declaration of all participants that they do not need the remaining pool.
  - SubOption 2: No rollover.

A-2.4. Additional Measures for Processors

IFQ Alternative Includes Option for Initial Distribution of QS to Processors

1. Any QS received for processing history will expire after a certain period of time.
2. The accumulation limit grandfather clause will not apply for QS issued based on processing history.
3. As needed, a fee will be established to provide financial compensation to processors for demonstrated harm. *Congressional action may be necessary to establish a fee dedicated to this purpose.*
4. The Adaptive Management provision will be used to compensate processors for demonstrated harm by:
   - auctioning QP to generate funds to provide financial compensation, or
   - providing QP to be directed in a fashion that increases benefits for affected processors.

A-3. Adaptive Management

- 1st 10 Years of Program
- 0% to 10% of the trawl allocation will be distributed as quota pounds (QP) to create incentives or to compensate for unexpected outcomes.
- This provision would apply to the overall trawl sector (whiting and non-whiting).
- Council establishes criteria for the distribution when it determines there is a need.

Note: This approach does not change the option for splits of quota share (QS) that will go to eligible groups.

A-4. IBQ for Pacific Halibut

- For bycatch only (not for retention)
- Issued on the basis of a bycatch rate applied to the target species quota shares an entity receives.
- Area specific bycatch rates may be used for allocation.

Quantitative Analysis

- Recent Participation Requirement Has Little Effect on Distribution of QS
  - Only a few permits would be affected
  - The amount of their landings is quite small
- Compare Graphs of Initial QS Distribution With and Without Equal Sharing
  - Some flattening of the distribution of QS
  - For some permits '04-'06 participation diverges greatly from historic participation
- Compare Tables With and Without Equal Sharing
  - Equal sharing is <u>not</u> the main factor affecting geographic distribution (e.g., Astoria and Coos Bay lose less, but Newport and Eureka are worse off)

TIQ Recent Participation

Number existing permits and share of total landings history that would be excluded under different Recent Participation Thresholds

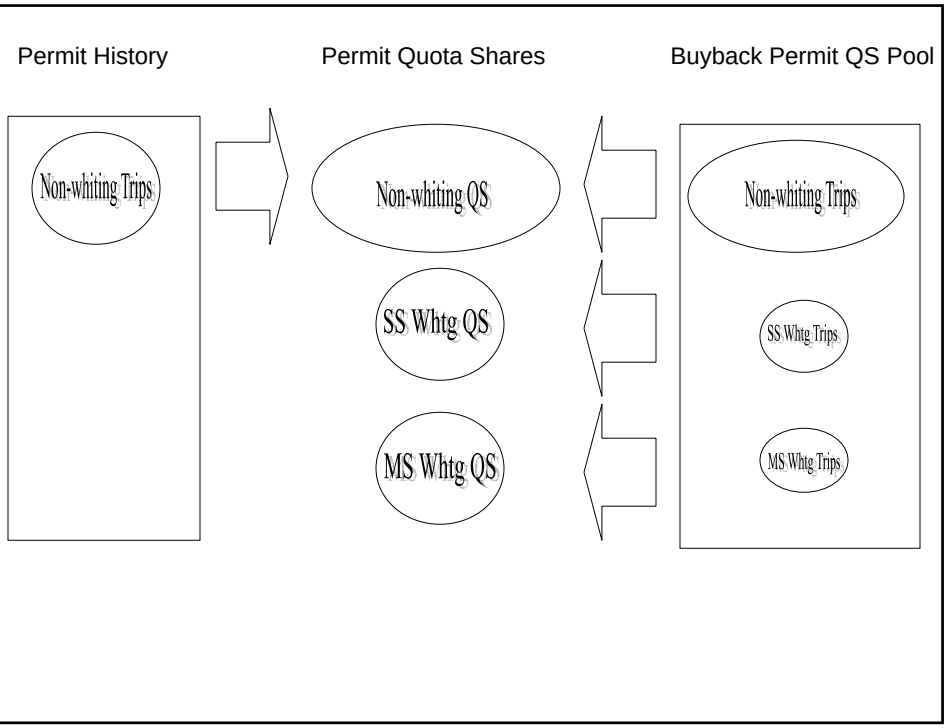
Recent Participation Minimum Landings Requirement 1998-2003

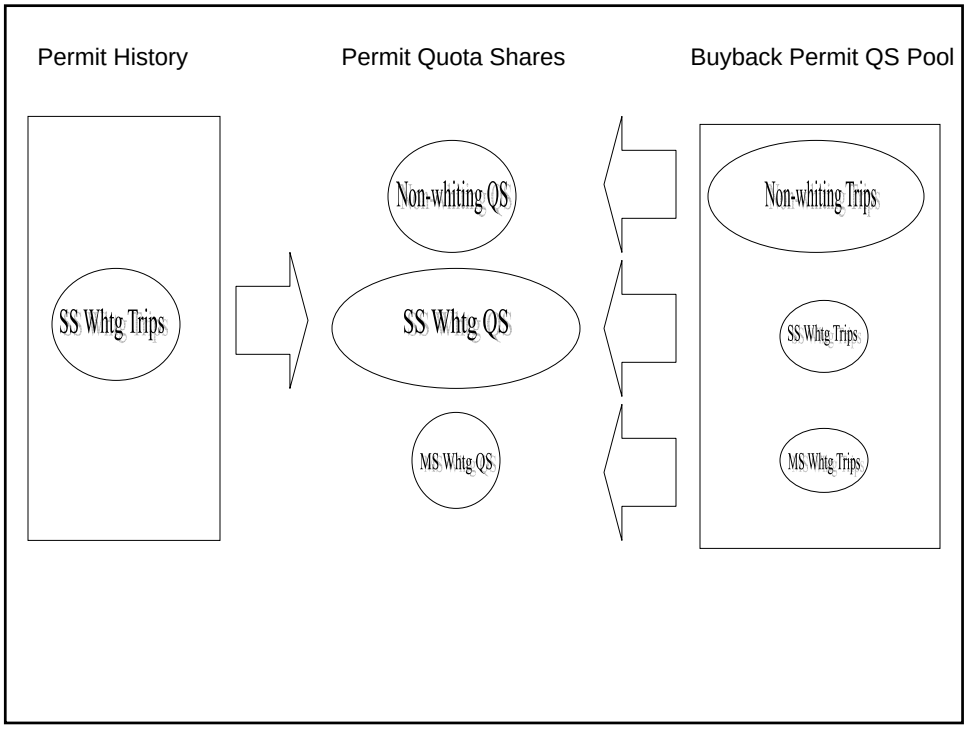
	One	Five	Ten	Total
Number of Permits Excluded	6	7	10	163*
Share of Landings History	0.34%	0.35%	0.47%	100%

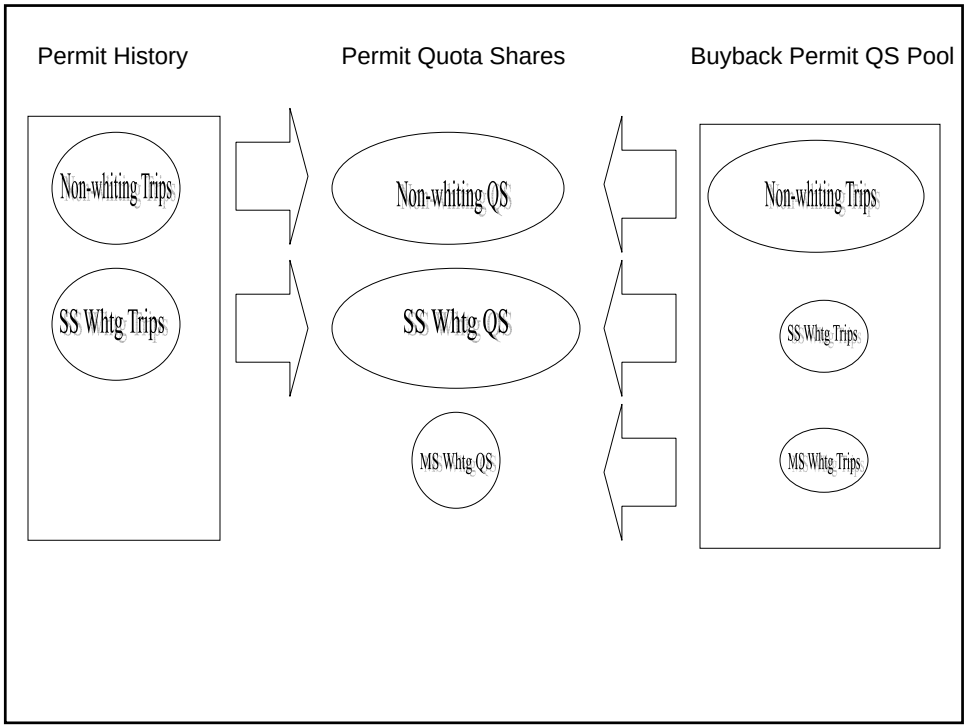
*** Number of permits does not include 5 permits with only whiting deliveries and 1 permit with no landings between 1994 and 2003**

Permit Allocation Option 2

- Allocation Based on Permit History
- Allocation of Buyback Permit Pool Based on Equal Sharing
- Following slides illustrate
  - a permit's history on the left
  - the buyback permit history pool on the right
  - the QS allocation to the permit in the center




Permit History
Permit Quota Shares
Buyback Permit QS Pool
SS Whtg Trips
Non-whiting QS
SS Whtg QS
MS Whtg QS
Non-whiting Trips
SS Whtg Trips
MS Whtg Trips


Permit History
Permit Quota Shares
Buyback Permit QS Pool
Non-whiting Trips
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Non-whiting QS
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Non-whiting Trips
SS Whtg Trips
MS Whtg Trips

Agenda Item E.9.a
Supplemental PowerPoint Presentation 2
June 2007

Preliminary Discussion and Analysis of Overfished Species Management Constraints in a Rationalization Program

Overview

- A perspective on how constraining overfished species will be
- Some potential repercussions
- A description of potential tools to deal with overfished species in addition to IQ

What are we worried about?

- In a rationalized fishery, overfished species are likely to continue constraining fishing opportunities
- When allocated to individual permits, each permit may receive minimal amounts. In some cases this may be the equivalent of one or two fish for a year...or less
- Under severe circumstances market-based mechanisms (IFQ) may not be effective enough on their own to successfully manage fishery harvests while achieving desired outcomes

Market theory in fisheries

Market-based mechanisms typically are effective at moving IQ to entities that need them and this means catch levels are typically not exceeded

- In a market, participants need a couple of things including information, the ability to make transactions, and they need to know their production possibilities.
  1. Known production possibilities implies that fishermen know precisely what they will catch when deploying fishing gear.
- To some degree we know that's not the case and that there is uncertainty about what will be caught when deploying a net.
  - For species with high enough OYs there is room for some unknown and uncertainty. In the case of species with low OYs there may not be room for uncertainty

Uncertainty about catch levels in the case of species with constraining OYs means their management is best viewed as risk management

- There is a risk that fishermen will catch more of something than they think they will
- There is a risk that they will not have enough quota to cover their catch
- There is a risk that there will not be available quota on the market to cover catch
- There is a risk that unanticipated catch levels without sufficient IQ could pre-empt other fishers

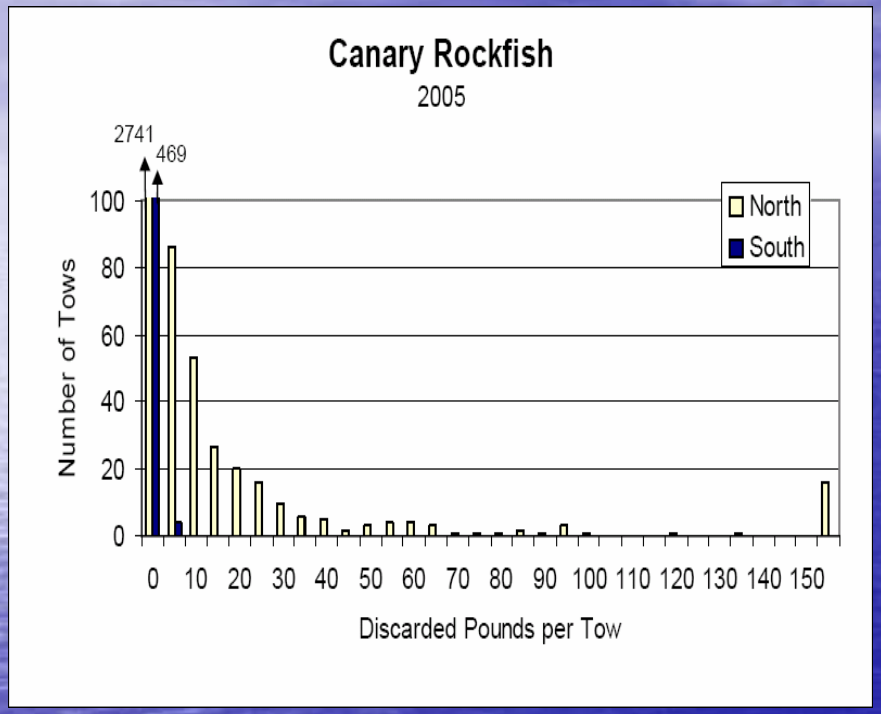
What is the magnitude of the problem?

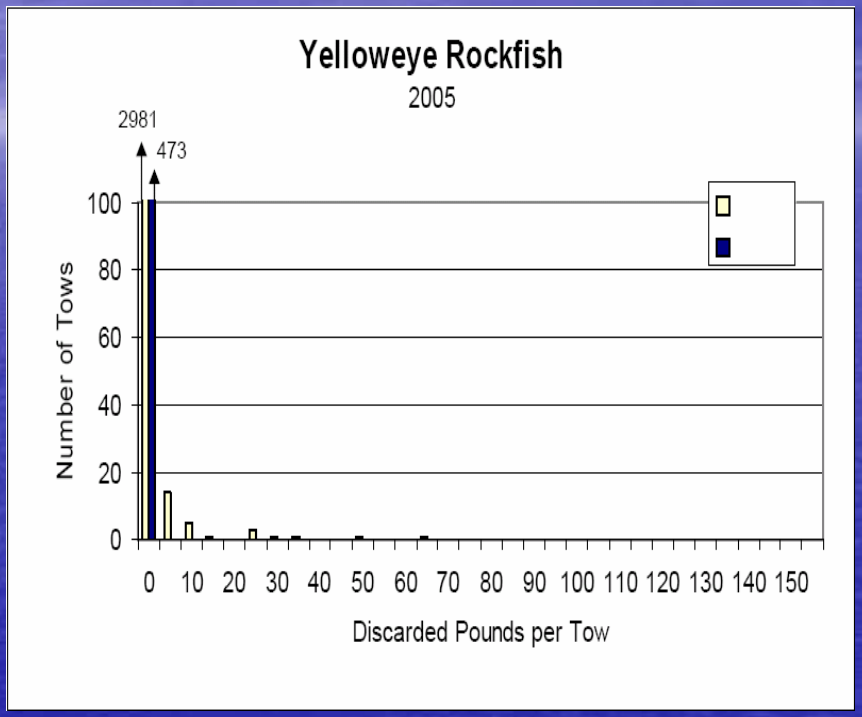
- Initial calculations of overfished species allocations show that the average permit will get very little of some species.
- Available observer data shows that some tows result in overfished species catch that are several times larger than the average initial allocation

Potential Allocation of Overfished Species to Average Permits (in lbs)

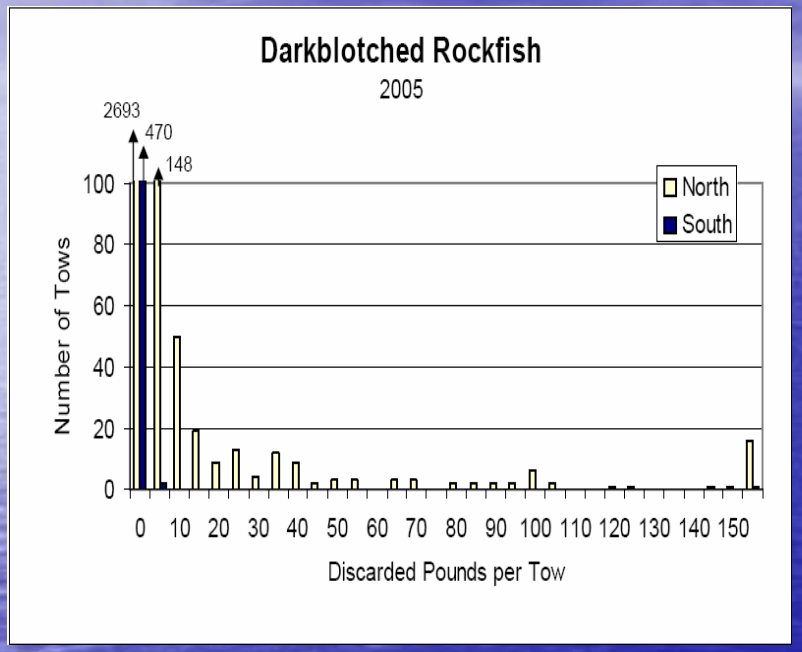
Sector	Assumed No. of Permits	Bocaccio	Canary	Cowcod	Darkblotched	POP	Widow	Yelloweye
Catcher Processor: Allocation per Permit	12	-	294	-	1,562	533	13,742	-
Mothership: Allocation per Permit	20	-	124	-	661	110	5,820	-
Shoreside Whiting: Allocation per Permit	25	-	174	-	926	159	8,148	-
Shoreside Non-whiting: Allocation per Permit	120	485	134	30	4,104	1,190	28	7

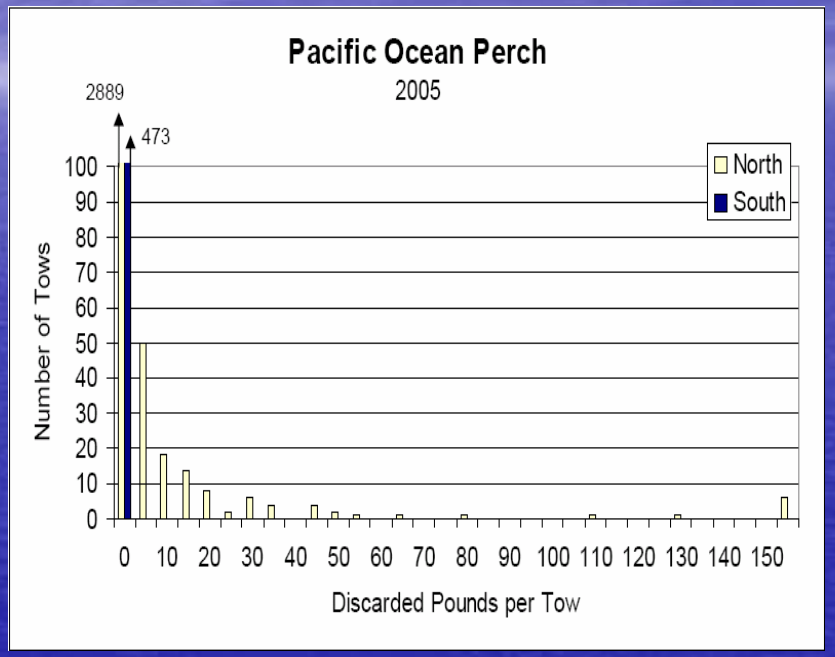
Overfished Species Discard at the tow level





Overfished Species Discard at the tow level (cont)





The previous few slides have shown a couple of things:

- Permits may get allocated very little of some species
- Some tows may be over 10 times the average permit allocation
- Some tows may be a substantial portion of the total sector allocation (if current catch levels are indicative of future allocation)

Policies in addition to IQ can minimize management risks

We can segregate policies into 2 approaches– proactive and reactive

- Proactive policies reduce the risk of unexpected and uncoverable catch levels from occurring
- Reactive policies deal with unexpected catch levels if they occur

Proactive	**Reactive**
Area closures	Insurance pools/coops
Gear restrictions	Carry-over provisions
Minimum holding requirements	Multi-year OYs

We currently use:	• Area closures • Gear restrictions	
Potential new tools include:	• Minimum holding req's	This would decrease the chance of catching uncoverable amounts
	• Carry-over provisions	Allow for quota to be exceeded without penalty
	• Multi-year OYs	Allow for flexibility to accommodate unexpected catch levels in one year
	• Insurance pools/coops	One vessel may have unexpected catch amounts, but the collective whole stays within allocation

Summary

The hypothesis is that permits will receive enough QP of groundfish allocated individually for a market-based mechanism to be an appropriate tool on it's own.

- In order to achieve desired social outcomes, it may be necessary to use additional tools and mechanisms to manage overfished species.

Agenda Item E.9.a
REVISED Attachment 5
June 2007

Preliminary Analysis and Discussion of Overfished Species Management in a Trawl Rationalization Program

This document is intended to provide an overview of the constraints and problems that overfished species will pose to a rationalized groundfish trawl fishery. In particular, it will address some of the problems created by having such low allowable catch amounts of overfished species. It will also address some of the potential tools for dealing with those low allowable catch amounts.

What are we worried about?

For the foreseeable future, the OYs for rebuilding species are likely to constrain fishing opportunity. The existing rationalization alternatives specify that all species shall be covered under an IFQ program either individually or in a complex[1]. If overfished species are allocated to individual permits, each permit will receive very little and in some cases the amount could be less than the equivalent of one fish.

In most IFQ systems the market works in a fluid and effective fashion and vessels that find themselves in a position of needing more quota can find it available for purchase on an open market. These markets work well at reapportioning available catch to entities that need them. In order for markets to work well at moving products between various entities there must be demand for the product at hand and supply that is adequate for potential buyers to easily find, acquire, and afford to purchase. In the case of overfished species we are likely to have a situation where there will be substantial demand but a supply that is at such a low level that finding available overfished species quota will be difficult, and if it is available it may be cost-prohibitive. In other words, if an individual entity finds that they are in a position of needing additional quota of an overfished species, there may not be any on the market. If there is quota available on the market it may be extremely expensive.

If a market does not work well at reapportioning quota to the vessels that need them, then an argument exists that the market alone may not be effective at keeping a sectors' catch level within its allocation. This is because participants in a fishery do not know exactly what they will catch when they deploy a net and they may end up inadvertently catching more fish than they have quota for. If the market is unable to work in a way that will cover that catch with quota through a trading mechanism then we have a case where a sector's allocation may be exceeded or the quota held by other participants becomes affected. In other words, if one individual cannot cover a disaster tow by purchasing

[1] The existing co-op alternatives do not specify that all species will be covered and managed by that system. In general they specify that whiting catch will be managed by the cooperatives and the whiting sectors will get bycatch caps of at least some overfished species.

quota, then the sector's allocation may be exceeded or (if NMFS closes upon attainment of a sector allocation) the quota held by other entities is not defensible from the actions of others. Having the actions of participants in a rationalization program disrupt the actions and plans of others goes against one of the principle foundations for the success of a rationalization program. In order for rationalization to be effective, participants must believe that they are not affected by the actions of other individuals.

How Big is the Concern?

To illustrate the magnitude of the concern we first make a couple of assumptions regarding sector allocations and allowable catch levels. In this section we assume that there are four trawl sectors (catcher-processor, mothership, whiting shoreside, and non-whiting shoreside). We then assume that existing catch estimates are representative of the way overfished species would be allocated under a rationalization program and show what the average permit would get by sector if the number of existing participants is maintained. The following table shows the assumed allocation of overfished species by sector. This table uses the GMT's bycatch scorecard and allocates overfished species with bycatch caps to each whiting sector on a pro-rata basis based on their whiting allocation.

Table 1 Potential Allocation of Overfished Species to Average Catcher Vessel Permits in Each Trawl Sector (units are in pounds)

Sector	Assumed No. of Permits	Bocaccio	Canary	Cowcod	Darkblotched	POP	Widow	Yelloweye
Catcher Processor: Allocation per Permit	12	-	294	-	1,562	533	13,742	-
Mothership: Allocation per Permit	20	-	124	-	661	110	5,820	-
Shoreside Whiting: Allocation per Permit	25	-	174	-	926	159	8,148	-
Shoreside Non-whiting: Allocation per Permit	120	485	134	30	4,104	1,190	28	7

What this table shows is that, under an IFQ program that allocates each overfished species to trawl permits, that approach may allocate zero shares of bocaccio, cowcod, and yelloweye to permits in the whiting fishery. Permits in the non-whiting fishery may receive shares of yelloweye that are the equivalent of one fish or less. This information helps put into context the concept of a "disaster tow". If we believe a disaster tow is one that eliminates an individuals' fishing opportunity for a year, then this gives us an idea of what level of catch constitutes a problem. We will assume for arguments sake that a tow that is equivalent to the average allocation shown in the table above will constitute a problem for fishery participants. Volume of this magnitude from a single tow would mean the average boat may need to stop fishing activities for the year.

Charts attached to the end of this document were developed by the west coast groundfish observer program and display the discard of overfished species occurring in non-whiting trawl fishery tows. The Y-axis represents the number of tows and the X-axis represents the amount of discard. What this information shows is that most tows do not result in encounters of many overfished species. However for most species, tows exist that meet or exceed the average annual allocation for a permit if the above table is reflective of the

eventual allocation decision. This information also shows that darkblotched, POP, and canary rockfish are more consistently encountered in non-whiting trawl tows than other species and tows of canary rockfish have occurred that would exceed the average non-whiting trawl permits' quota. Yelloweye, widow, and cowcod are encountered much less frequently, though tows of yelloweye have occurred that are approximately 10 times the average vessel allocation shown in the table above, and tows of widow have occurred that are nearly 5 times the average vessel allocation. Bocaccio is encountered in the non-whiting trawl fishery at a rate that is between the first and second groupings. Based on the assumptions constituting a "disaster tow", the assumed quantity of overfished species allocated to the trawl sectors, and available observer information we can say that disaster tows may be a problem for yelloweye, widow, and canary rockfish in the non-whiting trawl sector. For canary rockfish enough supply may exist that trading on a market may occur and this trading mechanism – along with other mechanisms – could be sufficient to adequately manage that species. If current catch predictions are reflective of the allocation that may be made to trawl sectors, then there may not be enough yelloweye and widow in the non-whiting trawl fishery to reasonably accommodate a market based mechanism. That is, there may not be enough supply of these species available to the fishery to accommodate the demand for that species and to allow for effective prosecution of the fishery.

Dealing with the Problem

Managing a rationalized trawl fishery with the constraints posed by overfished species can be separated into two parts. One part would be classified as preventative—measures would be put in place that minimize the probability of a disaster tow occurring. The second part would be classified as reactive—measures would be put in place that deal with a disaster tow if it has occurred. In this section we discuss tools that could be implemented to deal with the overfished species constraints that are likely to exist in the trawl fishery after rationalization has occurred.

Preventative Measures: Preventative measures in addition to fishing quota include such tools as area closures, gear restrictions, and minimum holding requirements.

- Area closures could be modified or refined in a rationalization program so that areas are closed to fishing where overfished species are found thus minimizing the chance of overfished species encounters in the fishery. However, area closures may have the effect of closing off productive areas where target species are found, so area closures would need to balance access to target species with acceptable disaster tow risk.
- Gear restrictions could be established in regulation, though the rationalization of a fishery would tend to encourage gear modifications that avoid overfished species. A gear restriction could be put in place to establish a minimum requirement that minimizes the probability and magnitude of disaster tows. For example, prohibiting the use of Aberdeen high-rise trawls could minimize the magnitude of a disaster tow if one were to occur.
- A minimum holding requirement could be established that requires vessels to have enough overfished species so that they can reasonably cover an unexpected

amount of overfished species catch should it occur. Minimum holding requirements could be established for individual vessels, for pools of vessels operating in a collective arrangement, or for harvest cooperative organizations[2].

Reactive Measures: Reactive measures include such tools as insurance pools and/or coops, carry-over provisions, and multi-year OYs.

- Forming insurance pools of several quota holders could occur through voluntary agreements outside the regulatory process. These pools would act like insurance where through the aggregation of quota, unexpected events occurring to individuals would be covered by the collective whole of the members of that pool.[3] Harvest cooperatives would work in the same manner, where the collective whole of the organization would be likely to stay within the allowable catch, but individuals in that organization may have unexpectedly large catches of some species.
- Carry-over provisions would allow vessels to exceed some portion of their quota in a given year and take that overage off the next years' quota. The current alternatives specify a 10 percent carry-over being allowed. For several species a 10 percent carry-over is less than one fish, and for yelloweye this may mean less than one pound.
- Multi-year OYs.

Summary

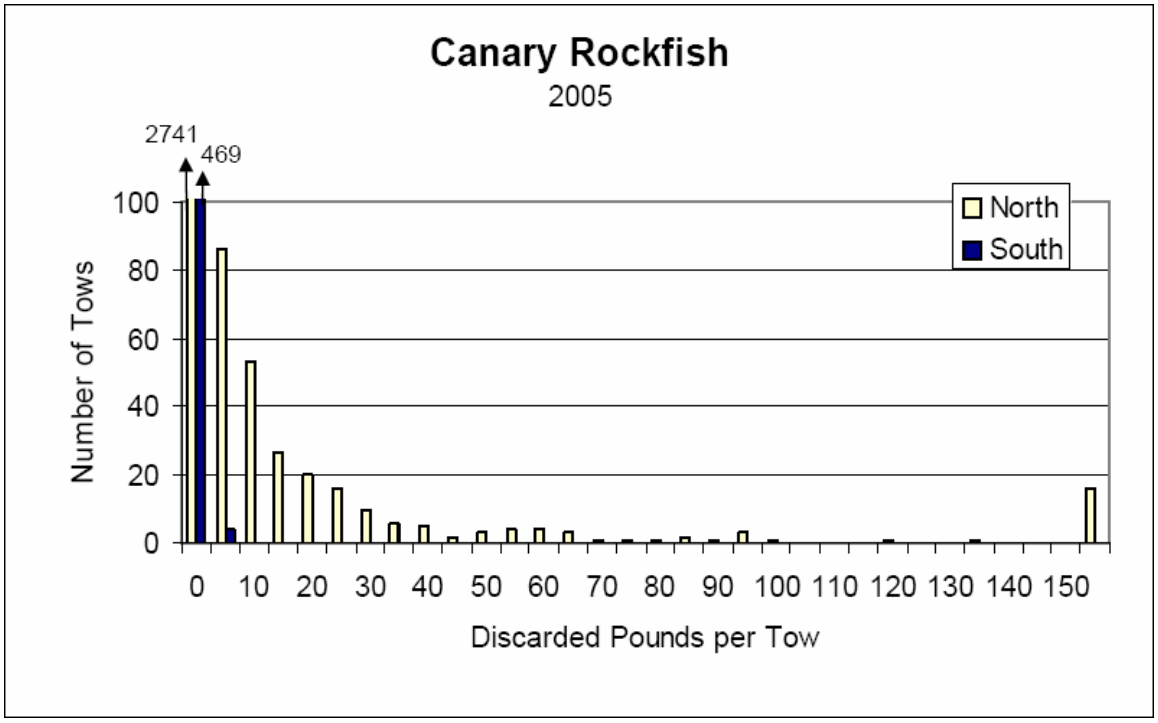
In order for a rationalized trawl fishery to operate with the overfished species constraints likely to be in place, several existing and new management measures are likely to be necessary. Area closures, gear restrictions, and minimum holding requirements are ways that minimize the chance that a disaster tow will occur. The formation of insurance pools and/or coops, carry-over provisions, and multi-year OYs are ways to deal with disaster tows if one has occurred.

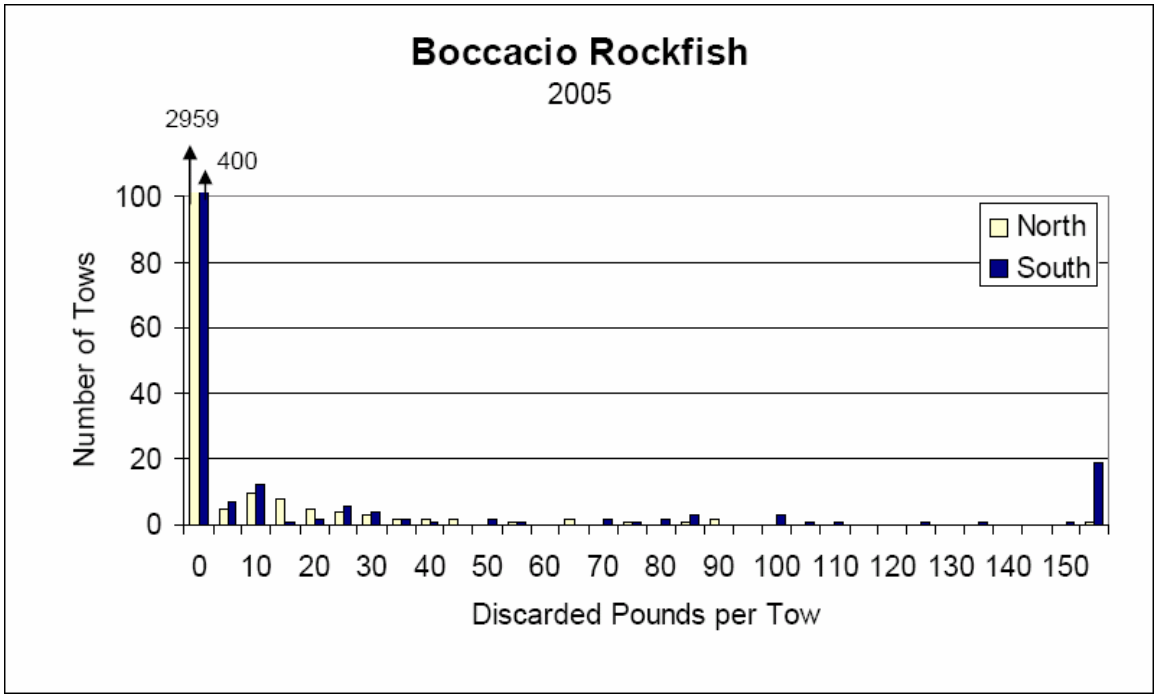
For some overfished species, permit-specific allocations of overfished species may be sufficient for management purposes. The allowable catch of species like darkblotched and POP are arguably large enough that effective trading may occur and that these trades would be effective enough to cover any unexpected catch levels. For other species IFQ may not be effective alone to achieve desired social outcomes. Species like yelloweye may have allowable catch levels that are too small for an IFQ system to be effective. For example, if the whiting fishery is expected to catch zero (or close to zero) metric tons of yelloweye, then it might not make sense to issue IFQ for yelloweye in the whiting fishery because each permit would not get enough quota to cover a single fish. In this case it might make sense to lump that species into a "shelf rockfish complex" which has IFQ and manage that particular species (yelloweye) with other tools. In either case, there are likely to be species without enough allowable catch that management of that species with

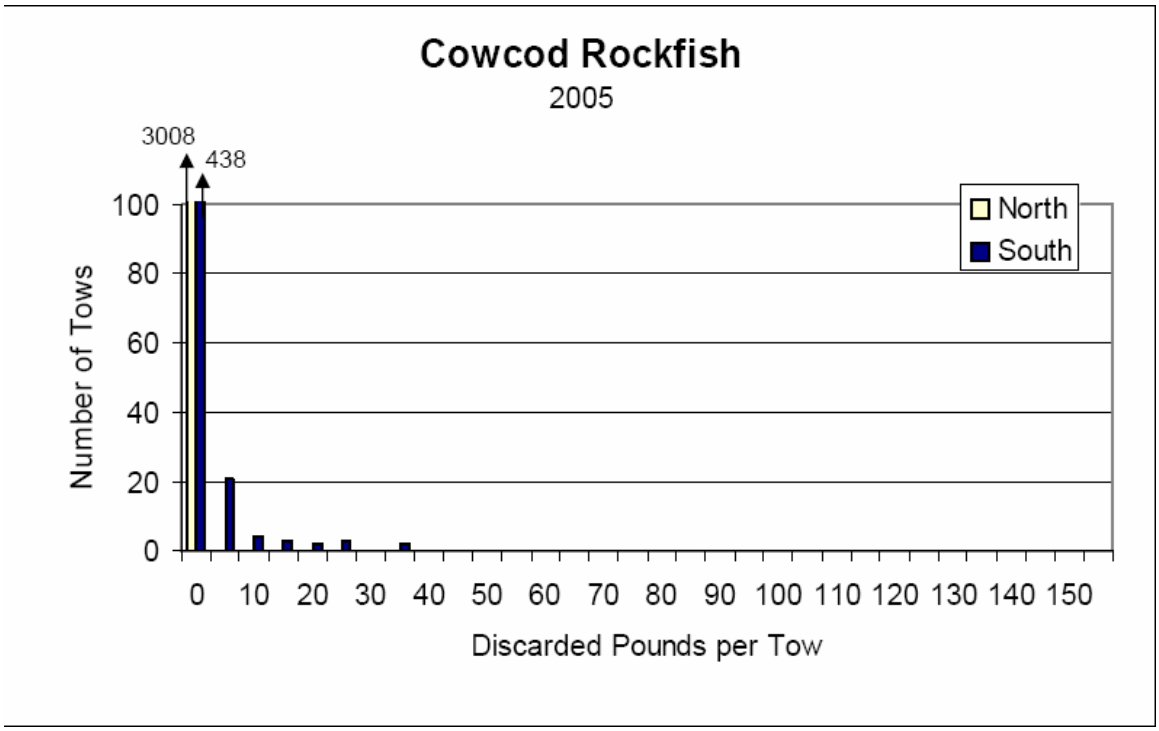
[2] If the whiting fishery is managed through harvest cooperatives with bycatch caps of overfished species, minimum holding requirements wouldn't be necessary.

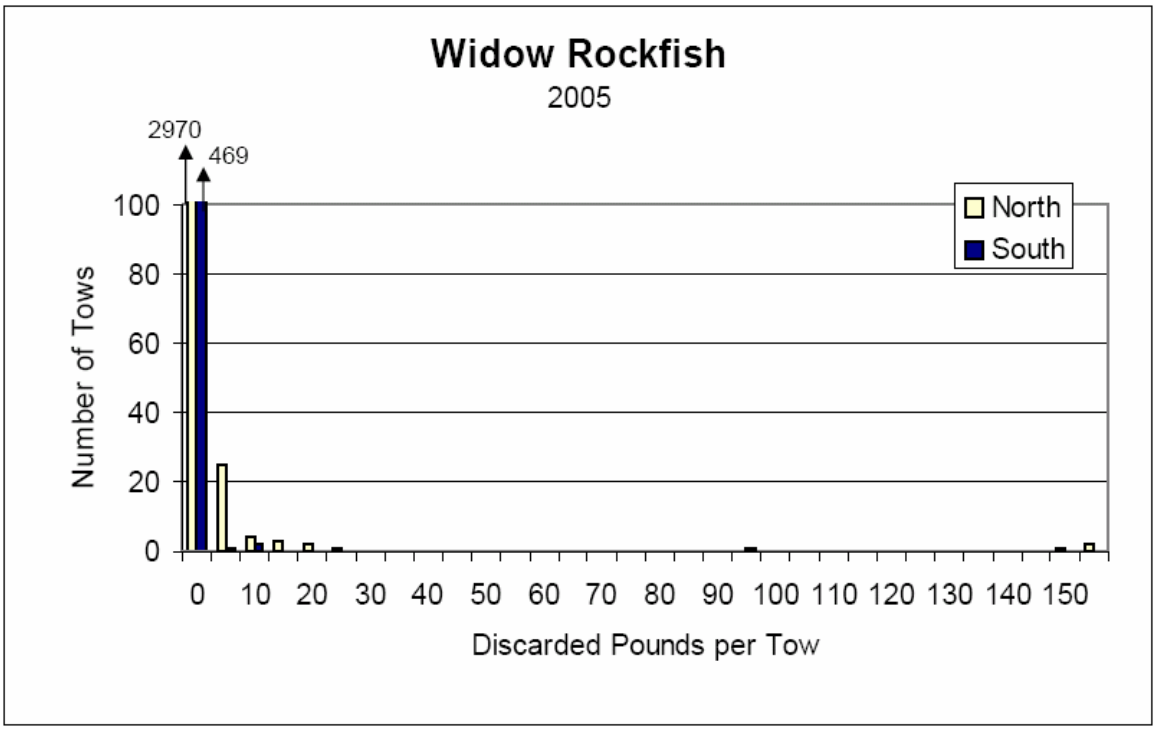
[3] If minimum holding requirements were specified for such arrangements, these pools may need to register with an agency.

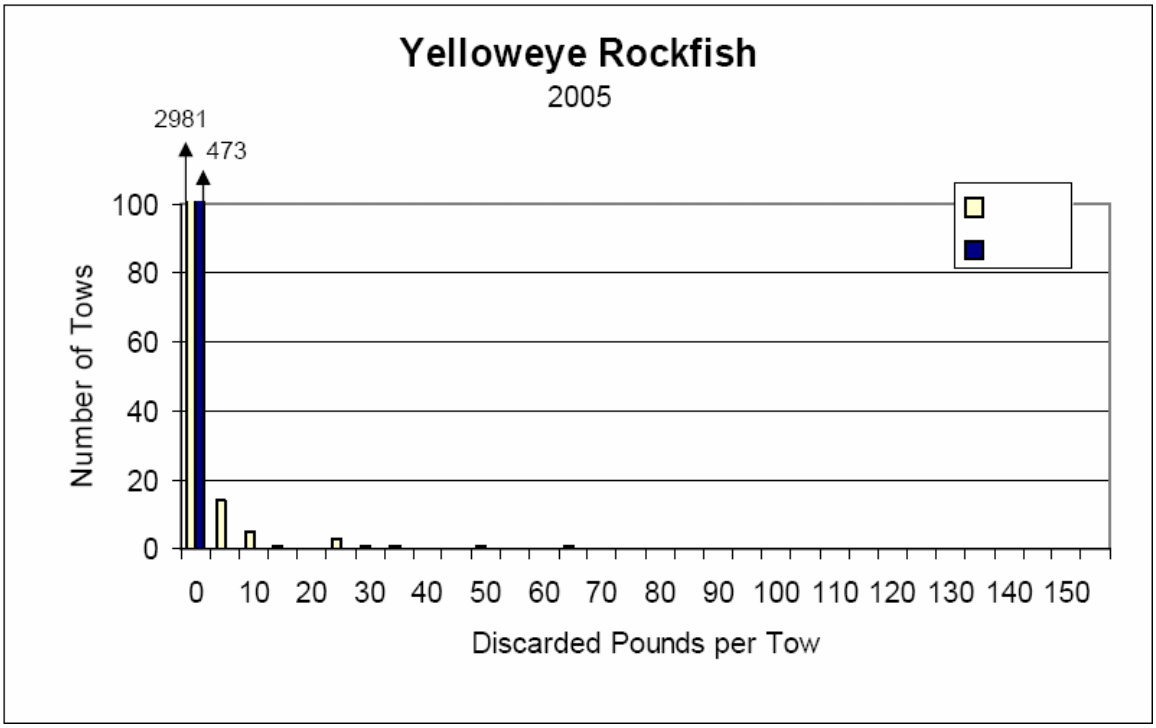
IFQ alone may not be sufficient. It is likely that some combination of the measures described above, and potentially others, will be necessary to manage overfished species in a rationalization program.

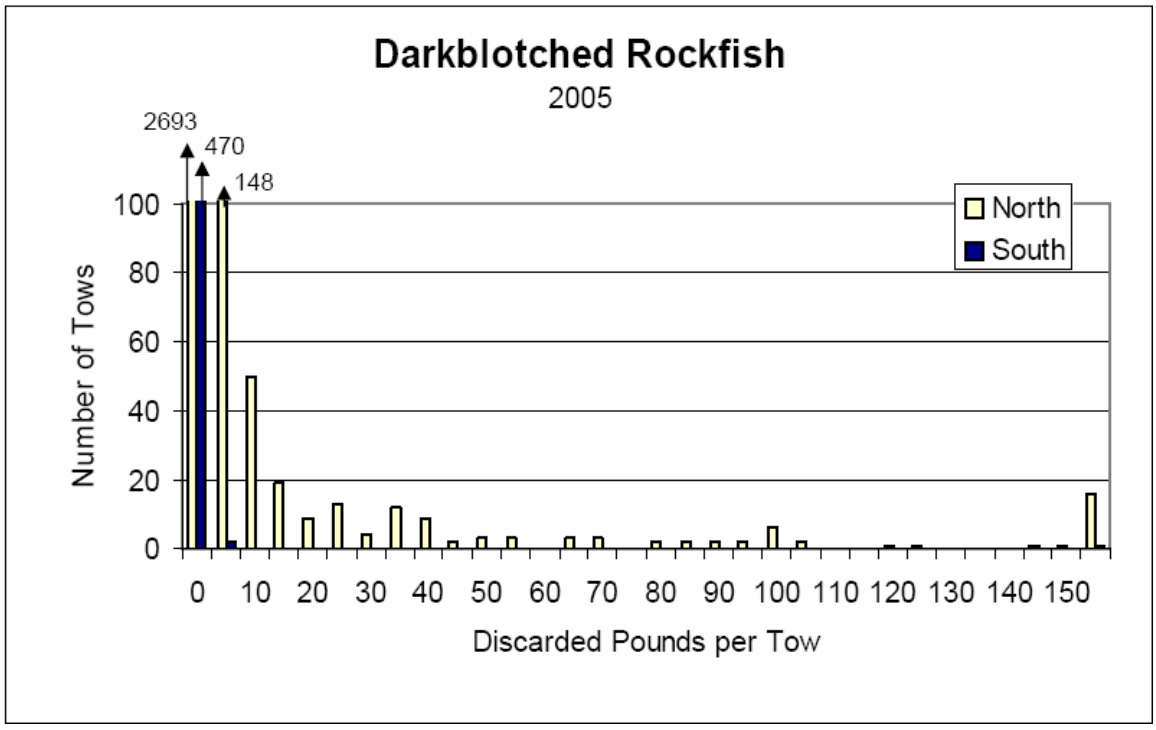


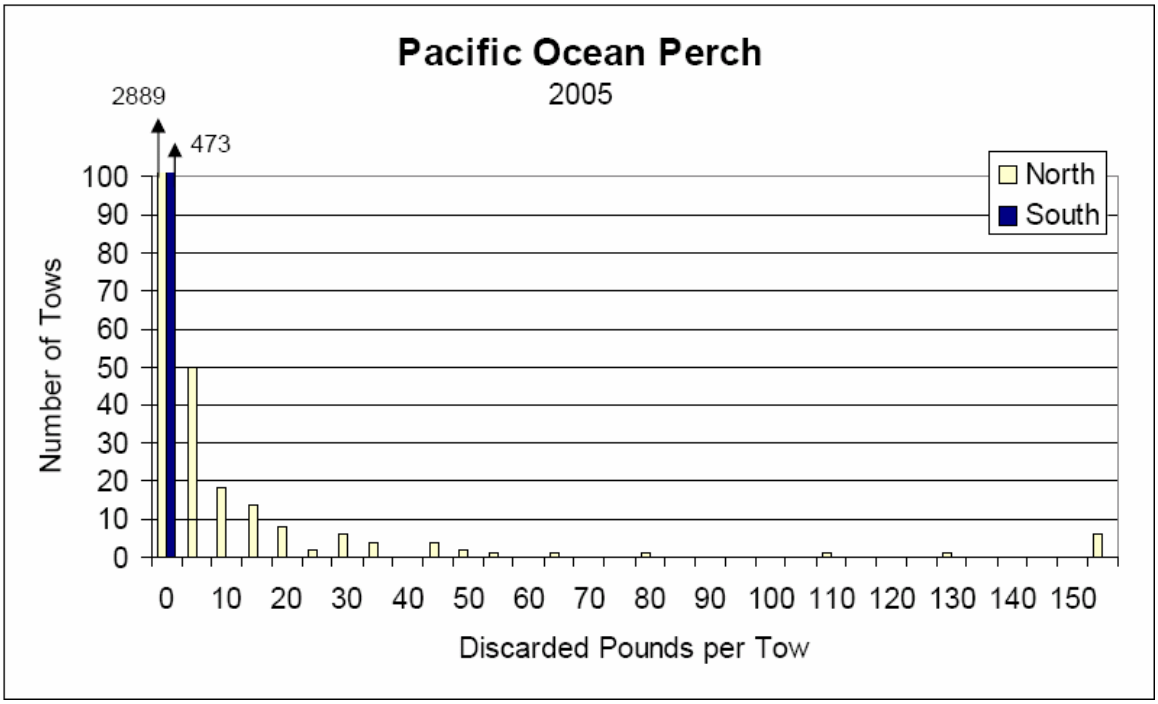

Boccacio Rockfish
2005
2959
400
Number of Tows
100
80
60
40
20
0
North
South
0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150
Discarded Pounds per Tow


Cowcod Rockfish
2005
3008
438
Number of Tows
100
80
60
40
20
0
North
South
0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150
Discarded Pounds per Tow


Widow Rockfish
2005
2970
469
North
South
Number of Tows
100
80
60
40
20
0
0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150
Discarded Pounds per Tow


Yelloweye Rockfish
2005
2981
473
Number of Tows
100
80
60
40
20
0
0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150
Discarded Pounds per Tow


Darkblotched Rockfish
2005
2693
470
148
North
South
Number of Tows
0
20
40
60
80
100
0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150
Discarded Pounds per Tow


Pacific Ocean Perch
2005
2889
473
North
South
Number of Tows
0
10
20
30
40
50
60
70
80
90
100
0 10 20 30 40 50 60 70 80 90 100 110 120 130 140 150
Discarded Pounds per Tow

Agenda Item E.9.c
Supplemental EC Report
June 2007

ENFORCEMENT CONSULTANTS REPORT ON AMENDMENT 20: TRAWL RATIONALIZATION ALTERNATIVES (TRAWL INDIVIDUAL QUOTAS AND COOPERATIVES)

The Enforcement Consultants (EC) was asked by the Groundfish Allocation Committee (GAC) to evaluate the merits of a minimum individual fishing quota (IFQ) holding requirement. The EC worked with Council staff, and evaluated recent landings in the West Coast Groundfish Fishery. As you may imagine, the landings were wide ranging and provided little insight on the issue.

As currently proposed and supported by the EC in the trawl individual quota (TIQ) document, West Coast groundfish fishers operating under an IFQ system will be fully monitored at sea and at landing. A combination of cameras, electronic log books, and people will accomplish this monitoring effort. Fishers will have 30 days to cover any overage incurred in a landing. After 30 days, deficits will be treated as violations with ensuing investigations and penalties. Any fisher with a deficit in any IFQ account will be prohibited from fishing in any West Coast Federally managed fishery until that deficit is eliminated. Permits showing deficits will be frozen and prohibited from transferring to another vessel.

This suite of IFQ monitoring and landing regulations were originally developed by the EC in the early stages of IFQ deliberations and have been supported by the TIQC in their entirety since they were first introduced. These regulations were developed in response to the industries need for flexibility, considering the non selectivity of this gear type deployed in a fishery that contains 82 species.

The EC is pleased with the support this suite of regulations has received from the TIQC. As proposed, the EC believes these regulations are adequate for ensuring responsible industry behavior and do not believe that an additional minimum holding requirement is necessary, but would be in fact redundant.

The EC has not had the opportunity to fully evaluate the minimum holding requirement and area designation component of the GMT's statement, but at first blush, the proposal appears to add a layer of complexity to an already complex program.

PFMC
06/14/07

GROUNDFISH ADVISORY SUBPANEL REPORT ON AMENDMENT 20: TRAWL RATIONALIZATION ALTERNATIVES (TRAWL INDIVIDUAL QUOTAS AND COOPERATIVES)

The Groundfish Advisory Subpanel (GAP) heard a presentation from Mr. Jim Seger, Council Staff, on the current status of the Trawl Individual Transferable Quota (ITQ) program and the recommendations from the May Groundfish Allocation Committee (GAC) meeting to refine the alternatives.

The GAP agrees with the recommendations set forth in the GAC Report (Agenda Item E.8.b) except for the following:

Initial Allocation

Under the allocation formula, the GAP agrees with the Trawl Individual Quota Committee (TIQC) that an option that analyzes an equal division of the buy back permits' pool of quota shares (QS) among all qualifying permits plus allocation of the remaining QS based on each permit's history should be included. This option is described in Agenda Item E.9.a, Table 2, page 14. Under this proposal everyone who is issued quota share will have access to all fish species. As the system starts up, fishermen may need access to fish they have not caught historically and this option provides access to those fish.

Adaptive Management

GAP also recommends that the Adaptive Management alternative that requires a 10% holdback of QS on an annual basis should not be included in the analysis. There are potentially unforeseen consequences for all Council actions and withholding 10% of the quota to accommodate these uncertainties could be overly burdensome to the industry. There is also added administrative burden in terms of the complexity of the analysis. The GAP is concerned that analyzing this unnecessary alternative will slow the process down even further.

Split Loads and Monitoring Program

The GAP concurs with the TIQC that an option that allows a vessel off-load to be split between different locations should be considered. With expanded monitoring both shore-side and at-sea there is no reason that loads could not be split. In fact, in order to foster additional competition and in order to find markets for fish that will be required to be retained, it actually makes more sense to allow split loads. Further the GAP does not believe that split loads should be confined to the same port. Vessel Monitoring Systems provide a "track" of the vessels trip so enforcement issues should not be significant.

Whiting bycatch

The GAP supports including an option for analysis that allows the whiting fishery to pool bycatch in lieu of issuing individual quotas. Currently the whiting industry is regulated using bycatch caps and the industry believes that this type of management approach works best for this sector of the industry. An alternative that analyzes a continuation of a successful approach should be included in the analysis.

PFMC
06/14/07

GROUNDFISH MANAGEMENT TEAM REPORT ON AREA MANAGEMENT UNDER TRAWL RATIONALIZATION

Introduction

Currently, the Council uses latitudinal and depth-based spatial management measures, as well as gear restrictions, to achieve area management objectives. Latitudinal area management is outlined in the acceptable biological catch (ABC) and optimal yield (OY) tables within the biennial specifications (e.g., North 40°10 N. Latitude and South 40°10 N. Latitude) and in the trip limit tables where, in some instances, limits differ from the ABC/OY delineations because of bycatch considerations. These subdivisions were created based on species abundance and stock assessments results. Regulations relative to rockfish conservation areas (RCA), boundaries which approximate various isobaths along the coast, achieve depth-based area management. Gear restrictions have also been implemented to achieve area management. For example, large footrope gear restrictions for bottom trawlers have been used to limit access to rocky habitat, areas that depleted rockfish species inhabit.

As evidenced by the March 2007 groundfish inseason action, increasingly complex spatial management measures may be necessary within the existing management framework. Intersector allocations and the implementation of trawl individual fishing quotas (TIQ) may further increase the need for spatial management, perhaps in a manner different than status quo. A thorough evaluation of the cumulative consequences of spatial management measures, both current and those expected from future initiatives, should be undertaken. Additionally, research efforts and analyses of current data sources is needed to support more refined area management approaches. This paper considers biological, economic, and administrative aspects of area management as well as their relevancy to the proposed TIQ program.

Biological considerations

A recent National Research Council (NRC) report found that "Spatial analyses may be one of the greatest obstacles faced by fishery managers." Several literature reviews of contemporary modeling abilities have noted that applied fisheries science has lagged behind more academic research in marine and terrestrial ecology with respect to an increasingly "spatially-rich" interpretation of population structure and complexity (Wilen 2004, Pelletier and Mahevas 2005). Such issues will be integral elements of fisheries science and management in the future, and advances in both assessment methods and simulation techniques should provide the means to better cope with the challenges of incorporating such complexity in the face of increasingly complex and spatially explicit management regimes (NRC 2006).

West Coast groundfish management has clearly become increasingly spatial. In addition to the RCAs, spatial management measures such as "hotspot" or "coldspot" analyses are increasingly available to help identify areas where available target species might be accessed with acceptable impacts on overfished species. Such measures benefit management actions by allowing fishing to occur on healthy stocks while minimizing the bycatch of rebuilding species. Yet the

underlying causes and consequences for spatially varying abundance and bycatch rates are often unclear. For example, the RCA configuration adopted in March 2007 to minimize canary rockfish bycatch created a spatial management regime considerably more complex than past management measures, yet this regime was implemented without the knowledge of whether the differences in high versus low bycatch rates by area reflected habitat association and stock distribution, or historical patterns of depletion that leave depleted (low bycatch) regions more vulnerable to localized depletion. There are also some legitimate concerns that the implementation of a TIQ program could result in the spatial concentration of fishing effort. Over larger spatial scales, such issues speak not only to the potential impacts of localized depletion, but to issues of equity with respect to historical exploitation rates and subsequent allocation of allowable catches.

The Cape to Cape group suggested that management of West Coast fisheries would benefit by matching the spatial scales of interest for coastal communities with those scales naturally found within marine ecosystems. The evidence reviewed in that statement suggests while nearshore ecosystems exhibit marked regional differences in their species composition, dynamics and productivity, and the specialization of associated fishery, offshore ecosystems (particularly the slope ecosystem and species) tend to have more population connectivity and more homogenous distribution and life history characteristics. Yet even at a coastwide scale, spatial differences in fishing mortality can lead to altered perceptions of stock status depending on the spatial scale at which a given stock is assessed. For example, sensitivity analysis of different stock boundaries for the shortspine thornyhead stock assessment in 2006 demonstrated that overall depletion and status was considerably more optimistic with a coastwide assessment relative to an assessment that only included the four International North Pacific Fisheries Commission (INPFC) areas north of Point Conception.

Spatially-explicit management has proven to be critical to meeting conflicting management goals and objectives, such as maintaining fishing opportunities on healthy stocks while reducing incidental catches of rebuilding species, and meeting habitat protection requirements. Furthermore, there is a growing appreciation of the significance of heterogeneity in population structure for most marine organisms, as well as for the potential interaction between population structure and fishing behavior, that scientists and managers alike will find increasingly necessary to confront in population models and management measures. An example is the research, that has been presented to the Council, that recommends the need to spatially preserve larger, older females in rockfish populations to enhance larval viability and survival (Berkeley, et al 2004).

The GMT has frequently recommended that a more strategic consideration of the cumulative consequences of spatial management measures be undertaken, and that efforts be made to develop information to support more refined area management approaches. Current spatial management utilizes six INPFC boundaries and twenty two other available management lines (Agenda Item E.5.b, GMT Report, March 2007). However, these management lines may not represent natural stock breaks. A concerted research effort to compile and review available data on landings, survey indices, population structure and other factors could be part of a long term strategy to inform area management. As part of this effort, the GMT recommends accessing the expertise and information being developed outside the immediate Council process with regard to spatial management (e.g., the PMCC "Cape to Cape" Workshop and the upcoming Temperate

Reef Workshop). Additionally, an ecosystem based fishery management plan could act as a coordinating mechanism for evaluating and perhaps implementing spatial management measures. However, it may be unlikely that these overall efforts will provide sufficient information in time to inform further spatial division of quota shares beyond our current OYs prior to the planned implementation of the TIQ program. The GMT recommends incorporating current area management tools within the TIQ program, recognizing the limitations, and continue to pursue research and data that may further inform spatial management. As data become available, area management within the TIQ program is expected to evolve and adapt.

Economic considerations

Area management within a TIQ program has the potential to generate both positive and negative economic impacts. Positive economic impacts may occur at a regional level if IFQ shares are area based. Catch harvested from an area-specific IFQ would most likely be landed in adjacent ports, which would disperse economic activity along the coast, providing community stability, as opposed to being concentrated in a few regions. However, creating area-specific quota could also have negative economic impacts. The fishing industry requires the flexibility to adapt to changing market conditions and quota shares based on small geographic scales may reduce this flexibility. For example, non-whiting trawl vessels in the Astoria fleet routinely travel to areas near the US/Canada border. Area-specific quota shares could restrict fleet mobility, which may limit access to target species that are not evenly distributed along the coast. Additionally, finer scale area-specific quotas could restrict the fleet's ability to adapt to market changes. In order to avoid this situation, care should be taken when creating area-based quota so that area-specific IFQ shares are not so small as to erode the economic gains typical of rationalization programs.

Administrative considerations

The feasibility of implementing area-based management and the ability to adapt to area-based scientific information, after the implementation of a rationalization program, are important considerations. An overly complex program designed to achieve area-based management objectives may increase operational costs and may be too bureaucratic to adapt to changing fishery and environmental conditions. Area-based quota shares substantially increase program complexity because each area may require quota shares by species, by permit, a set of minimum holding requirement rules, and a set of concentration-of-ownership rules amongst others. When determining the number of areas with quota share designations, administrative cost and burden should be balanced with economic and biological considerations.

In addition, a program that is too rigid to adapt to new scientific information (such as information suggesting a modification of area-based management tools) may result in a fishery that is unable to easily take into account negative biological consequences that may be occurring. In order to avoid this scenario, information can be collected in a rationalized fishery that could be used to modify area-based quota share allocations if necessary. For example, location of catch by vessel could continue to be recorded in a rationalized fishery and used in a manner to re-assign shares on an area basis. It may be prudent to specifically identify evaluation of the adequacy of any existing area-based quota management as part of the periodic routine review being considered for the TIQ program.

Data Sources

- Retained catch data by area from trawl logbooks
- Spatial distribution of West Coast Groundfish Observer Program (WCGOP) data
- Spatial distribution of National Marine Fisheries Service (NMFS) trawl survey data
- Landings data by port from RecFIN. These data could also be summarized by the 6 INPFC areas

The GMT has requested from the Northwest Fisheries Science Center the catch data, WCGOP data, and NMFS trawl survey. Landings data by port (1994-2005) are already available from information assembled for the GAC. The GMT will review this information, once available, and then identify potential remedies. However, the entire analysis likely cannot be completed in time for TIQ or intersector allocation.

GMT Recommendations

1. The GMT recommends that the TIQ program incorporate area management tools currently in use and continue to pursue data and research informing spatial management. Depending on the results of the data compilation and review, determine whether and how spatial management concepts could be used in developing fishery management measures for the 2009-2010 biennium as well as the development of an Ecosystem Fishery Management Plan.

PFMC
05/25/07

Sources

Berkeley, S, et al. 2004. Fisheries Sustainability via Protection of Age Structure and Spatial Distribution of Fish Populations. Fisheries Vol 29 no. 8: 23-32.

National Research Council (NRC). 2006. Dynamic Changes in Marine Ecosystems: Fishing, Food Webs, and Future Options. National Academy Press, Washington, DC.

Pelletier, D. and S. Mahevas. 2005. Spatially explicit fisheries simulation models for policy evaluation. Fish and Fisheries 6: 307-349.

Wilen, J.E. 2004. Spatial management of fisheries. Marine Resource Economics 19: 7-19.

GROUNDFISH MANAGEMENT TEAM REPORT ON AMENDMENT 20: TRAWL RATIONALIZATION ALTERNATIVES (TRAWL INDIVIDUAL QUOTAS AND COOPERATIVES)

The Groundfish Management Team (GMT) discussed several issues pertaining to the trawl rationalization program including a minimum holding requirement, managing bycatch as a pool in the whiting fishery, the proposed adaptive holdback mechanism, Pacific halibut bycatch quota, and allocating overfished species based on a bycatch rate. The GMT offers the following comments.

Minimum holding requirement

The GMT does not recommend the 500 to 1,000 pound general minimum holding requirement. A general minimum holding requirement may not prove useful for management purposes because the requirement may be filled by species that are not representative of what a trawler may catch. For example, a trawler could fill the minimum holding requirement with spiny dogfish and then target Dover sole. This type of scenario calls into question the utility of establishing a general minimum holding requirement. Enforcement and penalty mechanisms for not covering catch with quota pounds within an established time period may provide a more practical approach.

The GMT is in favor of analyzing a minimum holding requirement for constraining overfished species. The amount of overfished species allocated to individual permits in a rationalized fishery may be minimal and in some cases may result in a handful of fish, which could result in several unintended consequences as outlined in Agenda Item E.9.a. One mechanism that could mitigate the occurrence of uncoverable catch events is to establish a minimum holding requirement for overfished species that covers most of the potential overfished species catch that could occur during a trip.

The GMT specified two mechanisms for implementing this type of provision. One mechanism would establish a minimum holding requirement to access a certain area. These areas would be defined based on the presence of overfished species and the probability that a trawler would catch them during a fishing trip. This would require that trawlers declare their intent to fish in either the area that requires a minimum holding requirement or outside that area. For example, if trawlers intend to fish in depths less than 200 fathoms, a minimum holding requirement for canary and yelloweye rockfish could be required. Vessels could fish deeper without meeting the minimum holding requirement for canary and yelloweye, but would need to meet those minimum holding requirement provisions if they desire to fish shallower than 200 fathoms.

The second concept the GMT recommends for consideration is a minimum holding requirement that allow vessels to enter into voluntary pooling agreements in order to reach that minimum holding requirement. This would require that trawlers forming voluntary risk pools register with, or notify the National Marine Fisheries Service (NMFS) that they are in a voluntary quota sharing pool for a year. This would provide verification that vessels in that pool collectively meet the minimum holding requirement of a given overfished species.

Whiting Individual Fishing Quotas (IFQ) and Collective Pooling of Bycatch Species

The GMT discussed the proposal to pool bycatch species across the whiting fishery, if the whiting fishery is granted IFQ. Under this proposal, participants in the whiting fishery would receive quota of whiting but not receive quota of bycatch species. Bycatch species would be managed in a pool accessible by all whiting sectors or as a pool for each whiting sector. Members of industry clarified that, for the purposes of this proposal, bycatch species are constraining overfished species. The GMT discussed this proposal and believes that managing constraining overfished species across the sector, instead of having an individual limit, has promise and deserves consideration and analysis in the environmental impact statement (EIS). This type of arrangement may encourage collective decision-making and communication which is likely to be a very important element to the successful management of overfished species in a rationalized trawl fishery. If overfished species are allocated at an individual level, this may result in bargaining between members of the industry instead of collective decision making. In such a relationship, some members may have more negotiating power than others and this may not be a desired outcome of the rationalization process. The GMT further notes that the whiting fishery has operated successfully with a common bycatch limit for several years and this provides some empirical justification for considering this proposal in a future rationalization program.

Adaptive Holdback

The Groundfish Allocation Committee Report includes an adaptive management option that provides for up to a 10% holdback of the trawl allocation to address unforeseen circumstances. The GMT supports forwarding this alternative for analysis. While the Groundfish Allocation Committee Report specifically mentions that the potential uses for holdback are not limited to the examples it provides, the GMT notes that development of best fisheries practices is not among those listed. The GMT recommends that this be included as a possible use for trawl holdback and points out that it is consistent with alternatives presented in the EIS analysis leading to Amendment 18. The GMT envisions a process for providing adaptive holdback quota similar to the Council's Operating Procedures for considering exempted fishing permits (EFPs) where proposals would be made to the Council, considered by the Council's advisory bodies, and recommended or not recommended based on their merit and potential outcome.

Pacific Halibut Bycatch Quota

The GMT discussed the concept of managing Pacific halibut in the trawl fishery through the use of individual bycatch quota and is supportive of the concept because it would provide a tool for directly managing the catch of Pacific halibut in the trawl fishery. The GMT also discussed the proposed method of allocating Pacific halibut based on a bycatch rate or proxy. Based on available data the GMT believes that Pacific halibut bycatch quota should be applied for areas north of Cape Mendocino, and that the bycatch rate approach for allocating Pacific halibut be stratified by latitude and depth. The GMT recommends that one latitude area be the Vancouver International North Pacific Fishery Commission (INPFC) area and the other area be the combination of the Columbia and Eureka INPFC areas. Depth-based stratification would occur shallower or deeper than 100 fathoms. Available data from the Northwest Fisheries Science Center's (NWFSC's) GMT representative indicates that this stratification would appropriately capture the difference in halibut bycatch rates that occur off the West Coast.

Allocating Overfished Species Based on a Bycatch Rate (proxy species allocation)
The GMT discussed the concept of allocating overfished species based on a bycatch rate. The GMT concurs with the concept of allocating overfished species based on a bycatch rate because it would arguably provide more fishing opportunity for more individuals in the trawl fishery than allocating based on landings history. If overfished species are allocated based on landings, a relatively small number of individuals will receive a relatively large share of quota. The GMT discussed the revised proposed methodology for assigning overfished species quota to vessels based on a bycatch rate, target species catch history, and fleetwide average depth of catch of target species and looks forward to reviewing the description of the proposed methodology over the summer. The GMT will report back to the Council on this methodology at the November meeting.

GMT Recommendations:

1. Analyze an alternative that includes a minimum holding requirement for constraining overfished species with a specific area component as well as an opportunity to provide for pooling.
2. Analyze an alternative, specific to the directed Pacific whiting fishery, that issues IFQs for whiting but not for overfished species. Allow overfished species to be managed in a pool, accessible by all whiting sectors or as a pool for each whiting sector.
3. Analyze an adaptive management proposal, consistent with the goals of the fishery management plan.
4. Analyze the allocation of Pacific halibut bycatch quota based on a bycatch rate with depth and latitude divisions.
5. Analyze allocating overfished species based on a bycatch rate (proxy species allocation).

PFMC
06/14/07

Agenda Item E.9.c
Supplemental SSC Report
June 2007

SCIENTIFIC AND STATISTICAL COMMITTEE REPORT ON AMENDMENT 20: TRAWL RATIONALIZATION ALTERNATIVE (TRAWL INDIVIDUAL QUOTAS AND COOPERATIVES)

The Scientific and Statistical Committee (SSC) met with Mr. Merrick Burden to discuss various issues associated with the trawl rationalization alternatives. The SSC comments regarding the current analysis are as follows:

- One option being considered is a carryover allowance that would allow surplus quota pounds to be carried over from one year to the next. From a biological perspective, it may be desirable to consider ways to reduce the effect of such allowances on stocks that are declining. The Groundfish Management Team suggestion regarding adjustment of quota pound surpluses in proportion to changes in the trawl allocation (Agenda Item E.9.a, Attachment 2, p. 31, footnote r) would be one way to address this issue.

- The graphs in Agenda Item E.9.a, Attachments 3 and 4 depict revenue associated with initial allocations of quota pounds to individual permit holders relative to their 2006 revenue. The SSC recommends that the analysis be extended to include several recent years (e.g., 2004-2006) to determine the extent to which annual revenue variability affects the outcome of the analysis.

The SSC Economics Subcommittee has agreed to meet with Mr. Burden and other analysts on Sunday, September 9 for a more comprehensive review of methodologies being used to evaluate the rationalization program.

PFMC
06/13/07

TRAWL INDIVIDUAL QUOTA COMMITTEE (TIQC) REPORT ON AMENDMENT 20:
TRAWL RATIONALIZATION ALTERNATIVES
(TRAWL INDIVIDUAL QUOTAS AND COOPERATIVES

The TIQC met June 13, 2007 and has the following recommendations on the trawl rationalization alternatives.

Individual Fishing Quota (IFQ) Alternative

Consider Bycatch Pool Instead of IFQs for Whiting Bycatch (Section A-1.1 and A-1.5)

Rationale For and Against Managing Bycatch as a Pool

The TIQC discussed the rationale related to management of bycatch in the whiting fishery as pools rather than with IFQ.

Arguments in support of managing bycatch in pools.

- Bycatch of highly constraining, overfished species cannot be managed by bycatch IFQs because there is not enough distributed at the individual level to allow full harvest of the target species. Such an approach would be in conflict with achievement of optimum yield (OY) as required by National Standard #1.
- If highly constraining bycatch is allocated at the individual level it will be very difficult for individuals in a co-op to agree to terms on its management. It's not a pot luck dinner in which lots of food is brought and everyone shares in the bounty. There will not be large casserole dishes, salads, fruit bowls and brownies to feast upon. It will be a pot luck dinner in which a single leaf of lettuce, a raisin, a single strand of spaghetti and the crumb of a brownie will be brought to the table. It invites failure because individuals will fight giving up their crumb(s) for fear of starving caused by a single bad tow. However, if the bycatch arrives as a pool, the group will be forced to develop rules on how to serve it up so all have an increased chance to harvest the target species instead of running off with their raisin and a Hail Mary. Put another way, allocated as a pool is a lifeboat instead of a shortage of life rings. The expected behavior will be the same.
- Bycatch simply should not have currency to be bought by those with deep pockets or other agendas. Bycatch could be bought by a few big companies that would enable them to control the target fishery. Or it could be purchased by environmental groups that want to end the fishery. Or it could be purchased by another sector that wants the target fishery to rollover to them. Under any scenario, it is the tail wagging the dog and will confound the goals of a rationalized fishery to best manage bycatch in achieving OY while protecting participants and communities with dependence on the target species. Status Quo is a better alternative.
- Finally, bycatch IFQs would unnecessarily complicate the allocation of overfished species when it is rebuilt. At that time, an increased proportion of the species should be allocated to those who target those species. How will that be done if the species is owned as bycatch in the whiting fishery? Will another buyback program or some other form of

compensation be necessary? On the other hand, if bycatch of these species is allocated as pools during the annual specification process, it can be adjusted appropriately without compensation to increase the proportion to those targeting it while still satisfying the bycatch needs of other fisheries.

Arguments in opposition to managing bycatch in pools.

- The proposal under which whiting bycatch would be managed as a pool rather than with IFQs forces all fishermen into a relationship with one another, hence there is less individual accountability.
- Because of the very small amounts of bycatch quota pounds (QP) available for the whiting fishery, pools are going to happen regardless of whether or not they are mandated.
- Managing with IFQs: (1) allows fishermen the flexibility to voluntarily form pools with others if they find it advantageous to do so; and (2) allows them to choose with whom they share their bycatch risks.
- An IFQ program would allow vessels to form pools but also provide a fall back if the pool system fails, i.e. if vessels are unable to effectively form voluntary pools.
- If the industry ability to form co-ops deteriorates and the only IFQ alternative for whiting provides that bycatch be managed as pools, the Council would have to stop and reincorporate the IFQ options for bycatch species, resulting in a delay in the report to Congress.

Provide Options for Managing the Bycatch Pools

If bycatch in the whiting fishery is managed as a pool, the Council should include in the IFQ alternative the same bycatch management options provided for the co-op options (pages 38 and 39 of Agenda Item E.9.a, Supplemental Attachment 2). These include options for seasonal releases, if there is a single pool for all whiting sectors, and an option for a rollover, if the pool is divided among sectors.

Apply Bycatch Pools Only to At-sea Sectors Under the Three Sector Option

If the Council selects the option that would divide the trawl fishery into three sectors (shoreside, mothership, and catcher-processor) and selects the option that would manage bycatch in the whiting fishery as pools, the TIQC recommends that the bycatch pooling option not apply to the shoreside fishery (i.e. the TIQC concurs with the interpretation of the options provided in Attachment 2). Under this interpretation, if bycatch pools and three sectors are adopted, IFQs would be required to cover bycatch in shoreside deliveries of whiting.

Maintain Option for Equal Sharing of Buyback QS (A-2.1.3)

The TIQC reviewed additional data not previously available and disagrees with the GAC recommendation to drop the option that would equally distribute among all catcher vessel permits the QS pool associated with buyback permits. The TIQC reviewed an analysis (Agenda Item E.9.a, Supplemental Attachment 4) which provided a preliminary indication of some of the effects of the option containing an equal allocation element. The TIQC believes that dropping Option 2 at this time would be premature.

The TIQC asks that the trawl rationalization analysis include an assessment of the distribution of the burden to pay for the buyback program relative to the distribution of the benefits from the buyback program.

Move Forward With Consideration of Electronic Logbooks and Split Loads (A-2.3.1)

In its May report to the GAC, the TIQC recommended inclusion of an option that would require electronic logbooks and an option to allow deliveries to be split between processors in different locations. The GAC recommended that these options not be included and instead be addressed in a separate process. The TIQC does not object to dropping these provisions from the IFQ alternatives, so long as it is understood that the separate process should be complete by the time the IFQ program is in place.

The IFQ program depends totally on a complete and stringent monitoring system to ensure that vessels are held accountable for the catch. Electronic logbooks may be an important part of this system.

With proper monitoring systems in place, the rationale for prohibiting split loads may no longer exist. The flexibility provided by the option to split loads is needed in order to fully realize the benefits available from an IFQ program, including those that may be derived from increased retention of target species and innovative marketing practices.

Eliminate Option for Minimum Holding Requirements (A-2.2.1)

The TIQC reiterates its position that a minimum holding requirement is unnecessary because the tracking and monitoring program and consequences of not covering a landing with QP provide adequate incentives to ensure good faith compliance. Moreover, design of a minimum holding requirement (either a general requirement or one requiring that certain species be held) is problematic because of the variety of strategies a vessel might pursue. There is no way to ensure that the species held match with the expected catch. If the Council does choose to leave this option in, it should not be species specific.

Extend Time for Coverage of Catch with QP When Within Carryover Limits (A-2.1.1)

The TIQC recommends that if a carryover provision is adopted and a vessel has an overage that is within the limit of the carryover provision, the vessel should have more than 30 days to cover the overage before legal action is taken. Currently, there is an option that allows a vessel a 10% carryover of an underage or overage. Thus, a vessel with 10,000 QP for Dover sole may catch 11,000 pounds and cover the 1,000 pound overage with QP from the following year. However, the IFQ alternative also states that a vessel only has 30 days to make good on an overage, otherwise it is in violation. Therefore, unless the vessel's overage occurs in December, it cannot use the carryover allowance to cover the overage with following year QP and at the same time remain in compliance with the program. Under the TIQC recommendation a vessel would not be in violation if it took more than 30 days to cover its overage, so long as the overage is not more than the 10% carryover provision.

Increase the Carryover of an Underage (A-2.2.2.b)

The TIQC recommends that the underage carryover provision be expanded to 30% (the overage carryover would remain 10%). The TIQC feels that this amount of flexibility is needed to allow vessels an opportunity to fully harvest the allowable catch in a multispecies fishery. The TIQC recognizes that the amount of pounds an individual carries over to a following year might be reduced if the OY for a species declines in that year.

Change Accumulation Limit Options (A-2.2.3.e)

The mothership and shoreside sectors recommend changing the accumulation limit options as follows. For the shoreside whiting sector, change the options for the own or Control accumulation limit from

5%, 10% and 15%
to
10%, 15% and 25%

For the mothership whiting sector, eliminate the reference to the 50% rule for ownership affiliation currently found in footnote t of Table 3 in Agenda Item E.9.a, Attachment 2. The GAC's recommendation for use of an "individual and collective rule" makes this unnecessary.

Move Forward With Adaptive Management (Section A-3)

The TIQC recommends moving forward with the adaptive management option but modifying it so that it does not apply to the whiting fishery. Additionally, the TIQC recommends a few word changes to clarify that the set aside of up to 10% of the trawl allocation for adaptive management purposes would not occur unless the Council identifies a need at some future time. Specifically, change

"up to 10% of the trawl allocation <u>will</u> be distributed"
to
"up to 10% of the trawl allocation <u>may</u> be distributed"
and change
"<u>when</u> the Council determines that an adjustment is needed"
to
"<u>if</u> the Council determines that an adjustment is needed."

Analyze Halibut Individual Bycatch Quota (IBQ) Option (A-4)

The TIQC concurs with the GAC recommendation to include an option for halibut IBQ for analysis and notes that the IBQ should be specified in the same terms that the trawl halibut bycatch is accounted for in setting the Area 2a total allowable catch (TAC). If the trawl fishery is to be accountable for mortality then IBQ should be required to cover mortality, if it is to be accountable for catch (by expansion of the mortality to catch) then the IBQ should for catch.

Co-op Alternative

Allow Separation of the Whiting Co-op Endorsement from the Permit

The TIQC recommends that an option be provided in the co-op alternative that would allow for the transfer of endorsements and associated catch history from one permit to another. This would apply to both the mothership and shoreside co-op programs. Endorsements could be stacked on a single permit, so long as accumulation limits are not exceeded. There are permit owners that may receive whiting endorsements and nonwhiting fishery QS who may not wish to participate in the whiting fishery. This would allow those individuals to maintain their current permits and divest themselves of the whiting harvest privileges. It would also provide additional flexibility in the system.

Provide a New Processor Linkage Option

The TIQC recommends the addition of a new option in the section on "Co-op Formation and Structure" on page 44 of Agenda Item E.9.a, Attachment 2 (Option 2, below).

Co-op Formation and Structure.

• • • •

During the first two years of co-op formation, permit owners that join a co-op shall be required to deliver their whiting catches to the co-op qualified processors that were the basis of their landing history during the period ***[DATE RANGE TO BE DETERMINED]*** on a pro rata basis. Determination of the processor(s) to which a permit owner is obligated will take into account any successors in interest (see following paragraph). Transfers may take place within the co-op between permit holders to allow a permit holder to make deliveries exclusively to one processor so long as the total allocation received by the co-op, based on the permit holders that are members thereof, is distributed between the various co-op qualified processors on a pro rata basis based on the landing history of the members of the co-op during the period ***[SAME AS PREVIOUS DATE RANGE]***.

OPTION 1 (EXISTING LANGUAGE) Thereafter, once a CV(SS) permit has participated in the non-co-op fishery for ***[OPTION: 1 to 5]*** consecutive years, it is released from its delivery obligations to the processor(s) that were the basis of its history, and may join any of the various co-ops, or join with other permit holders who have also been released from delivery obligations to form a new co-op, and deliver to any shoreside processor in the subsequent years after the SSPs have expired.

OPTION 2: Thereafter any CV(SS) permit participating in a co-op is linked indefinitely to the processor they are delivering to under the initial linkage requirements. The permit can sever that linkage by participating in the non-co-op fishery for a period of ***[1 to 5 years]*** years. After completing their non-co-op obligation, the permit is then free to reenter the co-op system and deliver to a processor of their choosing. Once the vessel reenters the co-op system and elects to deliver their fish to a processor, a new linkage is then established with that processor. Should the permit later choose to break that new linkage, the non-co-op participation requirements again apply.

Should a permit elect to enter the non-co-op fishery within the first two years of this program, that permit must participate in the non-co-op fishery for a minimum of ***[two to five years]***, regardless of other non-co-op participation requirements applying elsewhere in this document.

Once the permit meets that obligation and later elects to enter a co-op, all provisions of co-op participation, including the processor linkage provisions, apply.

Summary: IFQ Alternative

1. Include an Option to Create Bycatch Pool Instead of IFQs for Whiting Bycatch (at-sea sectors only) (Section A-1.1 and A-1.5).
    a. Rational for Bycatch Pool Creation Provided.
    b. Provide Options for Managing the Bycatch Pools.
    c. If Three Sector Option is Selected (not four sector option), Apply Bycatch Pools to At-sea Sectors Only.
2. Maintain Option for Equal Sharing of Buyback QS Among All Catcher Vessel Permits (A-2.1.3).
3. Move Forward with Consideration of Electronic Logbooks and Monitoring to Allow Split Loads (A-2.3.1) (Separate Process, Implement by the Time IFQ Program is Implemented).
4. Eliminate Option for Minimum Holding Requirements (A-2.2.1).
5. Provide an Option to Extend Time (more than 30 days) for Coverage of Catch with QP when within Carryover Limits (A-2.1.1).
6. Provide an Option to Increase the Carryover of an Underage from 10% to 30% (A-2.2.2b).
7. Change Accumulation Limits Options for Shoreside Whiting and Eliminate the 50% Rule for Ownership Affiliation for Mothership Whiting Sector (A-2.2.3e).
8. Move Forward with Consideration of Adaptive Management Option but Do Not Apply to Whiting Fishery (includes minor changes to language) (A-3).
9. Concur with Halibut IBQ Options (A-4).

Summary: Co-op Alternative

1. Provide an Option for Separation of the Whiting Co-op Endorsement from the Permit.
2. Provide a New Processor Linkage Option.

PFMC
06/14/07

TRAWL INDIVIDUAL QUOTA COMMITTEE (TIQC)
REPORT TO THE GROUNDFISH ALLOCATION COMMITTEE
MAY 2007

The TIQC met May 2-3, 2007, to review and further develop alternatives under analysis. The TIQC has the following comments and recommendations.

Individual Fishing Quota (IFQ) Alternative

Recent Participation Requirement
The TIQC recommends that the Council drop the recent participation requirement as an option for vessel permits, including those for catcher-processors (CP) (some analysis would be maintained to document its consideration). There were only a few permits not meeting the recent participation requirement and they had very small amounts of associated catch history, therefore elimination of a recent participation requirement will make little difference in the allocation formula. A recent participation requirement for the shoreside processor sector and the mothership processor sector should continue.

The TIQC recommends that the following recent participation requirement be specified for the mothership sector: 1,000 mt processed in each of any two years from 1998 – 2004. This level of participation indicates that a processing vessel was providing a real market for catcher vessels, rather than just taking a few codends over the side while pursuing other activities. It is the same as that specified for the mothership sector under the Co-op Alternative. Development of a recent participation requirement option for shoreside processors is pending the needed quantitative analysis.

Equal Allocation Based on the Harvest History of Buyback Permits
The TIQC reiterates its recommendation that an option be analyzed that is based only on harvest history (i.e. an option with no equal sharing of buyback permit history). The other option would continue (i.e., equal sharing of the quota share (QS) pool associated with the history of the buyback permits plus allocation of the remaining QS to each permit based on that permit's history). The QS pool associated with the buyback permits will be the buyback permit history as a percent of the total fleet history for the allocation period. The calculation will be based on total absolute pounds with no other adjustments. The TIQC recommends that analysis of intermediate points be included as necessary to ensure that the Council may select an intermediate option (an option between an equal sharing of all buyback permit history and no allocation based on buyback permit history).

The TIQC discussed but did not take action on the ability of whiting sector participants to transfer to non-whiting sector participants any species of groundfish not associated with the whiting fishery (such as Dover sole). Whiting participants might receive an allocation of such species as a result of equal allocation of the buyback permit pool. The TIQC also discussed the ability of non-whiting participants to land whiting allocated to them as part of the same equal allocation portion of the formula.

Overfished and Bycatch Species
The TIQC recommends adopting for analysis a revised proxy species option for the initial allocation of overfished species to the non-whiting sector: allocate overfished species QS using fleet average bycatch rates applied to each permit's target species QS allocations. The target species QS allocation would be based on the standard allocation formula. For permits, this allocation is currently specified based on 1994-2003 permit history. Fleet average bycatch rates for the areas shoreward and seaward of the Rockfish Conservation Area (RCA) would be developed from West Coast Observer Program data for 2003-2006. For the purposes of the allocation, it would be assumed that a permit's QS for each target species would be distributed shoreward and seaward of the RCA based on the fleet average for that species, derived from logbook information for 2003-2006. Both the fleet bycatch rates and the distribution of fleet target catch would be stratified by latitudinal area.

The TIQC recommends Section A-1 of the IFQ program be modified to add consideration of an option that would not require IFQ for bycatch species in the whiting sector. If IFQ is not used for bycatch species, add options that would allocate bycatch at a (a) fishery level, (b) sector level, or (c) co-op level. Bycatch would be allocated to a sector or co-op based on one of the following options (a) *pro rata* in proportion to the whiting allocation, or (b) weighted historical catch formula (for example, in projecting bycatch in the whiting fisheries prior to the start of the season, the Groundfish Management Team (GMT) uses a four-year weighted average starting with the most recent year: 40%, 30%, 20%, 10%).

TIQC members expressed concern that the initial QS allocation may need to be adjusted when a stock is rebuilt, to facilitate targeting by traditional participants, and discussed possible consideration of reallocation of a selected list of species in 5-6 years or as stocks are rebuilt. Staff was asked to consult with NOAA General Counsel about the feasibility of such a framework for future reallocation. It was noted that if bycatch of overfished species for the whiting sector is distributed as pools available to fisheries or sectors instead of being allocated as transferable QS, those stocks could be redistributed as appropriate when they are rebuilt.

Allocation Formula for the Catcher-Processor Sector
The CP representative reported that Option 2, "Permit history for 1994-2003 (no option to drop years) and using relative pounds" is acceptable to all participants in the CP sector. The CP representative recommends deletion of Option 1, "Schedule developed by unanimous consent of catch processors."

Accumulation Limits
For the IFQ alternative, adopt the following accumulation limit options for the CP sector: Own or control limit: 50%, 55%, or 60%. For the permit accumulation limit: 65%, 70%, or 75%.

A draft definition of the *own or control accumulation limit*, along with example interpretations of "direct and indirect control," was presented to the TIQC. The TIQC noted that they may want to recommend changes to those examples to make them more specific and applicable to this fishery.

Adaptive Management/Holdback
The TIQC received a presentation from Environmental Defense on an adaptive management option. The option had not been completely developed and the TIQC does not have a recommendation on the option at this time.

Monitoring Program
The TIQC strongly recommends that real-time accounting be a required component of the trawl rationalization program. With current technologies, this likely means 100 percent at-sea catch monitoring, but the monitoring program should be able to adapt to incorporate new technologies that may be more cost effective. Complete individual accountability is key to the conservation and economic benefits expected from the program. By allowing access to a higher proportion of target fish per unit of overfished species, the trawl rationalization program is anticipated to allow for greater utilization of the available groundfish resource than can currently be accomplished. However, this access is contingent upon 100% at-sea catch monitoring that will give a fisherman individual accountability for their bycatch. The TIQC also recognizes the costs associated with full coverage. However, if quota has value, which is increasing, a quota owner should have responsibility to protect that by paying for it.

The TIQC recommends including in the monitoring program an option that requires 100 percent shoreside monitoring and allows the catch of a given trip to be unloaded at more than one location. Flexibility in offloading will allow for more innovation in marketing.

The TIQC recommends adding an option to the monitoring program that requires electronic logbooks. Electronic logbooks would be a valuable component of a viable camera monitoring system.

Co-op Alternative

At the start of the co-op alternative, there is a section covering management of the whiting fishery under co-ops. This section includes provisions that would have applicability to all whiting sectors. A new option should be added which would allocate bycatch among the whiting sectors based on a four year weighted average similar to that suggested by the GMT at the March Council meeting (Agenda Item E.3.b, March 2007) or some other formula based on historical performance. The GMT suggestion would have applied the following weights to the four year average (starting with the most recent year): 40%, 30%, 20% and 10%.

Also in this section, provide and option which would establish a 10% reserve of the whiting sector bycatch allocation as a set aside for use by those (sectors, coops, or individual vessels) with bycatch rates at or below a predetermined rate.

Mothership Sector Co-op Alternative
The TIQC recommends incorporation of the revisions to the mothership co-op alternative that were presented to the TIQC (and including subsequent changes based on TIQC comments during the meeting.) This alternative will be provided separately to the GAC. The revisions included the specification of two options for co-op formation and the inclusion of the "golden rule." The new insertions are underlined.

Co-op Formation. Co-ops will be formed among coefficient of variation (CV) (MS) permit owners.

Option 1 (Multiple Co-ops): In the first year of the program, permit owners choosing to participate in a co-op must form those co-ops based on the mothership where the CV permit holders delivered the majority of their most recent years' catch. A separate co-op must be formed for each mothership to which deliveries were made. Co-op agreements will be submitted to NMFS. In subsequent years, multiple coops are required to be formed based on the processor where CV permit holder delivered the majority of their most recent years' catch.

Option 2 Multiple co-ops are not required. Catcher vessels may organize a single co-op or multiple co-ops of like-minded catcher vessels. Vessels within the co-op(s) would have separate contracts with the processor to whom they are delivering. Permit owners choosing to participate in a co-op must register annually with NMFS and express their intent to be a member of the co-op at a date certain prior to the start of the fishery. In the first year of the program, permit holders are required to deliver their percentage of the co-op allocation to the mothership where they delivered the majority of the most recent years' catch.

Co-op agreements must stipulate that catch allocations to members of the co-op be based on their catch history calculation distribution to the co-op by NMFS ("The Golden Rule")

Mothership Sector Co-op Accumulation Limits. The TIQC recommends that the following accumulation limit options be adopted for the mothership co-op alternative. Mothership permit ownership limit: No individual or entity owning a mothership permit(s) may process more that 20%, 30%, or 50% of the total mothership sector whiting allocation. Catcher-vessel (mothership delivery) permit ownership limit: No individual or entity may own catcher-vessel (mothership delivery) permits for which the allocation totals greater than 10%, 15%, or 25% of the total mothership sector whiting allocation.

Shoreside Sector Co-op Alternative

The TIQC recommends incorporation of the revised shoreside whiting co-op alternative that was presented to the TIQC (and including subsequent changes based on the TIQC's comments). Among these is a clarification in the section on "shoreside permit transfers" that the shoreside processor permits are only in effect the first two years of the program. This alternative will be provided separately to the GAC.

Catcher-Processor Sector Co-op Alternative

It was reported to the TIQC that the CP alternative will not likely be classified as a limited access privilege program as defined under the Magnuson-Stevens Fishery Management and Conservation Act. The alternative being considered by the Council would create a closed class of catcher-processors but not a specific allocation to those choosing to participation in a catcher-processor co-op. This alternative will be provided separately to the GAC.

The CP representative has recommended changing the qualification years for the CP endorsement from 1997-2006 to 1997-2004.

PFMC 05/25/07

Agenda Item E.9.d
Public Comment
June 2007

ASTORIA HOLDINGS, INC.

March 8, 2007

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Pacific Management Council

Our company opposes any plan to restrict access for processing Pacific Whiting to a select group under a rationalization plan. It is our position that all fish plants should have the option to participate in the Pacific Whiting Fishery at any time. Limiting this option will only result in the restriction of economic benefits to local companies, which may need access to this fishery.

Regards,

Jerry Thon
Astoria Holdings
Astoria, Oregon

One 9th Street, Astoria, OR 97103 (503) 338-1288
Mailing Address: 12 Bellwether Way #209, Bellingham, WA 98225

NRDC
THE EARTH'S BEST DEFENSE

March 16, 2007

BY EMAIL and U.S. MAIL

Dr. Donald McIsaac, Executive Director
Pacific Fishery Management Council
7700 NE Ambassador Place, Suite 101
Portland, OR 97220
Email: pfmc.comments@noaa.gov

RE: Trawl Rationalization (Trawl Individual Quotas (TIQ) Program)

Dear Dr. McIsaac and members of the Council:

Thank you for the opportunity to talk to you at the Sacramento Council meeting last week. Design of the Trawl Individual Program (TIQ) Environmental Impact Statement (EIS) is making good progress, which is exciting and clearly represents significant effort from many of you.

We are pleased to be taking part in the TIQ process on behalf of Natural Resources Defense Council (NRDC)'s more than one million members and activists. Our interest in participating is to ensure that there are adequate conservation measures in the TIQ program so that it yields not only economically but environmentally sustainable results.

For the sake of clarity we are providing here in writing the comments we made at the public comment section on item C.4 Trawl Rationalization (Trawl Individual Quotas (TIQ) Program) on March 8, 2007.

The following are our priority concerns for the TIQ program and EIS design. We are glad to note that some of these now appear to be going forward in the EIS, specifically:

- 100% observer coverage (or equivalent).

  We further urge inclusion of higher dockside accounting and monitoring provisions in the EIS.

- Hard sector bycatch caps with stringent overage limits.

- Gear switching flexibility.

  To ensure the conservation benefit of gear switching, we request that the gear switching be specified towards ecologically-friendly gear.

- Area-based management to be considered as an option in the EIS.
- Consideration of processor alternatives based on the Jim Wilen study which warns against providing permanent compensation for what may prove to be minor or temporary economic impacts on processors, without documentation of those losses.

In addition, we appreciate your decision not to put forward a use-it-or-lose-it provision. Not only would such a provision be cumbersome to implement and oversee, we believe it would violate portions of the Magnuson-Stevens Act. Specifically, it would be inconsistent with the rebuilding requirement as interpreted by the Ninth Circuit to rebuild as quickly as possible absent disastrous economic consequences, as well as violating the bycatch requirement to reduce bycatch to the extent practicable. Thank you for your decision on this.

The following NRDC priorities do not yet appear to be a part of the TIQ design and we urge their inclusion:

- An incentives TAC allocation, which could be used to further the following management objectives:
    - Community stability
    - Bycatch reduction
    - Experimental fishing techniques

  Much is unknown about how implementation of the TIQ program will affect various aspects of the groundfish fishery. It is important to preserve options at the design stage of the process to give the Council flexibility to address unanticipated effects since legally it could be quite difficult to do after the program is up and running.

- Auctions as an allocation method in the EIS, especially now that auctions are expressly permitted under the Magnuson-Stevens Act.

  Consistent with the fact that a TIQ system is a market-based approach to allocating fish, auctions as an initial allocation method should be considered in the EIS. We believe it could be effective to structure a tiered auction, including categories for different size vessels and a cap on consolidation. Auctions also have the benefit of returning more of the real value of the public resource to the public trust and providing start-up management funds. Tiered lotteries can provide many of the same benefits as auctions without forcing the Council to reward or punish individual fishers. We therefore ask that auctions and lotteries be analyzed in the EIS.

- Cost-sharing for research, management, and enforcement.
- Fishing impact research on unassessed species and ecosystem attributes as a required feature of a TIQ program.
- Protocol for data collection and reporting.
- Recognition of the public trust nature of the ocean resource through assessment and capture of transfer fees when quota is sold.

Thank you for all your work on the TIQ program. We understand that it is a complex, involved process and we look forward to a productive collaboration going forward.

Sincerely,

Karen Garrison

Laura Pagano

e

ENVIRONMENTAL DEFENSE

finding the ways that work

May 9, 2007

Mr. Donald K. Hansen, Chairman
Pacific Fishery Management Council
7700 NE Ambassador Place
Suite 101
Portland, OR 97220-1384

Shaping Alternatives for the West Coast Groundfish Trawl Rationalization Program

Dear Chairman Hansen and members of the Council:

We write to applaud your continuing efforts to develop an IFQ program for the West Coast trawl groundfish fisheries. Environmental Defense strongly supports a well-designed IFQ program and we are optimistic that your efforts will result in substantial conservation benefits to ocean ecosystems and the fishery itself, as well as economic benefits to the harvesting and processing sectors and their communities. We pledge to continue working with you, fishery managers, and other stakeholders to design and implement a well-crafted program.

We also write to offer constructive suggestions that may help avoid potential obstacles as you continue with your efforts, specifically with regard to potential processing sector impacts. We cannot underscore enough the importance of taking a balanced approach on this issue, which could make or break the success of this extremely important fishery reform effort.

A single approach that allocates in perpetuity harvester quota to processors as a means to address unsubstantiated claims that the IFQ program will "strand capital" has become a stumbling block to a well-designed IFQ program. In addition, there are fundamental problems with an approach that presupposes that an adverse impact (stranded capital) will occur in the absence of any evidence, and that embraces a structural and permanent response to a problem that is by nature transient and should (if it exists) be solved through a one-time compensation. Finally, Environmental Defense remains concerned that any presumption by the Council or NOAA that the processors must get an allocation of quota could undermine the economic and ecological objectives of the IFQ program, and set damaging precedent for efforts to rationalize troubled fisheries in other regions of the country.

We wish to recommend some important refinements to the range of alternative approaches to the issue of stranded capital in the processing sector. We strongly believe that: (1) the processing industry needs to demonstrate, through rigorous analysis, that stranded capital is a problem before any attempt is made to address stranded capital; (2) the range of alternatives would be greatly strengthened if it were to encompass some of other available tools and methods for addressing the issue of stranded capital; and (3) the general approach should emphasize flexibility and adaptation to real problems rather than structural, hard-to-change solutions to undemonstrated problems. Currently, the alternatives propose to examine the use of one tool –

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initial processor allocations – and then shape the alternatives around the variations in the percentage size of that initial allocation.

This approach is far too narrow. It will simply not enable the Council, the National Marine Fisheries Service (NMFS) or the public to examine a robust range of options to the problem of potential adverse economic impacts and then make a well informed choice on the ultimate solution. Nor will it allow the Council, NMFS, or the public to evaluate possible trade-offs between alternative regulatory responses to stranded capital concerns on the capacity of the IFQ program to generate the desired changes in the fishery. We therefore recommend the following:

First, include within the EIS one alternative which reflects the possibility that stranded capital will be either non-existent or minimal and therefore provides no compensation mechanism. Second, develop a separate alternative which assumes that capital may be stranded but addresses this impact as an issue of compensation rather than quota allocation, since compensation is the crux of the matter at hand. Finally, when designing the compensation alternative and determining how to approach the analysis, we encourage the Council to take the following features into consideration:

> **Base compensation on fact, not speculation.** After implementation of the program, require claimants to demonstrate that the rationalization of the groundfish trawl fisheries has resulted in identifiable economic harm, and require that they make their case based upon empirical documentation of the losses, including demonstration that there are no other uses or resale value associated with the assets in question. The alternative should spell out simple, objective criteria which, if met, would require compensation to be paid. This showing of actual damage would ground the issue on a transparent, defensible, factual foundation and ensure that the remedy is properly tailored to the harm.
>
> **Make compensation a one-time solution to a one-time problem**. Set a time-definite transition period for the filing of compensable claims, and then sunset the program.
>
> **Use alternative funding mechanisms to finance the compensation.** We recognize the challenge of funding any stranded asset claims that may arise, and wish to offer some suggested mechanisms. One such mechanism might be to "tax" a percentage of permanent transfers of quota shares, and use the proceeds to fund the stranded-asset compensation pool. A second approach might be to seek Federal appropriations for a temporary fund, the remainder of which could be rolled over into program implementation once the sun had set on the program. A third approach might be to capitalize the compensation program through the lease of a certain small percentage of quota "hold-back" – that is, a small percentage of quota that is not allocated out to the industry in the initial allocation but held in reserve. Once the period for stranded capital claims had expired, this reserve quota could then be reallocated out to the quota holders in proportion to the initial allocation, or alternatively, held back and used to enhance the Council's ability to meet other objectives of the rationalization program.

At this juncture, the most important objective for the Council and NMFS is to shape a responsible range of alternatives that can then be further analyzed and vetted through the NEPA process. Environmental Defense strongly believes that the recommendations provided herein will help achieve that objective, and we are willing and eager to work with you and your staffs in further shaping these concepts. We can then proceed with confidence that the alternatives will

reflect a well-considered range of options which will preserve the opportunity for you and NMFS to make good decisions at the end of the day. We stand ready to work with you toward that objective.

Sincerely,

Johanna Thomas
Oceans Program Director, Pacific Region

Enclosure: Jim Wilen presentation on stranded assets

cc: PFMC Council Members
Dr. William Hogarth
Mr. Bob Lohn
Mr. James Connaughton
Senator Daniel Inouye
Senator Ted Stevens
Rep. Don Young
Rep. Nick Rahall
Senator Gordon Smith
Senator Ron Wyden
Senator Maria Cantwell
Senator Patty Murray

Stranded Capital in Fisheries

Jim Wilen
Department of Agric. & Resource Economics
University of California, Davis
March 2007

Questions

- What is stranded capital?
- How has stranded capital been treated in other policy settings?
- What are the potential effects on processors of IFQs?
- When are stranded costs likely to be significant?
- What are the arguments for considering these effects?
- How should we measure stranded capital?
- What mechanisms can be used to address impacts?

Stranded Capital: the Policy Context

- Notion arose during electricity deregulation of 1990s
- Utilities argued: investments/contracts induced by old regulations and unprofitable under new policy of deregulation were "stranded"

Responses to Stranded Capital Compensation Arguments In Other Industries

- Regulatory response
  - Compensation was not an issue in trucking, airlines, banking, and natural gas deregulation
  - Large size of stranded capital claims in electricity; ongoing debate over compensation is holding up some deregulation
- Legal responses
  - Courts have not supported notion of breach of "regulatory compact"
  - Courts have not upheld idea that failure to compensate is a "takings"
- Economists' responses
  - Risk of deregulation and its impact already taken into account in capital investment decision, so stranded capital has already been compensated
  - Compensation a distributional decision; unlikely to promote efficiency
- Wilen's stance
  - We should at least attempt to measure all benefits/costs of regulatory changes including, if important, stranded capital losses

Stranded Capital in Fisheries

- Notion first appeared in Alaska crab rationalization debates
- Backdrop: halibut experience in BC and Alaska
  - Pre ITQ: derby, compressed season, frozen product, concentrated processing, isolated processor locations
  - Post ITQs: fresh product, longer season, slower pace, new markets and new buyers,niche handlers
- Argument: crab processors needed protection
  - Stranded capital will become worthless
  - Owners of such capital will suffer losses during transition
- Alaska crab rationalization
  - Intricate scheme of processor IPQs, locked-in delivery options
  - No attempt to actually measure potential stranded capital

Likely Impacts of IFQs on West Coast Groundfish Processors

- Non-whiting Groundfish
  - Model: BC groundfish IFQ program vs. BC halibut
  - Value added opportunities for incumbents
    - More uniform harvesting--elimination of surges
    - More allocation to higher valued fresh markets
    - Market deepening--uniform supply, reliability, product specs
    - Continued use of hand fillet processing
    - Landings coordination with harvesters
  - Moderate entry of new handlers--niche development, market broadening, diffused community handling
- Inshore Whiting
  - Model: Alaska pollock fishery
  - Slower paced and longer fishery
    - Optimized raw fish condition
    - More product recovery
    - Increased product form flexibility

Preconditions for Stranded Capital to be a Significant Problem

- Major change in product form that can be ascribed specifically to change in regulations
- Contributing economic factors
  - Highly compressed derby fishery
  - Highly competitive processing sector
- Technological factors
  - Processing is capital intensive
  - Capital is specialized to one species
  - Capital is specialized to one product

Stranded Capital in the Pacific Coast Groundfish Fishery?

- **Groundfish: conditions differ from Alaskan halibut and crab fisheries**
  - Trip limits have been implemented to prevent derby conditions
  - Product flow spread over season with only small surges
  - Delivery agreements and coordination in place
  - Processing plants not isolated from markets and transportation network
  - Not likely to be a regulation-induced shift in the center of fishing activities
  - Fishing, processing and marketing in close proximity
  - Markets developed for diversity of products already
  - Highly concentrated processing sector
- **Therefore: preconditions for significant stranded capital do not seem to exist.**

Stranded Capital in the Pacific Coast Whiting Fishery?

- Some conditions similar to pre-AFA Alaskan inshore pollock:
  - Race to fish
- Conditions differ in other ways:
  - Shoreside processing more highly concentrated
  - Mixed product forms already developed
  - Strong markets for fillets, weakening surimi markets
  - Surimi product quality differences
  - Processing plants not isolated from markets and transportation network
  - Fishing, processing and marketing in close proximity
- Conclusion: may be more likely than in bottomtrawl groundfish; but stranded capital value not likely to be high

Compensating Stranded Processor Capital: for and against

- Arguments for: failing to compensate is unfair
  - Causes capital value losses to owners
- Arguments against: compensating causes future inefficiencies
  - Sunk capital already compensated in original investment
  - IFQ compensation gives processors market power; increases bargaining strength vis a vis harvesters
  - Compensation gives incumbents advantage over prospective entrants
  - freezes existing patterns of harvesting, marketing, products
  - Compensation encourages future holdup of other IFQ programs

Measuring Stranded Capital Costs

- Distinction between costs of capital and value of capital
- Value of capital depends upon its next best alternative use
- Examples of capital in groundfish/whiting processing:
  - Land and warehouse space---not stranded capital
  - Storage space---generally contracted out; not stranded
  - Offloading, pumps, chilling tanks--excess capacity possibly stranded
  - Flash freezing---excess capacity possibly stranded
  - Filleting/surimi machine---not stranded if caused by market shift
- Attributing stranded costs
  - Policy relevant stranded capital (example: unused surimi machines caused by market shift to fillets is not policy-induced stranded capital)
  - Apportioning shared capital (e.g., if freezing capacity used for multiple fisheries must apportion value between fisheries to isolate whiting portion in excess)
- Key question: exactly what capital becomes "worthless" as result of regulatory change?

Mechanisms for Compensating Stranded Capital Costs in IFQ Fisheries

- Granting permanent IFQ allocations to processors
- Lump sum compensation
  - Grants
  - Loan and landings tax
  - Loan and transfer tax on IFQ transactions
- Processing/harvester lock-in
  - landings requirements (sliding, sunset)
- Fractional set-aside of IFQ
  - Auctioned to generate compensation fund (sliding, sunset)

Important Administrative Process Issues

- Importance of measurement
- Burden of proof: tying to stranded capital value
- Codification of definitions/accounting procedures
- Setting a threshold; transactions costs
- Assessing spillovers
  - Altering power balance between harvesters and processors
  - Creating incumbent advantages
  - Precedent
- One time resolution vs. permanent distortion

Summary

- Little precedent for compensating stranded costs
- However, good policy making requires informed decisions, including understanding potential losses
- The preconditions to generate significant stranded costs in Pacific Coast non-whiting groundfish fishery do not seem present
- Possibly an argument for whiting but value of stranded capital not likely to be high
- Burden of proof should rest with industry to make explicit estimate of verifiable stranded capital losses
- Bad policy to make a "guess" about numbers, and then lock in a permanent distortion of IFQ system
- Currently suggested fixes seem implausibly high--eg 50% whiting IFQ allocation implies 45 million dollar capital losses*, an amount greater than likely value of **total** whiting processing capital

*based on total IFQ asset value of whiting of approx $90 million

What Is the Real Problem Here?

- Is the issue really stranded capital? Or is it:
  - Capturing the rents--groundfish
    - 30,000 MT x 2200=66,000,000 lbs
    - BC mixed prices: 0.25 lease; 3.00 sale
    - $16,500,000 lease market
    - $198,000,000 asset value
  - Rent Estimates--whiting
    - 85,000 MTx2200=187,000,000 lbs
    - Alaska prices (adj): 0.04 lease; 0.48 sale
    - $7,500,000 lease market
    - $90,000,000 asset value
- Bargaining Power: processors vs. harvesters
- Reducing competition for incumbents

May 21, 2007

Mr. Donald Hansen, Chairman
Pacific Fishery Management Council
770 NE Ambassador Place
Suite 101
Portland, OR 97220-1384

Trawl Rationalization Program: Include OSHUA for Analysis

Dear Chairman Hansen and members of the Council:

This is a request that the Optimum Species-Harvesting Unified Allocation (OSHUA) plan is included in the list that will be analyzed for the trawl rationalization program. A copy of the OSHUA plan, dated May 14, 2007, has been submitted.

This Council was short-sighted when it created the Trawl Individual Quota (TIQ) committee. The TIQ committee was given a purpose and goal of developing options that are primarily focused on economic improvement for the trawl component of the groundfish fishery. All of the options produced by the TIQ committee reflect this charge.

Instead of creating a TIQ committee this Council would have been acting responsibly by creating a Sustainable Groundfish Management committee. The goal for this committee would have been to produce options for implementing a truly sustainable management plan for all groundfish sectors including: landing all marketable bycatch and thus prevent overfishing, minimizing discard of non-marketable bycatch, minimizing habitat destruction, and creating a healthy economic environment for all parts of the commercial fleet: trawl, non-trawl, and open-access.

There seems to be an impression that the OSHUA plan does not offer any significant or improved features when compared to the TIQ committee options. Nothing could be farther from the truth.

The OSHUA plan focuses primarily on developing a sustainable plan with no overfishing. Economic benefits to the fleet, to communities, and to processors will proceed from implementation of sustainable management. More fish will benefit fishermen and processors alike. In contrast to the OSHUA plan, all of the TIQ committee options focus on how to privatize projected future allowable catches. The OSHUA plan demonstrates that a plan incorporating individual responsibility need not privatize the resource.

The TIQ committee options focus first and foremost on privatization of the fishery. The focus is on creating wealth for some fishermen. Developing a management regime that will produce a sustainable fishery are secondary concerns. Upon implementation of the TIQ preferred option, instantaneous wealth will occur for some fishermen regardless of their sustainable fishing practices.

The OSHUA plan focuses first and foremost on developing a sustainable management regime. Privatization is not part of the OSHUA plan. Increases in wealth will proceed over time to individual fishermen in direct proportion to their sustainable fishing practices.

Other key features of the OSHUA plan are:

* Distributes allocations for overfished species equitably, while TIQ committee options disadvantage one group or the other
*Allows annual allocations for overfished species to be purchased by any permit within the composite commercial groundfish fleet, while TIQ committee options prevent this by confining trading of allocations to within a sector
* Eliminates 5 annual commercial sector allocations
* Allows gear switching from trawl to non-trawl, but not the opposite
* Annual allocations can be fished anywhere in the Pacific Council's EEZ
* The pacific whiting fishery will operate under the same rules as the rest of the fleet
* Absolute catch limits for the recreational fishery are part of this plan
* Promotes shorter tows, minimizing bycatch, discards, and habitat degradation
* It is consistent with the limited access provisions of the law
* It is consistent with the sustainability requirement of the law
* Maximizes benefits to the nation
* Has minimal ownership requirements and has no need to track transactions
* Can be implemented more quickly than any other option
* The OSHUA plan is less expensive than any of the TIQ committee options, for development, implementation, and ongoing operations.

Since the OSHUA plan includes features that will produce a sustainable groundfish fishery, since it does include individual responsibility, since it does allow for an annual catch allocation marketplace, and since its features are distinctly different than those included in the TIQ committee options, I request that you include the OSHUA plan in the list of trawl rationalization options that will be analyzed.

Sincerely,

William Daspit

Comments of Environmental Defense

PFMC June Meeting
Agenda Item E.9b
May 23, 2007

At its May meeting, the Groundfish Allocation Committee recommended adopting several additional alternatives to address potential impacts on processors due to the transition to IFQ management. One of these alternatives would compensate processors for proven impacts instead of granting quota shares to processors in perpetuity. We wholeheartedly support this alternative and urge the Council to include it in the analysis.

Environmental Defense's interest is in securing an IQ program that is fair and equitable, and that can be a model – with positive precedent for future IQ programs in other regions. Our ultimate goal is that the program succeed from environmental, economic and social perspectives.

The adoption of a compensation alternative, coupled with the other new options designed to mitigate impacts on processors, signals a positive shift toward a more comprehensive range of alternatives. The new options, which include granting quota shares that sunset, granting quota shares limited to accumulation caps, using a quota holdback to ensure benefits for affected processors and communities, or creating a fund for compensation are all methods that can be used to fairly deal with processor claims. Including these alternatives in the analysis is a substantial move in the right direction regarding how processor claims should be evaluated and will avoid the problematic presumption that permanent allocation of quota is the appropriate method to address stranded asset or other claims.

We believe the compensation alternative should include the following important features:

1. Compensation should be based on fact, not speculation. Require claimants to empirically demonstrate losses that can be tied specifically to the transition to the TIQ program and can be verified by an independent auditor.
2. Make compensation a one-time solution to a one-time problem. After a certain time period in which claims could be filed, the program should sunset.
3. Use alternative funding mechanisms to finance the compensation. Some possible approaches would be to auction a small portion of quota and use proceeds to fund compensation or, alternatively, modify the adaptive management incentive system to allow temporary quota leases to cover stranded capital claims. The adaptive management incentive system could also be used to address processors' concerns about losing access to fish.

To summarize, Environmental Defense supports the additional alternatives recommended by the GAC and believes that they will result in a more robust analysis of potential processor impacts from transitioning to IQ management and ways to document and mitigate negative effects. We strongly support treating processors' valid concerns fairly,

but we oppose having the Council come to a presumptive conclusion that the only remedy is an initial allocation of quota without a robust analysis of a full range of reasonable alternatives to address these concerns.

Local Economic Contributions by West Coast Groundfish & Whiting Processors

Analysis by Globalwise Inc.

For West Coast Seafood Processors Association

Agenda Item E.9.d
Supplemental Public Comment PowerPoint Presentation
June 2007

Question to Address:

What do shore-based processors of groundfish & whiting add to the local economies in each state ?

General Approach

- Survey the groundfish & whiting processors in CA, OR & WA to collect 2006 employment and major expenditures data
- Pool & present the proprietary data by state
- Present only direct economic impacts (no multipliers)
- 13 processors in the three states participated

Employment Data – Groundfish Only

	CA	OR	WA	Total
Total Persons	777	1,125	227	2,129
Total Hrs	380,783	663,269	202,084	1,246,136
Total Payroll	$6.07 Mil	$10.06 Mil	$3.78 Mil	$19.91 Mil

Employment Data – Whiting Only

	CA	OR	WA	Total
Total Persons	140	963	1,092	2,195
Total Hrs	62,669	420,749	917,040	1,400,458
Total Payroll	$1.18 Mil	$5.98 Mil	$9.48 Mil	$16.64 Mil

Employment Data – Groundfish & Whiting

	CA	OR	WA	Total
Total Persons	777+	1,125+	1,092+	2,994+
Total Hrs	443,452	1,084,018	1,119,124	2,646,594
Total Payroll	$7.25 Mil	$16.05 Mil	$13.26 Mil	$36.56 Mil

Employment: Fishermen & Processing – Groundfish Only

Total Vessels in 2006	123
Average Crew	x 4
Total Employment	492

Ratio of Fishermen to Processors: 492 : 2,129

For each fisherman there are 4.3 shore-side processing employees

Employment: Fishermen & Processing – Whiting Only

Total Vessels in 2006	35
Average Crew	x 5
Total Employment	175

Ratio of Fishermen to Processors: 175 : 2,195

For each fisherman there are 12.5 shore-side processing employees

Local Purchases of Services – Groundfish & Whiting

Results:

- Utilities (sewer/solid waste & electricity) are major; water is also purchased
- Plant supplies, equipment purchases & repairs were also important
- $20.19 million of local purchases in 2006

Local Expenditures Data – Groundfish & Whiting

	CA	OR	WA	Total
Utilities (Elec., Water, Sewer)	$867,293	$3,679,041	$3,438,781	$7,985,115
Plant Supplies & Other Services	$898,172	$1,056,166	$3,262,189	$5,216,527
Equipment Purchase & Repair	$470,740	$3,711,751	$2,805,172	$6,987,663

Conclusions

1. In all states the processors of groundfish and whiting are major contributors to the local economies

2. Employment is substantial: over 2,990 persons are employed in these fisheries by processors with payrolls totaling $36.5 million

3. Local purchases are also very significant and include utilities as well as locally produced goods and services

Thank You!

Copies of this presentation are available

Bruce Prenguber

Globalwise Inc.

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May 14, 2007

Optimum Species-Harvesting Unified Allocation (OSHUA) Plan Proposal

New problem statement: The PFMC's purpose in this regard is to manage fishing effort in order to produce a sustainable fishery. A sustainable fishery means that overfishing is eliminated, that discards are eliminated for marketable species, and minimized for non-marketable species. In addition, a sustainable fishery is also one that is economically sustainable for the fishing fleet.

Each permit holder will receive an individual annual catch allocation (IACA). There will be annual lists for target species/categories, overfished species (bycatch), and unmarketable by-catch (discards). There will be allocations for each target, by-catch, and discard species. These allocations could be leased or loaned, but not sold. An allocation of available catch for each of these categories will be assigned to each permit annually. The annual catch allocations will be established early enough such that each permit holder would be allowed sufficient time to review and appeal the allocation.

The limited-entry (LE) permit system will continue as is. Permits will continue to be bought, sold, and leased. The scope of this plan encompasses the commercial LE, open-access (OA), and recreational groundfish fisheries. OA vessels will be incorporated into the LE permit system by assigning each OA vessel a non-transferable permit. These OA non-transferable permits will be assigned a gear endorsement based on the vessels dominate gear usage during some Council-determined historical catch period. LE trawl permits could be fished using non-trawl gear, however non-trawl permits could not be fished using trawl gear. An individual person, company, or corporation will be allowed to own a maximum of three LE permits. In addition only American citizens may own a LE permit. The target, bycatch, and discard lists could be changed from year-to-year, but not within a calendar year. The discard list, in addition to discard species, will include target species catch that may be discarded.

The actual allocation method, or rules, for target species would be decided on by the council, with most of this effort being conducted by an allocation subcommittee. The only changes allowed from year-to-year would be for sustainability reasons. The allocation for bycatch will be a function of the target species allocation. Example: if the IACA for permit P1 for target species A = 1% and the OY for bycatch species X is 6 metric-tons (mt) then the IACA for permit P1 for species X would be .06 mt or 132 pounds. Discarded catch will be allocated using a Council-determined amount for each species for each tow or set. Each permit holder will be allowed annual discards for each species not greater than their annual number of tows or sets multiplied by this council-approved discard catch rate. Discarded target species catch will be included in this discard catch limitation. Observer data, being the only source for this information, will be used to compute an average discard per species per tow or set, including target species discards.

Establishing the catch allocation for each target species for each permit could be approached in many ways. Using some compilation of catch data is integral to this plan. An annual historical catch window (AHCW) will be established by Council action. Here are a few suggestions. 1.) Use the most recent three years. 2.) Use the most recent five years. 3.) Use five out of the last ten years. The AHCW for species previously classified as over-fished need not be the same as for target species. For allocation purposes catch harvested with a particular permit would be assigned to that permit indefinitely. So, if a permit is sold, the catch history for that permit would go with that permit. If a landing is assigned to two or more permits the catch will be evenly divided amongst the vessel's permits or apportioned using some other method as determined by the Council.

Deciding on the specific scheme to be used to assign IACA prior to the first year will be rather contentious, as most allocations of this type are. However, once the allocation rules have been established by the Council and implemented via federal regulation, then implementing the rules will be straightforward. These allocation rules will include how catch for future years are incorporated. The allocation method prior to the second year will be essentially the same. However, the AHCW used prior to the second year will have changed since the just completed fishing year will now be part of the AHCW. This allocation method will continue in the same fashion for the third and subsequent years. Although this paragraph describes this process using an annual framework, this process would be exactly the same if the IACA were to be set bi-annually. In a bi-annual system each permit would receive the same IACA percentage during both years.

This plan provides for spatial and temporal closures as necessary to prevent localized depletion. The SSC will recommend the areas that will be closed and when. These closures would be gear specific. The existing rockfish conservation area (RCA) closure would continue as is, assuming the status of the stocks continue to warrant the closure. The intent of this part of the plan is to ensure the area and temporal closures is based on the best scientific information. With a new re-constituted SSC, as mandated by the new M-S FCMA, it is assumed that the SSC will be providing that "best scientific information."

This plan includes absolute catch limits for the PFMC recreational groundfish fishery. The recreational sector will have limits on the number of fish caught for four areas: Washington, Oregon, California-North, and California-South. Each of the states will be required to implementation additional recreational fishing regulations. Daily reporting of catch by species will be required of each angler, including those on party boats, and submitted to each state fishery agency via an electronic data collection system installed at each major recreational fishing port. Each angler will be required to have in their possession while fishing an approved species-identification sheet or booklet. Just as in the recreational salmon fishery, the new regulations will require that each catch is recorded on board when each fish is landed. This daily catch reporting will include number of fish discarded by species.

There will be a fixed allocation for research catch. Using historical catch patterns and research plans for the upcoming fishing year, or biennium, fixed allocations by species

will be set by the Council. During the fishing year, research fishing trips will be regulated, and possibly terminated, in order to prevent exceeding these allocation.

The incidental groundfish catch that will occur in non-groundfish fisheries will have a fixed allocation as well. This sector allocation will be based on historical catch rates by fishery plus the projected number of vessels expected in each non-groundfish fleet.

Ensuring that all catch of overfished species would in fact be landed (not-discarded) would be ensured by 100% observer coverage and video on all vessels, including those with observers. Included with the video observation method will be color tagging of each fish of the by-catch species plus logging each fish immediately upon identification in a log separate from the trawl log. There will be no revenue transferred to the fisher for this by-catch of overfished species.

Un-marketable by-catch would continue to be discarded. Estimates of this discarded catch will be generated via the 100% observer coverage. A good faith agreement between fishers and the Pacific Fishery Management Council will be an effective additional mechanism to minimize discards of un-marketable catch. Each fisher will be asked to sign a statement, prepared by the PFMC staff, whereby the fisher will agree to make every effort to avoid discards. The fisher will not receive his annual allocation unless the agreement is signed. A signed agreement will be required each year. In addition, this good faith agreement will include a section stating that the fisher agrees to record accurate information in their trawl logbook. This agreement would also state that the fisher agrees to keep one, and only one, logbook that documents their fishing activity.

Each fishing vessel receiving an annual allocation will be required to make marine debris removal (MDR) trips. The permit owner will be paid by volume, weight, or some other reasonable measurement. Each permit owner will be required to make a Council-specified number of MDR trips per month. The permit owner may lease his MDR opportunity. The debris will be re-cycled via the existing, or improved, marine re-cycling facilities located at all major ports. Fishing trips and MDR trips would be separate events.

Under this plan there will be one Groundfish Allocation Committee (GAC) with two primary tasks. The first task will be the top level allocation, which will recommend annual allocations for commercial LE, recreational, tribal, research, and incidental non-groundfish fisheries. The allocations for tribal, research, and non-groundfish fleets will be essentially automated. The only negotiated allocations will be the commercial vs recreational allocations. The second task will be overseeing the annual allocation to each LE permit.

This plan includes a provision for a percentage hold-back for new entrants to enter the fishery. Each year the Council will decide whether there will be a hold-back of target species for new entrants and what that percentage will be. Once the fishery has recovered sufficiently such that OF species have been become target species and OYs have increased for all target species then it would be reasonable to expect the Council to withhold some percentage for new entrants.

Discussion:

The following question has been raised many times by many reviews. Why allocate annually using the OSHUA model and not allocate one-time only as a transferable IFQ (TIFQ) model would? First of all, OSHUA is an individual fishing quota (IFQ) plan. It also qualifies as a limited access privilege (LAP) as defined by the M-S FCMA of 2006.

The issue at the center of this question is one of fairness and also one of sustainability.

The OSHUA model will produce much more equitable allocations while the TIFQ model will not. Because over-fished (OF) species IACA is distributed equally relative to target IACA all participants will be required to avoid OF species on an equal basis. Whereas the one-time allocation in the TIFQ model requires that the OF species QS be based on historical catch, which will produce very unequal OF species QS relative to target QS. This inequality will force many fishers to lease or sell their target QS almost immediately. The one-time nature of the TIFQ QS allocation will not allow many of the permit holders to ever recover from this initial one-time unequal allocation of OF species. However, the OSHUA IACA for OF species will allow fishers to prosecute the target species on an equal basis. Unfair management regulations, including an unfair initial one-time allocation, are one of the reasons some fishers will engage in unsustainable fishing practices. The fisher feels marginalized, victimized, and proceeds to discard good fishing practices.

The other possibility is that a TIFQ implementation might include a one-time OF species QS using the QS for the target species. This is unlikely, but possible. This would allow for an equitable sharing of OF species QS. But once the OF species becomes a target then the one-time allocation is now grossly unfair since it does not reflect the permit's catch history of the target species prior to the period the species was over-fished.

The OSHUA plan allows for the changing status of a species: from OF to target and target to OF, while the TIFQ model does not. The sustainability of this particular fishery is dependent on the ability to discriminate between target status and OF species status when granting allocations.

The Magnuson-Stevens Fishery Conservation and Management Reauthorization Act of 2006 (Act) states in section 303A that a Council may submit, and the Secretary may approve, for a fishery that is managed under a limited access system, a limited access privilege (LAP) program to harvest fish if the program meets the requirements of this section. One of those requirements is that there be no creation of a right, title, or interest in any portion of the allowable harvest. This section of the Act also states that any limited access privilege, quota share, or other limited access system authorization established, implemented, or managed under this Act may be revoked, limited, or modified at any time in accordance with this Act, including revocation if the system is found to have jeopardized the sustainability of the stock or the safety of fishermen. The Act also states that any LAP shall not confer any right of compensation to the holder of such limited access privilege, quota share, or other such limited access authorization if it is revoked, limited, or modified. The Act includes the requirement that any LAP shall not create, or be construed to create any right, title, or interest in or to any fish before the fish is

harvested by the holder. The Act continues on stating that any LAP shall be considered a grant of permission to the holder of the limited access privilege or quota share to engage in activities permitted by such limited access privilege or quota share.

Allowing the quota share of an individual fishing quota (IFQ) to be transferable gives the holder of the quota share a right to sell that quota share. This right to sell quota share in essence constitutes ownership. Once the first transaction for a particular quota share has occurred the buyer, having invested a significant number of dollars, will view the quota share as property. And rightly so! This first-round buyer will have exchanged dollars for quota share, which he will consider no different than land or corporate stock shares. Although this law states that an LAP may be revoked at any time in accordance with this Act, once the first transaction has occurred, revoking this LAP will be near to impossible. Revoking an LAP from a fisher who has spent $100,000 to purchase quota share would in fact be stealing $100,000 from the fisher. So we have a conundrum, which is in fact an illogical construction. This law says nothing directly about transferable IFQs. However, the restriction that "no creation of right, title, or interest" is allowed implies that allowing fishing quota shares to be transferred via the marketplace is not allowed.

The law requires that the Council manage the fishery with the goal of achieving sustainability. For the Council to get involved in manipulating the market flow or any other aspect of the fisher-processor economic relationship is a mistake. The Council does not have sufficient resources to adequately monitor, assess, and allocate OY for the 100-or-so species. To spend any resources on fisher-processor issues that are best left to the economic market place, is not a wise use of the very limited resources available. The Council should focus all of its resources on the relationship between fish and fisher and remove itself from fisher-processor concerns. The OSHUA plan addresses only the relationship between fish and fisher.

Individual responsibility is an American quality that most people consider desirable. However nearly all of the issues crowding the various DAP/IFQ agendas are about the opposite of individual responsibility. They are about how individuals will be taken care of by this or that policy, or co-op, or set aside. They are about how, if the group goes over the OY for an OF species, OY for the OF species might magically appear. The OSHUA plan focuses entirely on individual responsibility. The foundational belief of the OSHUA plan is that if each fisherman is given individual responsibility for his segment of the fishery then a sustainable fishery will be achieved naturally regardless of the success or failure of any particular fisherman. A plan based on individual responsibility and rewards for successful fisherman will, without a doubt, produce a sustainable fishery.

The law requires that management regulations maximize benefits to the nation while not over-fishing. The single best way to maximize benefits to the nation is to fish sustainably. The lost economic opportunity that has resulted from the OF species situation of the last few years is considerable. Another way to maximize benefits to the nation would be to eliminate unprofitable protected businesses. Implementation of the OSHUA plan will produce a sustainable fishery and by extension will maximize benefits to the nation. The OSHUA plan provides natural mechanisms for weeding out unprofitable businesses.

Fisherman and fisherman-processor co-operatives, as they have been discussed, will require a considerable NMFS regulatory expense. The funds that would be spent in this regulatory process would be better spent on fishery monitoring, assessments, and allocation. The various IFQ options all specify that NMFS would expend considerable sums in tracking IFQ transactions, ensuring that caps on consolidation are not exceeded, and monitoring the catch inseason. The OSHUA plan eliminates the IFQ transaction tracking expense, but will have expenses for caps and inseason real-time catch accounting. In general the OSHUA plan minimizes regulations which will free up NMFS funds for monitoring, assessment, and allocation.

Although in a few cases protecting an industry from the economic marketplace is desirable, protectionism is generally not helpful. Protectionism always ends up costing the taxpayers and consumers more. Those industries that are being protected must eventually compete in the real economic world rather than an artificial one. The shoreside pacific whiting fishery is currently a protected industry. Under OSHUA this fishery will be incorporated into the commercial LE fishery. There has been some discussion regarding maintaining fleet diversity. If a fishing business is not profitable then it helps no one to implement regulations that keep unprofitable operations in business. It would be better for fisherman that cannot make a profit in the current environment to either sell their LE permit or lease their IACA to profitable fisherman. If they lease their IACA rather than sell their LE permit the future may produce a more favorable business climate allowing them to fish their IACA.

There have been suggestions that as much as 20% of the total OY be set aside for communities. If this were done this would be protecting communities at the expense of the fishing industry. Forcing fisherman to fish in certain areas in order to protect communities would produce unprofitable operations. Assigning OY allocations to processors would also constitute industry protection. Fishers must be allowed to choose the processor that best fits their business needs. These needs include location, ex-vessel price, and general likeability. The bi-monthly trip limit is an example of an industry protection for the processor industry at the expense of the fisherman.

One of the reasons that overfishing exists is because we protect unprofitable fishing and processing operations. A sustainable management plan like OSHUA will provide incentives for unprofitable fisherman to either lease their IACA or sell the LE permit.

Under this plan many of the unresolved issues listed in the October 18-19, 2006 GAC meeting minutes would be obviated. Items 1a, 1b, 1c, 1d, 1f, and 2 would no longer be issues since they would naturally be handled as part of the annual allocation to each LE permit.

The IFQ options being studied will not produce a sustainable fishery. Overfishing of overfished species would continue due to the complexity of the options being considered. Discards of overfished species would continue. The method being proposed to observe the potential discard of overfished species is inadequate. None of the options include

logging and color tagging each fish caught. The fleet will not be economically sustainable.

A sustainable fishery can not be achieved unless there are absolute limits on total removals of each species/stock and those limits must correspond to the ABC/OY established via the stock assessment and sector allocation process. The goal is a sustainable fishery and that means the catch allocated to the various sectors can not be exceeded by any sector. It is no different then allocating catch to a commercial permit – once the allocation for a species is reached then no more catch is allowed for that permit. The same kind of limits must be implemented for the recreational sector: maximum number of anglers and maximum limit on number of fish per angler. For some species the recreational catch now exceeds the commercial catch. These are, for the most part, the overfished species. This plan is designed to maximize the catch for each commercial permit up to the allocation limits. This plan has no provision for reducing the commercial catch if the recreational catch exceeds the pre-season sector allocation.

This plan includes absolute catch limits for the PFMC recreational fishery, otherwise achieving a sustainable fishery will be impossible. It makes no sense to allocate catch to individual sectors and then allow one sector to exceed its allocation. The goal is a sustainable fishery and that means the catch allocated to the various sectors can not be exceeded by any sector

This plan will provide a natural incentive for those that minimize bycatch and a natural disincentive for those that continue to catch overfished species. Those who avoid overfished species bycatch would receive a larger allocation of target species catch in future years compared to those who don't. This is because those who avoid bycatch will tend to maximize their catch of target species. The annual allocation process would reflect this adjustment, or re-alignment.

This plan will require that all marketable species catch, including OF species bycatch, is delivered and processed. Landing all bycatch will improve catch accounting. Estimates of OF species catch will no longer be dependent on statistical methods applied to samples of catch. Fisherman will be happy about this as well since the catch accounting of OF species will be the same as for target species. Landing all bycatch will increase the number of fish available for biological sampling. As it is now, the number of biological samples of OF species is simply inadequate, and statistically biased, since all potential samples in the non-whiting shoreside fishery are currently discarded.

Assigning a fishing mortality limit to all species, including discard species, is required by the M-S FCMA of 2006. The method included in this plan promotes more tows or sets rather than fewer tows or sets, since the discard species allocation is per tow or set. The result of more tows or sets rather than fewer tows or sets will be shorter tows and sets. Shorter tows or sets will yield smaller amounts of bycatch and discards. And for trawlers shorter tows will save fuel and will reduce habitat destruction. Habitat destruction will be lessened because smaller codends will be less likely to drag on the seafloor.

The PFMC has been in the business of allocating since the very beginning. The Council will continue with sector allocation in addition to allocating catch to individual permits. The sector allocations required will be reduced to a total of five sectors (three from the current eight sectors plus two minor sectors not currently receiving allocations). Combining the LE trawl and non-trawl, OA, and the three whiting sectors into a single sector will produce savings of many hours of Council time, PFMC staff time, and NWR staff time. Eliminating separate sectors for LE non-trawl and OA eliminates the confounding catch-accounting problem of vessels moving from one sector to another depending on the fishery in which the vessel is participating.

This plan will keep as many fishers as possible fishing while allowing those fishing operations that are no longer viable to sell out.

Implementation of this plan will reduce habitat destruction. With an annual allocation fishermen will be more likely to operate in fishing areas where they know they can catch their target allocation. The fishermen will not have an incentive to search out new unfished areas. The first tow in a previously unfished area causes most of the damage - it causes more damage than all subsequent tows combined.

This plan will minimize the analytical work, in particular the analysis required by NEPA and the SFA, since no new amendments to the groundfish FMP will be required. This will allow the implementation of this plan much sooner than other plans that require considerable analysis in order to comply with NEPA and SFA.

Fishermen co-operatives should be discussed by the Council and NMFS, but there should be no rules regulating co-operatives. Attempting to regulate fisherman co-operatives creates too much complexity and restricts private enterprise. Workshops, funded by NMFS, should be employed to inform fishers about the advantages and disadvantages of co-ops and how to form them. These fisherman co-operatives may not be the most effective method to prosecute the fishery.

Fishermen Co-ops, as they have been implemented on the westcoast and proposed to the Pacific Council, are nothing more than a modern-day feudal system. A feudal system is one where the peasants give away some of their freedom in return for protection from the lord of the land. Co-ops emulate this arrangement because the fishermen are giving away their opportunity to gain a larger share in future years through low bycatch. In a co-operative those who maximize target catch and minimize bycatch are not reward in future years. Instead, the reward is distributed by the co-operative (i.e. the corporation) based on unknown criteria. Co-ops are anything but co-operative, rather they are dominated entirely by the corporate, fish-processing partner.

Bi-monthly catch periods will be eliminated. Bi-monthly catch periods have produced “product glut” at various times, which produces negative economic impacts for the entire fishing community. Bi-monthly catch periods have exacerbated the OF species discard problem.

Latent effort would be reduced, thus allowing more of the target species allocation to be harvested and processed. Under OSHUA permits must be fished or they will lose their value and eventually become worthless.

Under this plan the pacific whiting fishery (both at-sea and shore-side) would operate under the same by-catch limitations as the rest of the LE trawl fleet.

Since this allocation process would be conducted annually or biannually, there will be the opportunity to make adjustments on each succeeding cycle. This should create an atmosphere that is less contentious, since any "injustices" would be rectified on the next cycle.

Tribal fishers should be supportive of this plan since all PFMC groundfish stocks would be improved and their status would move toward sustainability.

Salmon and halibut bycatch will be handled as it is now. Those fisheries that retain it will continue to do so and those that release (discard) will continue to do that as well.

The idea behind the good faith agreement is that the act of signing a document is stronger, and holds more weight, then simply talking about avoiding discards.

Which agencies would implement OSHUA?

1. The Allocation method would be recommended by the council and implemented by NMFS. The allocation committee, and PFMC staff would do essentially all of the analysis. The actual allocations would be implemented via the usual federal regulation. This would include notifying permit holders of their allocations and providing for a reasonable review and appeal period. The 100% observer coverage and the video coverage would be the responsibility of NMFS. NMFS and the fishing industry will share the observer coverage cost 50/50.
2. The LE buy/sell process would be the same. This is handled by NMFS.
3. Commercial catch reporting will be handled by the NWR in a manner similar to the IFQ reporting that has been implemented by the AKR. It is highly recommended that the NWR use as much of that automated system as possible in order to minimize costs and to ensure a timely implementation. The fish-ticket, logbook, and observer data collection would continue as is. These three systems serve their own purposes and can not be replaced by this OSHUA catch reporting. This OSHUA catch reporting system would require area-of-catch. The granularity of these catch areas would be determined by the PFMC SSC. These catch records would consist of confidential information and would be handled in the same manner as fish-ticket records. Reporting would be for each tow including both animal and non-animal "catch". These records would document where contact with habitat has occurred. Each tow report would include catch discarded by species/species category. The list of species/species categories would be similar to the list developed for the trawl logbook.
4. Enforcement of commercial LE fishery : when IACA is attained…..

5. Recreational catch reporting will be handled by the NWR. This catch reporting will include species, gear, area, date, weight of fish, and length. Each fish will be recorded separately. All fish will be landed whole. The SSC will establish the recreational catch areas. This data collection will have electronic data collection stations at each major port such that no less than 90% of the catch will be handled by these automatic installations. Provisions will be made for collecting this data via an internet application as well as regular mail. This data collection system will be a real-time system designed to meet the needs of effective Council management.
6. Enforcement of recreational catch limits for each angler will be handled by NOAA enforcement. NOAA will publish the species-identification sheet or booklet and distribute it to major ports and recreational fishing supply stores via state fishery agencies.
7. All data obtained by the NWR from this recreational fishery will be shared with state fishery agencies as non-confidential data.
8. Marine debris removal (MDR) will be funded by NMFS.

How would OSHUA work for 07-08 Management Measures?

Video and 100% observer coverage are critical aspects of this plan and can not be eliminated. Therefore, unless these two requirements are met, this OSHUA plan could not be implemented for 07-08 management.

Contact Info: William Daspit 206 526 4068 (office); 425 780 1548 (cell)
william.daspit@psmfc.org;

CITY OF MONTEREY

HARBOR/MARINA DIVISION

June 1, 2007

RECEIVED

JUN 04 2007

PFMC

Mr. Donald K Hansen
Chairman Pacific Fishery Management Council
7700 NE Ambassador Place Suite 101
Portland OR 97220

RE: REQUEST TO INCLUDE AN ADAPTIVE MANAGEMENT TRUST ALTERNATIVE IN THE GROUND FISH TRAWL DEIS

Dear Chairman Hansen and Council members:

Fishing communities such as Morro Bay and Monterey are concerned that adoption of an Individual Quota program in the ground fish trawl fishery will cause economic disruptions and further consolidate fishing effort into areas where buyers want the fish landed. As you know, all of the local trawl permits in the Morro Bay area have been acquired by a private NGO at this time in Morro Bay and currently the abundant ground fish resources in this area are not being harvested. There are many reasons why the local trawlers chose to sell their permits, but lack of resource here was not one of them. The Morro Bay community is working hard to maintain its infrastructure and to restore ground fish landings in Morro Bay. I am writing to ask for your help to hold a place for small coastal communities such as Morro Bay.

I am writing to ask you to support analysis of an option in the upcoming DEIS for the ground fish trawl IFQ program that would meet adaptive management and public trust objectives. This adaptive management option, which could be funded by holding back a small portion of the quota, could help meet social and conservation goals that will not be met by the alternatives as they now stand. An adaptive management trust alternative will provide communities like Morro Bay a chance to retain its heritage and the viability of the port while a transition to a new management system occurs.

Thank you for your consideration.

Steve Scheiblauer

Stephen B. Scheiblauer
Harbormaster, Monterey Municipal Marina

City of Morro Bay

HARBOR DEPARTMENT
1275 Embarcadero
Morro Bay, CA 93442
Ph. 805-772-6254
Fax: 805-772-6258

RECEIVED
JUN 04 2007
PFMC

May 29, 2007

Mr. Donald K Hansen
Chairman Pacific Fishery Management Council
7700 NE Ambassador Place Suite 101
Portland OR 97220

RE: REQUEST TO INCLUDE AN ADAPTIVE MANAGEMENT TRUST ALTERNATIVE IN THE GROUND FISH TRAWL DEIS

Dear Chairman Hansen and Council members:

Fishing communities such as Morro Bay are concerned that adoption of an Individual Quota program in the ground fish trawl fishery will cause economic disruptions and further consolidate fishing effort into areas where large buyers want the fish landed. As you know, all of the local trawl permits have been acquired by a private NGO at this time in Morro Bay and currently the abundant ground fish resources in this area are not being harvested. There are many reasons why the local trawlers chose to sell their permits, but lack of resource here was not one of them. We are working hard to maintain our infrastructure and to restore ground fish landings in Morro Bay, but we need your help to hold a place for small coastal communities.

We are writing to ask you to support analysis of an option in the upcoming DEIS for the ground fish trawl IFQ program that would meet adaptive management and public trust objectives. This adaptive management option, which could be funded by holding back a small portion of the quota, could help meet social and conservation goals that will not be met by the alternatives as they now stand. An adaptive management trust alternative will provide communities like ours a chance to retain our heritage and the viability of our port while we transition to a new management system.

Thank you for your consideration.

Rick Algert
Harbor Director

RA/sl

PACIFIC MARINE CONSERVATION COUNCIL

June 5, 2007

Mr. Donald K. Hansen, Chairman
Pacific Fishery Management Council
7700 NE Ambassador Place, Suite 200
Portland, Oregon 97220-1384

Re: Groundfish fishery rationalization E.9.d

Dear Chairman Hansen,

Thank you for the opportunity to testify on behalf of the Pacific Marine Conservation Council (PMCC).

PMCC is a west coast wide nonprofit conservation organization now in our tenth year. Founded by a group of progressive fisherman, marine scientists, and conservationists we undertake activities that link Science, Policy, and Community to benefit the marine environment and the people and livelihoods connected to the sea. Our mission is focused on conserving healthy and diverse fisheries and marine ecosystems, and the coastal communities that depend on them.

The diverse board of directors at PMCC strives for understanding and consensus. There are few issues that have ignited controversy and brought out the passion of the Board like the development of a trawl-only individual fishing quota (IFQ) system for the West Coast groundfish fishery.

PMCC's initial reaction a few years ago was skeptical to say the least that a trawl IFQ system could effectively address the problem statement published in the Federal Register. The problem statement was primarily about the constraints and inequities related to the incidental catch of overfished species. Not only did it seem that bycatch of overfished species might not be reduced by an IFQ per se, but the program development seemed to be used as an excuse to avoid taking other available bycatch reduction measures.

We feared that the preferred alternative of the Bycatch Program environmental impact statement (EIS), the subsequent adoption of the Groundfish Fishery Management Plan (FMP) Amendment 18, and the timely implementation of non-IFQ features of each might take a back burner to the trawl IFQ. We felt strongly, and still maintain that focused bycatch reduction measures such as sector total catch limits and cap and trade systems could provide effective incentives to avoid

the rebuilding fish populations. IFQs in themselves would not achieve these ends, unless they included specific features that would drive the market appropriately.

PMCC was concerned that the groundfish fishery was moving toward a rationalization based primarily upon economic efficiency, sort of an adjunct to the trawl buyback, and that social equity issues might at best be tertiary afterthoughts. After all the program design committee was dominated by representatives of the trawl industry and processors. Later, a seat was included for community interests. But this was hardly a group that was expected to ensure fleet diversity, opportunities for small fishing businesses and new entrants to the fishery, and community stability in the wake of industry consolidation. It stands to reason that individuals appointed to represent special interests would properly do just that.

PMCC believes that the public deserves rent for the granting of access to the public's resource. That's why we've objected to that inadequate public representation on the design committee.

Market-based programs can be designed with a variety of outputs. If the primary drivers for such programs are improving ocean health and making for more abundant fisheries, then incentives for delivery of measurable ecological benefits should be central to the program design, as should disincentives for poor performance in avoiding bycatch and protecting habitat.

As this process moved forward, some positive (from PMCC's point of view) elements were brought forward for analysis, including

- 100% observer coverage.
- Consideration of area-based quota.
- Permitting trawlers to access their quota with more selective and less destructive gear.
- A percentage holdback of quota to benefit fishery-dependent communities.
- Rejection of gifting harvest shares, beyond permit qualifications, to processors.
- Consideration of processes for adapting future management to respond to unexpected consequences and improved scientific understandings.

It was starting to seem that with most of these features included, and the standards of the new Magnuson-Stevens Act amendments adhered to, an IFQ program might emerge that PMCC could tolerate, if not embrace. We decided to take another close look at these issues at our May 2007 board meeting.

The board **did not** move to embrace what is currently under consideration. The consensus was that advocating for essential design features to be tacked on to a trawl-only IFQ was similar to, if you know the expression Mr. Chairman, putting lipstick on a pig. The integrity of PMCC's solution went back to the high road of insisting on a more comprehensive rationalization,

We've examined Mr. William Daspit's work to create an alternative to a trawl-only IFQ system, the Optimum Species-Harvesting Unified Allocation (OSHUA) Plan Proposal. The latest version of OSHUA is in your briefing book. Mr. Daspit has, as a private citizen, actually formed the only alternative before us that is designed foremost from the public interest. He has reached out for review to a broad spectrum of those interested in the west coast groundfish fishery.

OSHUA addresses the original problem statement better than anything else on the table. It also appears to be more effectively address the goals and objectives for this rationalization as adopted by the Council. We realize that there are concerns about the practicability of some of the program features, but the PMCC board felt that Mr. Daspit's work is admirable, should not be dismissed out of hand, and in fact should be taken into the process and further analyzed as a reasonable alternative.

Beyond its own merits the OSHUA approach should be a wake up call that there are a variety of ways to create a comprehensive rationalization of the west coast groundfish fishery. PMCC urges the Council to take a step back and to re-evaluate what the primary intentions of rationalizing the groundfish fishery.

PMCC is troubled that this process has gone down a path that eliminates reasonable alternatives relative to the Problem Statement even before the National Marine Fisheries Service has issued a draft EIS. This does not seem to be consistent with the National Environmental Policy Act and the regulations of the Council on Environmental Quality.

For additional perspective on PMCC's view of this issue, I'm attaching an Op-Ed authored by PMCC President Charlie Hanson on behalf of the Board of Directors.

Respectfully submitted,

Peter Huhtala
Senior Policy Director

May 23, 2007
Opinion Editorial – Intelligent Design: Managing as if the Oceans Mattered
By Charlie Hanson, President, and the Pacific Marine Conservation Council Board of Directors

In a hurried and misdirected effort to protect west coast marine fish, the federal government is about to make a few fishermen very rich at the expense of coastal communities and consumers. In June, the Pacific Fishery Management Council plans to lock in some key design elements of what is called the groundfish trawl individual quota program, giving owners of trawl permits long-term exclusive access to the bulk of many commercially caught species. Fishery managers are missing the mark.

At stake are healthy marine ecosystems and sustainable fishing communities. The federal plan jeopardizes fisheries for a number of west coast rockfishes, lingcod and other bottom fish, and the restoration of overfished populations from Northern Washington to Southern California.

The government proposes to give catch shares in the sea to the very sector of the fishing industry that massively over-harvested coastal fishes some twenty years ago. No conservation outcomes are guaranteed from the trawl quota program, and fishery managers will inevitably undermine efforts of fishermen who are already fishing sustainably. Having catch shares is supposed to encourage fishermen to be better environmental stewards. But there are few incentives for conservation in the current plan. The government should reward those fishermen with a track record of conservation, rather than those with a track record of overfishing.

The nation's leading oceans experts now recognize the need for an ecosystem-based management approach. We agree. Conservation incentives matter if we are to create long-term health and wealth in west coast fisheries. We need a management system that encourages sustainability by eliminating overfishing, reducing waste, and promoting viable coastal fishing communities.

Federal fishery managers propose to privatize west coast groundfish fisheries, by taking what has long been a public resource and apportioning a substantial part of it to trawl fishermen. The West Coast groundfish fishery is complex, both in diversity of species and gear types. If market-based tools are to be used in management, they must encompass the entire fishery, rewarding fishermen who use the most selective gear and techniques.

We need to ensure that economic rewards are coupled with ecological health. Market-based policies can only do this if designed with conservation as the driver. We would support a market-based plan that is comprehensive and provides strong incentives to achieve the federal government's mandate to encourage a sustainable fishery.

If we want to eat wild and sustainable seafood, we need healthy ecosystems and healthy fishing communities. Poorly designed management plans will only hasten the decline of both.

Pacific Marine Conservation Council is a non-profit fisheries conservation organization founded in 1997. With a diverse board of directors comprising fishermen, community activists and marine scientists, we advocate for ecosystem-based management that fosters sustainable fishing communities. Visit www.pmcc.org

ENVIRONMENTAL DEFENSE
finding the ways that work

NRDC
THE EARTH'S BEST DEFENSE

WC Groundfish Trawl Rationalization Process
ITQ Set-aside Considerations - Summary

⇒ On May 15, 2007 the GAC committee passed a motion to recommend to the PFMC that a 10% quota set-aside provision be included in the EIS evaluation process. A 10% quota set-aside could be used as an adaptive management tool to address unforeseen and unexpected impacts of an ITQ plan.

⇒ Because a 10% adaptive management quota set-aside can provide compelling incentives for industry to develop a fishery that balances conservation, economic, and community objectives, Environmental Defense and Natural Resources Defense Council support its inclusion in the EIS process.

⇒ A quota set-aside can be used, not only to deal with "unforeseens," but as a vehicle for encouraging industry to evolve towards a positive, vibrant future.

⇒ The attached brief is offered as a resource to better inform the debate on the merits of an adaptive management quota set-aside to address unanticipated and unforeseen impacts associated with Groundfish Trawl ITQ plan implementation.

⇒ Several ITQ concerns or issues are described, along with four mechanisms for potentially addressing them:

Issue/Concern:	Adaptive Management Goal/Mechanism:
Concern over processor stability - IQ plan dynamics may cause disruption to processors, placing processing investments and shore jobs at risk.	**Industry Stability** (described on p.3)
Concern over processing plant closures in communities that are dependent on the groundfish trawl fishery.	**Vulnerable Communities** (described on p.3)
Issue of encouraging fishermen to use best practices such as bycatch reduction and minimum habitat impact	**Best Fishing Practices** (described on p.4)
Concern that industry is failing to engage in meaningful business development to grow wholesale revenues and reduce costs and allow new entrants, but is rather focusing overly on rationalization as the means of achieving operating efficiencies.	**New/Innovative Business Initiatives** (described on p.4)

⇒ Although 10% of the trawl allocation would be set aside for adaptive management purposes, 100% of the TAC would still be fished by LE trawl vessels. Commonly voiced concerns about a set-aside program are addressed on page 5.

⇒ This brief shows how an adaptive management/quota set-aside plan can serve a variety of practical purposes, confirming that its inclusion in the EIS process would ensure a balanced and comprehensive evaluation of initial allocation options.

June, 2007

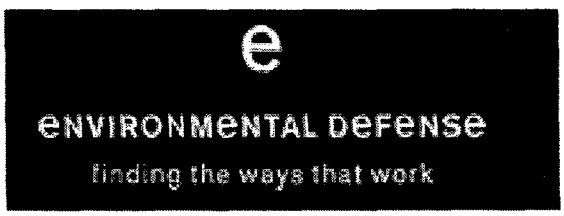
WEST COAST
TRAWL RATIONALIZATION PROCESS

Trawl Allocation Set-Aside Considerations

A Brief Supporting Inclusion of an Adaptive Management Quota Set-Aside Provision in the Environmental Impact Study

Prepared by: Stuart Nelson,
Nelson Bros Fisheries Ltd

On behalf of: Environmental Defense and
Natural Resources Defense Council



INTRODUCTION

On May 15, 2007 the GAC committee passed a motion to recommend to PFMC that a 10% quota set-aside provision be included in the EIS evaluation process. The motion described the set-aside option as follows:

- 10% share set-aside, all species; temporary (10 year sunset); beginning in the first year.
- Set-aside to address unforeseen and unexpected impacts arising from the ITQ program.
- Flexible - set-aside quota-pounds could be issued if not needed; could be matched with other allocation alternatives; could address areas/issues such as new entrants, best fishing practices or communities.

The above resolution reflects GAC's recognition of the need to address unforeseen potential impacts accompanying ITQ implementation, coupled with the desire to ensure a successful program.

PURPOSE OF THIS PAPER

Environmental Defense ("ED") and Natural Resources Defense Council ("NRDC") support inclusion of a quota set-aside provision in the EIS process, because they believe that an ITQ program which allocates 100% of quota-shares to industry will inevitably bring side-effects that cannot be retroactively remedied. A 10% quota set-aside can provide compelling incentives for industry to develop a fishery that balances conservation, economic, and community objectives. Even though a quota set-aside option has strong inherent appeal, ED and NRDC recognize that the Council needs to have sufficient specificity for the option as it strives to define the detailed elements of the EIS for the trawl ITQ Plan.

Therefore, this brief is offered as a resource to Trawl Rationalization decision-makers, providing illustration of how a 10% quota set-aside could be used as an adaptive management tool to address emerging and changing areas of need.

ADAPTIVE MANAGEMENT: DEALING WITH "UNFORESEENS"

The key purpose underlying the GAC motion is maintenance of a mechanism for dealing with the unforeseen impacts of an ITQ plan. In fact, some of the potential impacts are foreseeable - including processor dislocation, diminishing activity in trawl-dependent communities, a shift in the bargaining dynamics between fishermen and processors, lack of innovation due to concentration in processing, and failure to fully realize potential conservation benefits - but the timing and severity of these impacts, if they occur at all, will only be revealed over time.

A quota set-aside can be used, not only to deal with "unforeseens," but as a vehicle for encouraging industry to evolve towards a positive, vibrant future.

VISION OF GROUNDFISH TRAWL FISHERY EVOLUTION

ED/NRDS share a vision of a West Coast groundfish trawl fishery where:

- Catches of target species stay comfortably within TACs, and mortality of over-fished species is minimal.
- Fishermen and processors enjoy a true partnership, focusing on enhancing the value of West Coast groundfish, rather than being at loggerhead over differences in ex-vessel fish prices.
- There is reasonable stability for past participants, and reasonable opportunity for new entrants (in both the harvesting and processing sectors).
- Industry engages in critical business development initiatives to ensure competitiveness.
- Industry goes beyond compliance with conservation regulations, demonstrating genuine resource stewardship.

Inclusion in the management framework of *incentives* such as those potentially provided by a flexible, well-conceived adaptive management program would help achieve this vision.

ADAPTIVE MANAGEMENT PROGRAM – HOW IT MIGHT WORK

One of the challenges in evaluating the merits of the adaptive management (quota set-aside) concept is a lack of definition - the concept is appealing, but the details have not yet been nailed down. ED and NRDC have devoted considerable thought to how an adaptive management program could be made to work in the West Coast groundfish trawl fishery. The following comprises a summation of work completed. It is not presented as the definitive answer, but merely as a potential system that could fit the intended purpose of dealing with ITQ program unforeseens as they arise.

Adaptive Management Program: Selected Details

The adaptive management/quota set-aside system envisioned by ED/NRDC would include the following provisions:

- The 10% share set-aside would be "across the board" for all species/area quotas.
- The 10% share set-aside could be allocated towards a single goal (that is, Industry Stability, Vulnerable Communities, Best Fishing Practices, or New/Innovative Business Initiatives) or could be split to serve multiple objectives. If not needed, the set-aside would be assigned directly to quota share holders. All set-aside quota pounds would ultimately flow through to LE groundfish trawl vessels.
- A discipline of ITQ Program Review (at least every four years) would accompany an adaptive management program. Measurable parameters could be defined and tracked, and possibly serve as "triggers" for activation/de-activation of program mechanisms.
- The 10% share set-aside would be in lieu of an initial direct allocation to processors.
- The set-aside allocation would never be *owned* by the recipient; leasing of set-aside quota-pounds would not be permitted (set-aside quota swapping *would* be allowed).
- A nominal (2-5 cent per pound) administrative fee would be levied for use of set-aside quota-pounds.
- Set-aside quota-pounds would be deemed the "first fish caught" for admin purposes.

Potential Adaptive Management Purposes & Mechanisms

Although others could be added as circumstances required, the details for achieving four specific goals have been fleshed-out:

Issue:	Adaptive Management Goal/Mechanism:
Concern over processor stability - IQ plan dynamics may disadvantage processors, placing processing investments and shore jobs at risk.	**Industry Stability** - allow processors to allocate set-aside portion of allocation to secure raw material supply and foster improved relationships with fishermen.
Concern over processing plant closures in communities that are dependent on the groundfish trawl fishery.	**Vulnerable Communities** - provide plant owners in "vulnerable" communities with quota incentives to encourage continued fish deliveries and operations in these ports.
Concern that industry is minimally complying with conservation requirements, but is not developing a genuine resource and ecosystem stewardship ethic.	**Best Fishing Practices** - use all or a portion of set-aside allocation to provide conservation incentives to fishermen demonstrating low overfished species encounters, low discards, and minimal bottom impacts.
Concern that industry is failing to engage in meaningful business development to grow wholesale revenues and reduce costs, but is rather focusing overly on rationalization as the means of achieving operating efficiencies.	**New/Innovative Business Initiatives** - use all or a portion of set-aside allocation to encourage new product/market development, fish handling protocols, and new entrants.

Details for Implementing Four Adaptive Management Goals – Description and Elements

The details for using the set-aside to help achieve these four goals are offered for consideration. Programs such as these could be mixed and matched, implemented & phased out over time, or never implemented at all (if not needed). Review would help determine the evolving need for various set-aside allocations.

1. Industry Stability

Industry Stability Description & Objectives

During a challenging transition period, a program to encourage stability - to prevent undue dislocation - could be important.

Industry Stability allocation allows processors to direct a portion of quota pounds to fishermen to:

- facilitate fishermen-processor working relationships.
- maintain secure supply of fish to coastal plants.

Allows processor to direct a small portion of quota pounds to secure supply arrangements.

Addresses processor concerns about security while still providing fishermen with 100% of the quota.

Industry Stability Program Elements

Each processor directs its portion of set-aside quota pounds to LE vessels.

Based on 3-year running average processing history for the company.

Requires processors and fishermen to make pre-season delivery arrangements.

Fee for use of set-aside quota pounds - $0.02 per pound to cover administration (paid prior to quota issuance).

No leasing of set aside quota-pounds from processor to fishermen.

Fishermen can swap/trade set-aside quota-pounds but not lease to other vessels.

Up to industry to enforce delivery agreements.

2. Vulnerable Ports

Vulnerable Ports Description & Objectives

Fleet and processing rationalization accompanying an IQ plan may adversely impact communities that are dependent on the groundfish trawl fishery.

Set-aside quota pounds can be used as an incentive for fishermen/processors to maintain operations in vulnerable ports.

Set-aside quota pounds would provide support for vulnerable communities that are in other ways disadvantaged.

Plant owners in vulnerable ports would receive enhanced allocation of quota (vs plants in "resilient" communities).

Based on port analysis in Chapter 7.0 (Socio-economic Environment from Draft EIS).

Encourage continued operation of plants in vulnerable communities.

Vulnerable Port Program Elements

Each processing plant owner directs its portion of set-aside quota pounds to LE vessels.

Based on 3-year running average processing history for each plant (plant specific).

Processing history "attached" to plant, not plant owner (succession).

Set-aside quota stratified by port type: robust, vulnerable, or most-vulnerable. Plants in more-vulnerable ports receive higher percentage of set-aside for distribution to local fleets.

Requires plant-owners and fishermen to make pre-season delivery arrangements.

Fee for use of set-aside quota pounds - $0.02 per pound to cover administration .

No leasing of quota-pounds from plant-owner to fishermen.

Fishermen can swap/trade set-aside quota-pounds but not lease to other vessels.

3. Best Fishing Practices

"Best Fishing Practices" Description & Objectives

Strive to go beyond mere compliance - to develop a strong resource and environmental stewardship ethic.

Provide additional incentive to harvesters to maximize ecological benefits, for example:

- Overfished species avoidance.
- Minimal at-sea releases.
- Minimal bottom-impact.

Develop measurable criteria using observer and offload monitor data.

Best fishing practices quota to reward top conservation performers.

Quota should gravitate to harvesters with best sustainable fishing practices.

"Best Fishing Practices" Program Elements

Benchmark conservation criteria established; define measurable parameters of "best practices"

- Overfished/bycatch species (eg. lowest mortality, lowest encounters).
- At-sea releases (eg. lowest ratio of discards to retained).
- Bottom-impacts (eg. highest bottom-fish landings per hour towed.)

Consider information requirements in at-sea/landings monitoring program design.

Two-year catch history, with higher weighting on most recent year.

Set-aside quota-pounds allocated to "top" performers (establish criteria).

Fee for use of quota-pounds - $0.03 per pound to cover administration

4. New/Innovative Business Practices

New/Innovative Business Practices Description & Objectives

ITQ plan provides an environment for improved fish-handling, a more stable landings pattern, and more refined scheduling of landings to meet customer needs.

Merely performing the same functions better may not result in an economically healthy and competitive groundfish trawl industry - genuine business development must accompany ITQ-driven improvements

A new/innovative business initiatives program could provide additional incentives to improve revenues, reduce costs, and expand opportunities, for example:

- New product development
- Market diversification
- On-board and in-plant fish handling protocols
- New processing entrants that may have limited processing history
- Ventures that restore fishing heritage/commercial wharf activity

New/Innovative Business Practices Description & Objectives

Set-aside quota made available to fishermen and/or processor proposals demonstrating new or innovative business initiatives.

A proposal ranking system would be developed.

Also requires a process for assessing plans vs. actual results and accomplishments

A 3rd party could be contracted to perform rankings/assessments.

Proposals not yielding quantifiable benefits would not receive set-aside allocation in following year(s).

Fee for use of quota-pounds - $0.05 per pound to cover administration (higher cost - will require more administration and evaluation of claims vs. actual).

This is a more subjective mechanism that the other three.

ANSWERING ADAPTIVE MANAGEMENT PROGRAM CONCERNS

Previously raised concerns with an adaptive management program are answered as follows:

Adaptive Management Program Concern:	Adaptive Management Program Rationale:
A 10% set-aside is not sufficient to have a meaningful impact on industry behavior.	The British Columbia experience demonstrates that a 10% set-aside provides ample incentives, and can be used as an effective influence over the remaining 90% of allocation.
A 10% set-aside may be workable in British Columbia, but our fishery management system and industry structure are totally different than BC's. B.C.'s solutions don't apply here.	The set-aside mechanisms suggested by ED/NRDC are unique in design to suit U.S. circumstances. They are less bureaucratic, less subjective, and more incentive-oriented than BC's model. The main lesson learned from B.C. is that industry and government can design a unique system based on their goals and objectives. Here, as in B.C., the fishery objectives include community considerations - hence, the appeal of an allocation set-aside scheme.
An allocation set-aside erodes the amount of fish available to the fleet, rendering fishing economics marginal.	All set-aside quota "flows through" to be fished by LE vessels - at the cost of only a slight administrative fee.
Processor concern: a set-aside in lieu of processor initial allocation fails to address processor interests. Fishermen concern: a set-aside where processors influence a portion of allocation may perpetuate (or exacerbate) the current level of processor concentration.	The set-aside concept (industry stability mechanism) strikes a balance: providing processors with a tool for attracting fishermen, while ensuring that all quota is fished by LE vessels. It may be neither party's first choice, but both could live with it.
What if there is no use for all or a portion of set-aside quota-share in a given year? Would it remain un-fished?	Any set-aside allocation not used for a specific purpose would be allocated to LE vessels pro-rata to their quota-share holdings.

SUMMARY

This brief is offered by Environmental Defense and Natural Resources Defense Council to better inform the debate on the merits of a quota set-aside to address unanticipated/unforeseen impacts associated with Groundfish Trawl ITQ plan implementation.

In designing an ITQ plan that balances conservation, economic, and social goals it is important to remember that:

- Once quota shares are fully allocated and trades have been made, it is extremely difficult to amend the allocation formula; an upfront set-aside is a sensible approach for dealing with unforeseens.
- Although the future is uncertain, there are specific concerns that, if they arise, could be addressed with quota set-aside mechanisms (such as those offered in this paper).
- Very little else exists in the EIS besides this feature to address social goals.

The large number of potential permutations of a set-aside program should not preclude informed and reasoned discussion. It is hoped that the framework provided herein will help to narrow the debate. Using these examples as a springboard, the Council could task staff to develop specific details of the program for analysis. ED and NRDC believe that a quota set-aside provision merits evaluation in the EIS process alongside the other initial allocation options.

Agenda Item E.9.d
Supplemental Public Comment 4
June 2007

West Coast Seafood Processors Association
1618 SW 1st Avenue, Suite 318
Portland, OR 97201
503-227-5076

June 7, 2007

Mr. Donald K. Hansen, Chairman
Pacific Fishery Management Council
7700 NE Ambassador Place, Suite 200
Portland, OR 97220-1384

Dear Chairman Hansen:

The West Coast Seafood Processors Association, on behalf of a number of long-time shore-based Pacific whiting processors, forwards the following proposed options for analysis within the whiting cooperative proposal of the Council's trawl rationalization EIS.

These options represent the consensus request of Ocean Beauty Seafoods, Ocean Gold Seafoods, Pacific Seafood Group, Point Adams Packing Co., and Trident Seafoods.

Under the section "Co-op Formation and Structure" in the shore-based whiting co-op plan being proposed for analysis, we ask that you consider the following vessel-plant linkage options in place of "DATE RANGE TO BE DETERMINED":

1. The single year 2001
2. The single year 2000
3. The range of years from 2000 to 2003, inclusive

Based on our examination of available landing records, we believe that this range of options for determining co-op linkage between permit holders and co-op qualified processors, best represents the status quo of processing operations within the window period specified by the Council in the draft whiting cooperative proposal.

We request that the Council adopt these options for inclusion in the analysis going forward. Please contact me at 503-220-0780 should you or staff have any questions regarding these options.

Sincerely,

Kent Craford

cc: Mid-Water Trawlers Cooperative

STATEMENT OF JAMES P. WALSH

ON BEHALF OF THE PACIFIC SEAFOOD GROUP

BEFORE THE PACIFIC FISHERY MANAGEMENT COUNCIL

ON THE PROPOSED LIMITED ACCESS SYSTEM FOR THE PACIFIC GROUNDFISH FISHERIES

June 14, 2007

Foster City, California

Mr. Chairman and Members of the Council:

Introduction

My name is James P. Walsh and I am a partner in the San Francisco, California office of the law firm of Davis Wright Tremaine LLP. Prior to entering the full-time practice of law, I served, from 1972 to 1977, as Staff Counsel and General Counsel of the U.S. Senate Committee on Commerce, Science and Transportation under Senator Warren G. Magnuson (D.-Wash.) as Chairman. In that position, I was responsible for handling maritime, oceans and environmental legislation for the Committee and also served as staff to the Senate's original National Ocean Policy Study. One of my particular responsibilities was to help draft what is now referred to as the Magnuson-Stevens Fishery Conservation and Management Act (the "Magnuson-Stevens Act"). In 1978, I was appointed by President Jimmy Carter to serve as the Deputy Administrator of the National Oceanic and Atmospheric Administration ("NOAA"), and served as Acting Administrator of NOAA beginning in January 1981, until July 1981. During my tenure in office, I was responsible not only for overseeing NOAA's fishery management programs and budgets, but also for reviewing all fishery management plans adopted by Regional Fishery Management Councils under the Magnuson-Stevens Act.

Today I am representing the Pacific Seafood Group, and I have been asked by that company to present a legal perspective on decisions that are pending before this Council to establish a "limited access system" for the West Coast groundfish fisheries from Washington in the north to California in the south, within the U.S. Exclusive Economic Zone. In particular, I

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will address the legal obligations of the Council to give fair and equitable consideration to including initial allocations of harvest quota shares to processing companies that have made substantial and continuing economic and market contributions to these fisheries in recent years.

Before providing specific comments, I first want to provide a summary of the recent statutory changes to the Magnuson-Stevens Act that guide the Council's decision-making process and to note the Council's response to these new statutory changes in considering rationalization for the Pacific groundfish and whiting fisheries.

The Limited Access System Directives of the Reauthorized Magnuson-Stevens Act

Everyone is aware that, with enactment of the Magnuson-Stevens Fishery Conservation and Management Reauthorization Act,[1] Congress added new statutory authority and directives with respect to limited entry systems that become part of fishery management plans. A "limited access system" is defined to mean a system that limits participation in a fishery to those persons satisfying certain eligibility criteria or requirements contained in a fishery management plan or associated regulation. Within this system, a "limited access privilege" is established that provides a person with a quantity of fish equating to a portion of the total annual allowable catch of that species of fish that may be received or held for the exclusive use of that person, and includes a individual fishing quota ("IFQ") but does not include any community development quota ("CDQ"). This privilege will be in form of a revocable permit issued for a period of not more than 10 years.

In addition to the general provisions on limited access systems, the Reauthorized Magnuson-Stevens Act contained a specific directive addressed to this Fishery Management Council with respect to an "appropriate rationalization program for Pacific trawl groundfish and whiting fisheries under its jurisdiction."[2] This directive (1) established timetables for your consideration of a limited access system for these fisheries, (2) changed the general requirements that would have otherwise been applicable generally, and (3) stated additional analysis to be considered by the Council. I will now summarize very generally some of the key provisions relevant to your discussions at this meeting.

A. The New Directive

The first element of this specific limited access system provision reads as a mandatory directive for the Council to develop a proposed limited entry program:

> (f) PACIFIC FISHERY MANAGEMENT COUNCIL.—
>
> (1) IN GENERAL.—The Pacific Fishery Management Council shall develop a proposal for the appropriate rationalization program for the Pacific groundfish and whiting fisheries, including the shore-based sector of the Pacific

[1] H.R. 5946, enacted as Public Law 109-479 on January 12, 2007.

[2] Section 301(f) of H.R. 5946.

whiting fishery under its jurisdiction. The proposal may include only the Pacific whiting fishery, including the shore-based sector, if the Pacific Council determines that a rationalization plan for the fishery as a whole cannot be achieved before the report is required under paragraph (3).

In reviewing the Council's recently published "Trawl Rationalization Alternatives (REV 05/23/07)," it appears the Council is well on its way to satisfying this directive by considering an Individual fishing quota ("IFQ") or Cooperative program that includes both the Pacific groundfish and whiting fisheries.

B. Special Factors That Must Be Considered

In addition to the general requirements for all limited access systems, which I will discuss briefly later, Congress included unique language addressed only to this Council:

> (2) REQUIRED ANALYSIS.—In developing the proposal to rationalize the fishery, the Pacific Council shall fully analyze alternative program designs, including the allocation of limited access privileges to harvest fish to fishermen and processors working together in regional fishery associations or some other cooperative manner to harvest and process the fish, as well as the effects of these program designs and allocations on competition and conservation. The analysis shall include an assessment of the impact of the proposal on conservation and participating in the trawl groundfish fisheries, including the shore-based sector of the Pacific whiting fishery.

What marks this provision as unique is the reference to allocating limited access privileges at the outset to two difference segments of the fishing industry, entities that harvest the fish and entities that process the fish. However, this language is consistent with the recommendations of the National Research Council in its 1999 Report entitled "Sharing the Fish: Towards a National Policy on Individual Fishing Quotas." In that Report, the authors concluded that there was no "compelling reason to recommend the inclusion or exclusion of processors from eligibility to receive initial quota shares."[3] By the reference above and in other provisions, Congress has decided to include processors as eligible for allocations of initial quota shares. Significantly, Congress specially directed this Council to consider allocations to both the harvesting and processing sectors of the Pacific groundfish and whiting fisheries.

In response to this directive, the Council's Trawl IFQ Alternative includes a discussion of options for the initial allocation of IFQ, which are (1) allocate 100 percent of quota share to vessel permit owners, or (2), for non-whiting groundfish, allocate 75 percent to vessel permit owners and 25 percent to processors, or for whiting, allocate 50 percent to vessel permit owners and 50 percent to processors. This allocation issue is now squarely before this Council, as Congress directed.

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[3] National Research Council Report, at 205.

C. Report to Congress

Upon completion of the Council's work on its rationalization program, the "proposal and related analysis" must be submitted to the Senate and House Committees with jurisdiction over the Magnuson-Stevens Act no later than January 2009. This provision, however, does not change the requirement that any such proposal must go through the normal approval process for amendments to fishery management plans under the Act. Congress merely gets a report on what is going on. This reporting requirement, no doubt, influenced the timetable being followed by the Council with respect to these particular fisheries.

D. An Overview of the General Limited Access System Statutory Provisions

The 2006 Reauthorization of the Magnuson-Stevens Act expanded considerably the Congressional guidance on the use of limited access systems in the nation's fishery management program. Creation of such a system remains a discretionary matter with each Council. However, the new guidance includes expanded definitions, statements as to the purpose of such systems, considerations that must be taken into account in developing a system, and mandated requirements for approval of a limited access privilege program. Also created were new categories of entities that would qualify to receive limited access privileges, in addition to qualifying individuals or business entities that own fishing vessels and fish processing plants or hold permits. These categories include fishing communities and regional fishery associations, each with its own particular qualification criteria. Neither of these new categories is involved in the rationalization program this Council is considering for the Pacific groundfish and whiting fisheries.

Some of the highlights of these general provisions as they apply here, are the following:

1. By operation of the transition rules, the Pacific groundfish and whiting fishery program is not necessarily required to assist in the rebuilding of the fishery. Presumably this is because these fisheries are already very tightly regulated and that reduced harvesting opportunities because of ongoing rebuilding requirements, and a buy-out program, have already significantly reduced the number of vessels participating in these fisheries. Thus, considerable excess harvesting capacity has left the fishery, estimated at more than 50 percent, in recent years.

2. By the same transition rules, the program is not required to be for a fishery that has been determined by the Secretary of Commerce or the Council to have over-capacity, for the same reasons as just indicated. Overcapacity has been presumed for this fishery but it has been addressed previously through other programs.

3. As a result, the primary requirement under the Reauthorized Magnuson-Stevens Act that this Council must consider is the mandate that its adopted program shall "promote (i) fishing safety; (ii) fishery conservation and management; and (iii) social and economic benefits." All the other applicable general requirements relate to considerations other than the primary reasons behind the limited access system, such as, for example, the procedural requirement of specifying the goals of the program in writing.

E. Allocation

The subject I want to address in more detail is the section of the new legislation that deals with the issue of allocation, particularly initial allocations. The primary requirement here directs the Council to adopt procedures "to ensure fair and equitable initial allocation, including consideration of (i) current and historical harvests; (ii) investments in, and dependence upon, the fishery; and (iii) the current and historical participation of fishing communities" and to distribute the limited access privilege to "persons who substantially participate in the fishery, including in a specific sector of such fishery." These statutory statements frame your legal obligations in determining the substance of the allocations under the program.

General Observations on Initial Allocations to Processing Companies

A. Congress Expressed Its Clear Intent That the Processing Sector of the Pacific Groundfish and Whiting Fisheries Be Eligible to Receive an Initial Allocation of Limited Access Privileges

From the express language of the Reauthorized Magnuson-Stevens Act, there can be no doubt but that Congress decided to make the processing sector of the Pacific groundfish and whiting fisheries eligible to receive an initial allocation of limited access privileges. The universe of eligible recipients is not limited to vessel owner and employees, permit holders, communities, and regional fishery associations, but all of them, including processors. Prior law did not contain sufficient legislative language and history to make such a strong legal statement, notwithstanding the onshore/offshore allocations made in the pollock fishery in Alaska and the statutory "two-pie" system in the Alaska Crab Rationalization Act.

With the changes made on January 2007, there can be no doubt that harvest privileges may be given to any qualifying processing company that satisfies the general goals of the program and the other requirements of the Reauthorized Magnuson-Stevens Act. The Council's obligation to promote "social and economic benefits" applies equally to the harvesting and processing sectors because Congress did not make any distinction between the two sectors in the provisions governing limited access allocations. If an entity is judged by the Council to have substantially participated in the fishery, then it can be argued that that entity should be given quota share, unless there is convincing rationale that another entity is more deserving or would better serve the objectives of the limited access program.

B. Eligible Processing Companies Must Demonstrate A Commitment to the Pacific Groundfish and Whiting Fisheries Through Investment and Active Participation in the Fisheries

A limited access privilege system often changes the timing, focus, and location of harvest activity after rationalization. Eliminating the open entry style of fishing, or even a limited entry system, with harvest quota allocations will force changes, both geographical and temporal, in harvesting and marketing patterns, and could impact current processing and transportation patterns. Congress recognized this fact when it adopted the new limited access system

legislation. As a consequence, investments in existing fixed processing plants may be at risk in a rationalization system. One way to guard against processing disruption is to allocate a portion of the harvest quota to processing companies.

But Congress also required, it is clear, that any processing entity that seeks limited access harvesting privileges must have made demonstrated commitments to the fishery, in terms of active participation and investment in the recent past. A case can also be made that each sector (and each member of each sector) must be subjected to a comparative analysis as to its recent commitment the fishery to order to avoid economic injury and to ensure continuing social and economic benefits from the fishery, as well as fairness. In summary: those who have made substantial commitments to the fishery, whether harvesters or processors, should not be ignored in the initial allocation. For example, permit holders who have not used their permits in recent years may lack that substantial commitment.

In this regard, it must be recognized that, as a matter of law, anyone holding a federally issued fishing permit lacks a property right to that permit. Recent cases in the United States Court of Federal Claims have decided that such permit holders are unlikely, if their permits are revoked, to succeed in claiming an unconstitutional taking of private property under the Fifth Amendment of the U.S. Constitution. See *Arctic King Fisheries, Inc. v. United States*, 59 Fed.Cl. 360 (2004) (fishing vessel owner does not have a property interest in permits and licenses which can be the subject of a taking claim). Thus, even if someone holds a permit in the Pacific groundfish and whiting fishery, that permit may be extinguished for public use, such as in the creation of a properly devised new limited entry program with proper fishing management objectives.

Thus, the important consideration here is whether an entity seeking an initial allocation of a limited access privilege has demonstrated a meaningful active commitment to the fishery, such as by making an investment, and will likely do so in the future. In fact, it can be argued that the Council cannot simply ignore any such entity in developing its program. This is true whether considering allocations to vessel owners, permit holders, or processing entities.

C. Allocations Must Be Fair and Equitable

The touchstone standard for allocations is fairness and equity. Making the decision about how best to meet this standard may be the most difficult task before you. However, each entity that has demonstrated a strong commitment in terms of investment and active participation in the relevant fisheries deserves, and even requires, consideration. Excluding any such entity from the initial allocation could run afoul of the Reauthorized Magnuson-Stevens Act and the Due Process Clause of the U.S. Constitution. Under the Due Process Clause, government regulation of economic activity, which is what a limited access system does, must meet the "rational basis" test. While not a stringent standard to meet, nonetheless the "rationale basis" test requires that any classification created by statute or rule must bear a rational relationship to a legitimate public purpose. The Supreme Court has stated that any classification is unlawful whose relationship to the stated goal (such as stated in the Reauthorized Magnuson-Stevens Act limited access provisions) is so attenuated as to make it arbitrary or irrational. *City of Cleburne, Tex. v.*

Cleburne Living Center, 473 U.S. 432, 447 (1985). The Court also said that the objective of harming a politically unpopular group is not a legitimate state interest.

Conclusion

Congress has made clear that those processing entities that make significant commitments to a particular fishery, and are important to the economic activity of the fishery in the future, are eligible to receive an initial allocation of limited access privileges. Determining what is fair and equitable will depend on the facts of each fishery and will require a clear articulation as to why the allocations made by the Council are rationally related to the objectives of the Reauthorized Magnuson-Stevens Act and the fishery management plan at issue.

Thank you for the opportunity to appear before you today. I would be happy to answer any questions you may have.

* * * *

Agenda Item E.10
Situation Summary
June 2007

FINAL CONSIDERATION OF INSEASON ADJUSTMENTS (IF NECESSARY)

Consideration of inseason adjustments to ongoing groundfish fisheries may be a two-step process at this meeting. The Council will meet on Wednesday, June 13, 2007, and consider advisory body and public advice on inseason adjustments under Agenda Item E.7. If the Council elects to make final inseason adjustments under Agenda Item E.7, then this agenda item may be cancelled or the Council may wish to clarify and/or confirm these decisions. If the Council tasked advisory bodies with further analysis under Agenda Item E.7, the Council task under this agenda item is to consider advisory body advice and public comment on the status of ongoing 2007 groundfish fisheries and recommended inseason adjustments for 2007 groundfish fisheries prior to adopting final changes as necessary.

Council Action:

1. **Consider information on the status of ongoing fisheries.**
2. **Adopt inseason adjustments as necessary.**

Reference Materials: None.

Agenda Order:

a. Agenda Item Overview — John DeVore
b. Report of the Groundfish Management Team (GMT) — Kelly Ames
c. Agency and Tribal Comments
d. Reports and Comments of Advisory Bodies
e. Public Comment
f. **Council Action:** Adopt or Confirm Final Adjustments to 2007 Groundfish Fisheries

PFMC
05/15/07

GROUNDFISH MANAGEMENT TEAM (GMT) REPORT ON FINAL CONSIDERATION OF INSEASON ADJUSTMENTS

In the inseason action adopted under Agenda Item E.7, the Council adopted an increase in the weekly trip limit for sablefish in the open access fixed gear fishery south of 36° N Lat. from 700 to 800 lbs per week, with no change in the daily (300 lbs) limit. However, the GMT recommendations were based on a set of assumptions regarding how rapidly such changes could be implemented into regulations. As a result of new information regarding the time necessary to implement both these and future in-season regulatory actions, the GMT recognized that there would be reduced flexibility to make trip limit changes that would facilitate attainment of the sablefish optimum yield (OY) later in the season. Consequently, the GMT re-evaluated this action. As current catches are tracking well below the OY, the GMT recommends increasing the current trip limits to 350 lbs per day or one landing of 1,050 lbs per week. The GMT will consider at the September meeting whether additional changes in these limits are appropriate, and there will be the opportunity to reduce these limits late in the season if effort shifts or higher than expected catches results.

GMT Recommendations

Adopt sablefish trip limits of 350 lbs per day, or one landing of 1,050 lbs per week, for the Open Access fixed gear fishery in the Conception Area (south of 36° N Lat).

PFMC
06/14/07

DRAFT AMENDMENT 15: AMERICAN FISHERIES ACT ISSUES

When Congress passed the American Fisheries Act (AFA) in 1998, Congress designated the Pacific Fishery Management Council (Council) to develop conservation and management measures to protect West Coast groundfish fisheries from potential harm caused by the AFA. In September 1999, the Council initiated Amendment 15 to the Pacific Coast Groundfish Fishery Management Plan (FMP) to address this concern and enacted a control date of September 16, 1999 regarding participation by catcher vessels in mothership and shore-based Pacific whiting fisheries, and in the inshore groundfish fishery for non-whiting species. The Council has also set a control date of June 29, 2000 which provides advance notice to the public and potential purchasers of limited entry permits held by AFA entities that, based on future Council action, groundfish limited entry permits held by an AFA entity may be revoked or restricted to a specific fishery sector. However, because of competing workload and no threatened imminent harm, the Council tabled action on Amendment 15 in 2002.

The Council readdressed Amendment 15 at its September 2006 meeting and voted to move forward expeditiously to complete Amendment 15 for first use in the 2008 fishery with direction to simplify the alternatives brought forward for Council consideration. At its April 2007 meeting, the Council adopted a preliminary range of alternative measures for public review and preliminary analysis. The Oregon Department of Fish and Wildlife (ODFW) has taken the lead in coordinating the development of a draft Environmental Assessment (Agenda Item E.11.b., Attachment 1) which summarizes the proposed action, the purpose and need for such action, and a description of the alternatives. The Washington Department of Fish and Wildlife and the National Marine Fisheries Service (NMFS) have provided staff time to work on portions of the required analyses and documents. Also included for Council review are draft amendatory FMP language (Agenda Item E.11.b, Attachment 2) and a NMFS report on analyses needed for Amendment 15 under the National Environmental Policy Act. The Council is scheduled take final action on Amendment 15 at the September 2006 meeting in Portland, Oregon.

As an interim protective mechanism, the Council voted in November 2006 to request that National Marine Fisheries Service (NMFS) enact an emergency rule restricting AFA vessel participation in the whiting fishery without catch history prior to 2006, to be implemented for the 2007 non-tribal season. NMFS did not approve the request. In March 2007, based on concerns of adverse conservation, economic, and safety effects to the 2007 fishery that could result from an unrestricted derby style fishery, the Council broadened its original emergency rule request to prohibit participation in the 2007 non-tribal Pacific whiting fishery by all vessels, including both AFA and non-AFA vessels, without sector-specific history in the fishery prior to January 1, 2007. NMFS is scheduled to report on implementation of an emergency action and temporary rule under the NMFS Report, Agenda Item E.1.

Council Action:

1. **Review the proposed action and the purpose and need for such action.**
2. **Review the range of alternatives and modify as necessary.**
3. **Review the draft outline for the EA and provide guidance on future analyses.**

Reference Materials:

1. Agenda Item E.11.b, Attachment 1: Environmental Assessment of Management Measures to Prevent Harm to the Pacific Whiting Fishery Resulting from Implementation of the American Fisheries Act.
2. Agenda Item E.11.b, Attachment 2: Draft Amendment 15 FMP Language.
3. Agenda Item E.11.b, Attachment 3: NMFS Report on National Environmental Policy Act Analysis Needs for Amendment 15 to the FMP.

Agenda Order:

a. Agenda Item Overview — Mike Burner
b. Alternatives Analysis Report — Gway Kirshner
c. Reports and Comments of Advisory Bodies
d. Public Comment
e. **Council Action:** Adopt Alternatives for Public Review

PFMC
05/25/07

SUPPLEMENTAL NMFS REPORT ON AMENDMENT 15 ITEMS: LIST OF VESSELS REGISTERED FOR USE WITH BOTH WEST COAST GROUNDFISH LIMITED ENTRY PERMITS AND AFA PERMITS; DRAFT TIMELINE FOR FEDERAL IMPLEMENATION OF AMENDMENT 15

Groundfish Permit #	USCG Vessel #	Vessel Name	Catcher Vessel or Catcher-Processor
GF0090	979437	BLUE FOX	Catcher vessel
GF0216	593809	COLLIER BROTHERS	Catcher vessel
GF0144	584873	LESLIE LEE	Catcher vessel
GF0010	584360	LISA-MELINDA	Catcher vessel
GF0438	525608	MAR-GUN	Catcher vessel
GF0043	509552	MARK I	Catcher vessel
GF0517	913277	MISS BERDIE	Catcher vessel
GF0795	611524	MUIR MILACH	Catcher vessel
GF0374	599534	NEAHKAHNIE	Catcher vessel
GF0675	542651	NORDIC FURY	Catcher vessel
GF0273	518937	PACIFIC CHALLENGER	Catcher vessel
GF0051	561934	PACIFIC FURY	Catcher vessel
GF0351	697280	PACIFIC PRINCE	Catcher vessel
GF0205	589115	PACIFIC RAM	Catcher vessel
GF0132	565120	PEGASUS	Catcher vessel
GF0254	536873	PERSEVERANCE	Catcher vessel
GF0256	547390	PREDATOR	Catcher vessel
GF0124	629499	RAVEN	Catcher vessel
GF0210	628959	SEA STORM	Catcher vessel
GF0572	548685	SEADAWN	Catcher vessel
GF0109	924585	SEEKER	Catcher vessel
GF0111	929356	TRAVELER	Catcher vessel
GF0362	524423	WESTERN DAWN	Catcher vessel
GF0030	637856	ALASKA OCEAN	Catcher-Processor
GF0092	951307	AMERICAN DYNASTY	Catcher-Processor
GF0048	646737	AMERICAN TRIUMPH	Catcher-Processor
GF0007	610290	ISLAND ENTERPRISE	Catcher-Processor
GF0108	579450	KODIAK ENTERPRISE	Catcher-Processor
GF0142	506694	NORTHERN EAGLE	Catcher-Processor
GF0119	521069	NORTHERN JAEGER	Catcher-Processor
GF0101	933627	PACIFIC GLACIER	Catcher-Processor
GF0062	904767	SEATTLE ENTERPRISE	Catcher-Processor
GF0971	944658	STARBOUND	Catcher-Processor
Total*			33 vessels total: 23 catcher vessels 10 catcher-processors

*Vessels with AFA mothership or catcher-processor permits that participate off U.S. West Coast as *motherships*, but which are not required to have groundfish limited entry permits to do so: ARCTIC STORM, ARCTIC FJORD, EXCELLENCE, GOLDEN ALASKA, OCEAN PHOENIX.

Amendment 15 DRAFT Timeline for Implementation NEPA and Magnuson-Stevens Act Processes	
June 10-15, 2007	Council defines purpose and need, selects a range of alternatives
August 22, 2007	Briefing book deadline: draft EA to PFMC staff and to NMFS NEPA coordinator
September 9-14, 2007	Council selects preferred alternative and finalizes its Amendment 15 recommendations
October 5, 2007	Draft EA is revised to indicate Council action and per NMFS NEPA coordinator comments, Council transmits Amendment 15 to NMFS
October 12, 2007	Notice of Availability for Amendment 15 publishes
November 10, 2007	Proposed rule publishes
December 11, 2007	End of comment period on proposed rule and Amendment 15.
January 10, 2008	NMFS makes final decision on approval/disapproval/partial approval of Amendment 15
February 1, 2008	Final rule publishes, followed by 30-day APA cooling-off period and approx. 2 month period for agencies and public to get new season up and running.
March 3, 2008	Final rule in effect
April 1, 2008	Fishery begins.

Title of Environmental Review: Environmental Assessment of Management Measures to Prevent Harm to the Pacific Whiting Fishery Resulting from Implementation of the American Fisheries Act

Responsible Agency and Official: D. Robert Lohn
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Legal Mandate: Magnuson-Stevens Fishery Conservation and Management Act, 50 CFR Part 660

Location of Proposed Activities: The Exclusive Economic Zone (3-200 nautical miles offshore) of the states of Washington, Oregon, and California

Abstract: The American Fisheries Act (AFA) of 1998 was designed to strengthen U.S. ownership standards that had been exploited under the Anti-reflagging Act, and to rationalize the Bering Sea and Aleutian Islands (BSAI) walleye pollock fishery while protecting non-AFA participants in other fisheries. Management measures required by the AFA include (1) regulations that limit access into the fishing and processing sectors of the BSAI pollock fishery and that allocate pollock to such sectors, (2) regulations governing the formation and operation of fishery cooperatives in the BSAI pollock fishery, (3) regulations to protect other fisheries from spillover effects from the AFA, and (4) regulations governing catch measurement and monitoring in the BSAI pollock fishery. The AFA requires the Pacific Fishery Management Council (Council) to develop conservation and management measures to protect fisheries under its jurisdiction and the participants in those fisheries from adverse impacts caused by the AFA, or by any fishery cooperatives in the directed pollock fishery. To address this concern the Council initiated Amendment 15 to the Pacific Coast Groundfish Fishery Management Plan in September 1999 and published two control dates relative to participation of AFA-permitted vessels in the west coast groundfish fisheries. However, because of competing workload and no threatened imminent harm, the Council tabled action on Amendment 15 in 2001. In 2006, changes in the Pacific whiting fishery occurred which led to Council concern about increased participation by AFA-permitted vessels in the Pacific whiting fishery. The purpose of this Environmental Assessment is to provide decision makers and the public with an evaluation of the environmental and economic impacts of the regulations that would be implemented under the proposed Amendment 15.

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1.0 PURPOSE AND NEED FOR ACTION

1.1. Introduction

The groundfish fishery in the Exclusive Economic Zone (EEZ), offshore waters between 3 and 200 nautical miles (nm), off the coasts of Washington, Oregon, and California (WOC) is managed under the Pacific Coast Groundfish Fishery Management Plan (FMP). The Pacific Coast Groundfish FMP was prepared by the Pacific Fishery Management Council (Council) under the authority of the Magnuson Fishery Conservation and Management Act (subsequently amended and renamed the Magnuson-Stevens Fishery Conservation and Management Act). The FMP has been in effect since 1982.

Actions taken to amend FMPs or to implement regulations to govern the groundfish fishery must meet the requirements of several Federal laws, regulations, and executive orders. In addition to the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act), these Federal laws, regulations, and executive orders include: National Environmental Policy Act (NEPA), Regulatory Flexibility Act (RFA), Endangered Species Act (ESA), Marine Mammal Protection Act (MMPA), Coastal Zone Management Act (CZMA), Paperwork Reduction Act (PRA), Executive Orders (E.O.) 12866, 12898, 13132, and 13175, and the Migratory Bird Treaty Act.

NEPA regulations require that NEPA analysis documents be combined with other agency documents to reduce duplication and paperwork (40 CFR§§1506.4). Therefore, this EA will ultimately become a combined regulatory document to be used for compliance with not only NEPA, but also E.O. 12866, RFA, and other applicable laws. NEPA, E.O. 12866, and the RFA require a description of the purpose and need for the proposed action as well as a description of alternative actions that may address the problem.

- Chapter One describes the purpose and need of the proposed action.
- Chapter Two describes a reasonable range of alternative management actions that may be taken to meet the proposed need.

[June 2007 PFMC Meeting Note: This document contains drafts of Chapters 1 and 2; subsequent chapters are scheduled to be available for the September 2007 PFMC meeting.]

- Chapter Three contains a description of the physical, biological, and socioeconomic characteristics of the affected environment.
- Chapter Four examines the physical, biological, and socioeconomic impacts of the alternative management actions.
- Chapter Five outlines the consistency with the fishery management plan and other applicable laws.
- Chapter Six details the regulatory impact review and regulatory flexibility analysis.
- Chapter Seven contains a list of references for this document.

1.1.1 Background

The American Fisheries Act (AFA) of 1998 was designed to strengthen U.S. ownership standards that had been exploited under the Anti-reflagging Act, and to rationalize the Bering Sea and Aleutian Islands (BSAI) walleye pollock (hereinafter pollock) fishery while protecting non-AFA participants in other fisheries. Provisions of the Anti-reflagging Act failed to prohibit the rebuilding of U.S. vessels in foreign shipyards between 1987 and 1990. As a result, approximately 20 large factory trawlers entered the Bering Sea pollock fishery as foreign rebuilds which resulted in overcapitalization of the fishery. The AFA prioritized U.S. interests in the harvest of U.S. fishery resources and decapitalized the BSAI pollock fishery through buyouts. Management measures required by the AFA include (1) regulations that limit access into the fishing and processing sectors of the BSAI pollock fishery and that allocate pollock to such sectors, (2) regulations governing the formation and operation of fishery cooperatives in the BSAI pollock fishery, (3) regulations to protect other fisheries from spillover effects from the AFA, and (4) regulations governing catch measurement and monitoring in the BSAI pollock fishery.

Section 211(c)(3)(A) of the AFA requires the Pacific Council to develop conservation and management measures to protect fisheries under its jurisdiction and the participants in those fisheries from adverse impacts caused by the AFA, or by any fishery cooperatives in the directed pollock fishery. Adverse impacts as a result of rationalization in the BSAI pollock fishery are not specifically defined by the AFA however, the Final Environmental Impact Statement for the American Fisheries Act Amendments 61/61/13/8 (National Marine Fisheries Service, 2002) outlines the potential impacts of the AFA to non-pollock fisheries and fishery participants. For example, surplus vessels and processing capacity is no longer needed absent the race for fish and spillover into other fisheries may occur. The formation of cooperatives under the AFA provide competitive advantages since members can arrange fishing and processessing schedules in such a manner to increase their participation in non-pollock fisheries. Furthermore, members within a cooperative agree to divide the available quota among themselves which maximizes productivity and flexibility to expand their operations in non-pollock fisheries. Harm could also occur through the investment of funds, derived by benefit of the AFA, to expand effort in non-pollock fisheries.

The AFA states:

> SEC. 211. Protections for other fisheries; conservation measures.
>
> (b) Catcher-processor restrictions.
>
> (5) Fisheries other than the North Pacific.
> The catcher/processors eligible under paragraphs (1) through (20) of section 208(e) and motherships eligible under section 208(d) are hereby prohibited from harvesting fish in any fishery under the authority of any regional fishery management Council established under section 302(a) of the Magnuson-Stevens Act (16 U.S.C. 1852(a)) other than the North Pacific Council, except for the Pacific whiting fishery, and from processing fish in any fishery under the

208 (e) CATCHER/PROCESSORS……
(1) AMERICAN DYNASTY
(2) KATIE ANN
(3) AMERICAN TRIUMPH
(4) NORTHERN EAGLE
(5) NORTHERN HAWK
(6) NORTHERN JAEGER
(7) OCEAN ROVER
(8) ALASKA OCEAN
(9) ENDURANCE
(10) AMERICAN ENTERPRISE
(11) ISLAND ENTERPRISE
(12) KODIAK ENTERPRISE
(13) SEATTLE ENTERPRISE
(14) US ENTERPRISE
(15) ARCTIC STORM
(16) ARCTIC FJORD
(17) NORTHERN GLACIER
(18) PACIFIC GLACIER
(19) HIGHLAND LIGHT
(20) STARBOUND

208 (d) MOTHERSHIPS
(1) EXCELLENCE
(2) GOLDEN ALASKA
(3) OCEAN PHOENIX

> authority of any such regional fishery management Council other than the North Pacific Council, except in the Pacific whiting fishery, unless the catcher/processor or mothership is authorized to harvest or process fish under a fishery management plan recommended by the regional fishery management Council of jurisdiction and approved by the Secretary.

Section 211 (b)(5) of the AFA explicitly prohibits the 20 AFA eligible catcher-processors and motherships named in the law from participating in west coast groundfish fisheries, except for the Pacific whiting fishery. Those catcher-processor and motherships will be unable to use their AFA-eligibility to increase participation in west coast groundfish fisheries unless recommended by the Council and authorized by the Secretary of Commerce. However, AFA-eligible catcher-processors and motherships could use benefits derived from the AFA or by fishery cooperatives in the directed pollock fishery to increase or optimize their participation in the Pacific whiting fishery, unless the Council recommends otherwise and it is approved by the Secretary of Commerce.

The AFA also states:

> SEC. 211. Protections for other fisheries; conservation measures.
>
> (c) Catcher vessel and shoreside processor restrictions.
>
> (3) Fisheries other than the North Pacific.
>
> (A) By not later than July 1, 2000, the Pacific Fishery Management Council, established under section 302(a) of the Magnuson-Stevens Act (16U.S.C. 1852(a)), shall recommend for approval by the Secretary conservation and management measures to protect fisheries under its jurisdiction and the participants in those fisheries from adverse impacts caused by this Act or by any fishery cooperatives in the directed pollock fishery.
>
> (B) If the Pacific Council does not recommend such conservation and management measures by such date, or if the Secretary determines that such conservation and management measures recommended by the Pacific Council are not adequate to fulfill the purposes of this paragraph, the Secretary may by regulation implement adequate measures including, but not limited to, restrictions on vessels which harvest pollock under a fishery cooperative which will prevent such vessels from harvesting Pacific groundfish, and restrictions on the number of processors eligible to process Pacific groundfish.

Benefits obtained through the AFA may empower AFA-permitted vessels to increase their participation in Pacific groundfish fisheries, including the Pacific whiting fishery. Section 211

(c)(3) of the AFA does not restrict or prohibit catcher vessel or shoreside processor activity in the Pacific groundfish fisheries. Instead, the AFA requires the Council to recommend conservation and management measures to protect fisheries under its jurisdiction and the participants in those fisheries from adverse impacts caused by the AFA or by any fishery cooperatives in the directed pollock fishery. Table 1 contains a list of AFA-permitted catcher vessels that could purchase a limited entry permit and participate in west coast groundfish fisheries and the Pacific whiting fishery.

At its September 1999 meeting, the Council initiated Amendment 15 to the Pacific Coast Groundfish FMP. The Council voted to establish a control date of September 16, 1999, and to initiate the development of recommendations to restrict AFA-qualified vessels from participating in the Pacific Coast groundfish fishery if, during a qualifying period between January 1, 1994, and September 16, 1999, the vessel: (1) did not harvest at least 50 metric tons (mt) of Pacific whiting in the mothership sector; (2) did not land at least 50 mt of Pacific whiting in the shore-based sector; or (3) did not land groundfish shoreside in the Pacific Coast groundfish fishery (not including fish landed in the Pacific whiting fishery) (64 FR 66158). This control date provides notice to AFA-permitted vessels that might seek to participate in the Pacific Coast groundfish fisheries that current requirements for accessing these fisheries may change.

At its June 2000 meeting, the Council set a control date of June 29, 2000; any limited entry permit on that date owned by an owner of a vessel eligible for benefits under the AFA (AFA-qualified) and registered for use with an AFA-qualified vessel that does not meet minimum participation requirements that may be established in the future, may be subject to restrictions on being registered to participate in the Pacific coast groundfish fisheries, similarly to restrictions imposed on the vessel (65 FR 55214). The intended effect of this action is to discourage speculative entry or increased effort in the Pacific coast groundfish fisheries by entities eligible for AFA benefits and to provide notice of potential permit restrictions or revocation to purchasers or lessees of limited entry permits owned by AFA-qualified vessel owners and registered for use with AFA-qualified vessels.

In September 2001, the Council reviewed a range of alternatives limiting participation in the west coast groundfish fisheries and the Pacific whiting fishery for Amendment 15. Analysis in the draft environmental assessment identified four key issues: qualifying criteria for AFA catcher vessels; whether AFA catcher vessel restrictions will be on vessels, permits held by vessels, or both; qualifying criteria for AFA catcher processors; qualifying criteria for AFA motherships; and duration of the restrictions. The Council adopted a preferred alternative and directed Council staff to complete public review drafts of the analysis and proposed management measures. However, because of competing workload and no threatened imminent harm, the Council tabled action on Amendment 15 in 2001.

In 2006, changes in the Pacific whiting fishery led the Council to readdress Amendment 15 at its September 2006 meeting. A significant increase in the whiting ex-vessel price attracted several new vessels, including some AFA-permitted vessels, to the shoreside whiting fishery. Since the Alaska pollock fishery was rationalized, some vessels found they could engage in fishing for Pacific whiting off the west coast in the spring and early summer and then travel to Alaska to take their shares of pollock later in the summer when Alaskan fishing conditions were more

favorable. Increased participation in the Pacific whiting fishery resulted in achievement of the shoreside whiting harvest limits earlier in the year in 2006 than in 2005 which adversely affected processors and fishers. The Legislative Committee and the Council received testimony regarding anticipated entrance into the west coast Pacific whiting fishery by AFA-permitted vessels with no prior history in the fishery. The Oregon Department of Fish and Wildlife also reported an increase in participation and associated impacts by three AFA-permitted vessels and five non-AFA permitted vessels with no prior history in the Pacific whiting fishery during the 2006 season (Agenda Item C.5.b, Supplemental ODFW Report, September 2006). The Council also understood there was the prospect of additional entry of AFA-permitted vessels in 2007, as well as perhaps additional other vessels in the groundfish fishery.

The Council voted to move forward expeditiously to complete Amendment 15 for first use in the 2008 fishery with direction to simplify the alternatives brought forward for Council consideration. The Council also voted to request NMFS enact an emergency rule to be implemented for the 2007 season that prohibits sector-specific participation by AFA-permitted vessels that did not participate in the Pacific whiting fishery prior to December 31, 2005. In a letter dated January 11, 2007 the Northwest Regional Administrator of NMFS notified the Council that the request for the emergency rule was disapproved. The Regional Administrator noted that the Council's action was intended to address actual or potential harm to west coast fishers from the AFA, but that the evidence they presented to indicate harm (i.e., an earlier closure of the whiting fishery in 2006 than in 2005) was due to new participation by both AFA vessels and non-AFA vessels. While acknowledging that new market conditions were likely to attract additional vessels, the Regional Administrator pointed out that the proposed action would have denied new entry to a selected category of vessels (i.e., AFA-permitted vessels) but not all vessels. The Regional Administrator noted that the guidelines for the use of emergency rules call for use of notice-and-comment procedures when there are controversial actions with serious economic effects, especially when the decision is largely related to allocation and not conservation. Further, the Council's remedy would not have fully addressed the valid conservation concerns raised by the Council. Therefore, the proposal, as with other allocation decisions, would more appropriately be handled through the Council's full rulemaking process even if there were valid conservation concerns.

Key Pacific Whiting Market Indicators , Landings, Ex-vessels Revenues, and Ex-vessel processed

Year	Ex-vessel Revenue (millions $)	Percent Change	Landings mt	Landings millions of lbs	Percent Change	Ex-vessel price ($)	Ex-vessel price percent change
2000	8.0		88,842	195.86		0.041	
2001	5.7	-28%	73,411	161.84	-17%	0.035	-13%
2002	4.6	-21%	45,707	100.77	-38%	0.045	27%
2003	5.5	21%	55,333	121.99	-21%	0.045	0%
2004	7.7	40%	96,364	212.44	74%	0.036	-2-%
2005	12.6	64%	109,395	241.17	14%	0.052	44%
2006	17.4	38%	127,167	280.35	16%	0.062	19%

At the March 2007 Council meeting, the Council discussed a schedule of final Council action for Amendment 15 at the June or September Council meeting. As an interim protective mechanism, the Council also voted to request that NMFS enact an emergency rule to be implemented for the 2007 non-tribal season to prohibit participation in the 2007 non-tribal Pacific whiting fishery by all vessels without sector-specific history in the fishery prior to January 1, 2007 (72 CFR 27760). At the April 2007 Council meeting, the Council approved a range of alternatives, specific to AFA-permitted vessels in the non-tribal Pacific whiting fishery, for the Amendment 15 analysis.

1.2 Summary of the Proposed Action

The proposed action is to develop conservation and management measures to protect the west coast non-tribal Pacific whiting fishery and the participants in the fishery from adverse impacts caused the AFA or by any fishery cooperatives in the directed pollock fishery; specifically vessels with no sector-specific significant historical participation in the Pacific whiting fishery.

1.3 Purpose and Need for the Proposed Action

The Council has a responsibility to develop conservation and management measures to minimize the potential economic and environmental harm to the Pacific whiting fishery from adverse impacts caused by the AFA or by any fishery cooperatives in the directed pollock fishery. The purpose for the proposed action is to

- limit expanded participation that could cause adverse harm in the Pacific whiting fisheries by AFA-permitted vessels which are receiving benefits from the AFA and directed pollock fishery cooperatives.
- define the acceptable level of participation in the Pacific whiting fishery by AFA-permitted vessels which are receiving benefits from the AFA and pollock fishery cooperatives which would prevent harm to the Pacific whiting fishery by these vessels.

2.0 ALTERNATIVES

This chapter describes the alternative management actions that could be implemented to prevent increased participation in the Pacific whiting fishery by AFA-permitted vessels with no sector-specific significant historical participation in that fishery during the qualifying periods. The range of alternatives is specific to the non-tribal whiting fishery and AFA-permitted vessels. The effects of increased participation by AFA-permitted vessels in the non-whiting fishery was not considered. Many AFA-permitted vessels hold valid limited entry permits for the west coast groundfish fisheries. The alternatives proposed by the Council do not seek to restrict or exclude participation of AFA-permitted vessels with limited entry permits who have significantly participated in the Pacific whiting fishery during the qualifying period. However, AFA-permitted vessels with limited participation during the qualifying period could be restricted. Preventing harm by AFA-permitted vessels in the Pacific whiting fishery could be accomplished by excluding AFA-permitted vessels and/or their limited entry permits that do not meet qualifying criteria for sector specific significant participation in the Pacific whiting fishery during the qualifying period.

The primary factors taken into consideration when developing the alternatives were (1) defining sector-specific significant historical participation by AFA-permitted vessels and (2) determining qualifying dates by sector. Tonnage requirements of 1,000 mt for catcher processors and motherships, and 500 mt or 1,000 mt for catcher vessels in the shore-based or mothership fishery were chosen to represent significant historical participation. The starting date for defining participation is January 1, 1994, the year in which the west coast limited entry trawl permit system began. The alternative starting date of December 31, 1996 for the at-sea sector represents the year in which the at-sea sector received a Pacific whiting allocation. The ending date of

January 1, 2006 reflects the participation levels in the Pacific whiting fishery during the 2005 season, prior to increased participation in the shoreside sector by three AFA-permitted vessels. The ending date of January 1, 2007 reflects participation levels in the Pacific whiting fishery during the 2006 season, after increased participation in the shoreside sector by three AFA-permitted vessels.

Three different approaches to limiting participation by AFA-permitted vessels in the Pacific whiting fishery are defined and analyzed in this EA:

2.1 Alternative 1 (No Action). *Do not limit participation in the Pacific whiting fishery by AFA-permitted vessels*

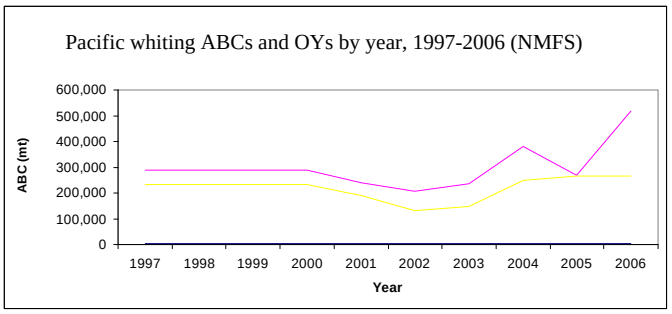
Under the No Action Alternative, any AFA-permitted vessel with a west coast limited entry permit could participate in the shoreside, catcher/processor, and mothership sectors of the Pacific whiting fishery. Therefore persons receiving benefits from the AFA or the directed pollock fishery cooperative could purchase a permit and participate in any sector of the Pacific whiting fishery.

2.2 Alternative 2. *1994- 2005 qualification period for AFA-permitted vessels with significant levels of participation in the Pacific whiting fishery.*

Alternative 2 prohibits participation in the shoreside, catcher/processor, and mothership sectors of the Pacific whiting fishery by AFA-permitted vessels that do not have sector-specific significant historic participation in the fishery during the qualifying years as defined below. This alternative reflects the participation levels in the Pacific whiting fishery since license limitation was implemented through the 2005 season. Alternative 2 excludes vessels that participated only in the 2006 fishery, when increased participation by AFA-permitted vessels occurred in the shoreside sector, and excludes vessels that participated prior to license limitation and have not significantly participated in a specific sector since. Adverse harm to the fishery from AFA-permitted vessels who joined the fishery in 2006 and any new AFA-permitted vessels that may choose to join the fishery in the future would be prevented.

Vessels included under this alternative have participated in the Pacific whiting fishery during the years of license limitation, which began in 1994. Since this time, regulations required that catcher/processors and catcher vessels have limited entry permits with trawl endorsements to operate in the fishery. Vessels that did not initially qualify for a permit had to purchase or lease one or more permits from qualifying vessels to gain access to the fishery. The license limitation program significantly changed the composition of the at-sea processing fleet, increasing the number of motherships, because permits were not required. No catcher/processors initially qualified for permits, but later purchased permits for participation. In 1997, a new allocation plan divided the commercial harvest guideline into three sectors: the shore-based sector (42% of the commercial optimal yield), mothership (24% of the commercial optimal yield) and catcher/processor (36% of the commercial optimal yield). Participation by vessels in the at-sea fishery has been consistent since 1997, with lower participation in years with low Pacific whiting OYs and limited market opportunities.

Low participation in the fishery during years with historical low Pacific whiting OYs may reduce the number of vessels qualifying under this alternative. Pacific whiting is a very productive species with highly variable recruitment. The stock was stable between 1995 and 1997, but then declined to its lowest level in 2001. Since 2001, the stock has increased substantially due to a strong 1999 year class that matured and entered the spawning population.



2.3 Alternative 3. *1994- 2006 qualification period for AFA-permitted vessels with significant levels of participation in the Pacific whiting fishery.*

Prohibit participation in the shoreside, catcher/processor, and mothership sectors of the Pacific whiting fishery by AFA-permitted vessels that do not have a sector-specific significant historic participation during the qualifying years, as defined below, between January 1, 1994 and January 1, 2007. Like Alternative 2, this alternative reflects participation levels in the Pacific whiting fishery since license limitation was implemented. However, Alternative 3 includes the 2006 season, after increased participation by AFA-permitted vessels occurred in the shoreside fishery. Alternative 3 excludes vessels that participated prior to license limitation and have not significantly participated in a specific sector since. The AFA-permitted vessels with sector-specific significant historical participation between January 1, 1994 and January 1, 2007 could continue to operate in the Pacific whiting fishery. Entrants who joined the fishery in 2006, including the AFA-permitted vessels, would be allowed to use benefits received by the AFA or the directed pollock fishery cooperative to participate in the Pacific whiting fishery. However, further harm by AFA-permitted vessels would be prevented as no new AFA-permitted vessels could to use benefits received by the AFA or the directed pollock fishery cooperative to participate in the Pacific whiting fishery in the future. Like Alternative 2, low participation in the fishery during years with historical low Pacific whiting OYs may reduce the number of vessels qualifying under this alternative.

For both Alternative 2 and Alternative 3, "significant historic participation" is defined:

- For catcher/processors (two alternative definitions for analysis) as:
  a. having caught and processed at least 1,000 metric tons (mt) of Pacific whiting in any one qualifying year; or
  b. having caught and processed at least 1,000 mt of Pacific whiting in any one qualifying year subsequent to December 31, 1996.

- For motherships (two alternative definitions for analysis) as:
  a. having caught and processed at least 1,000 mt of Pacific whiting in any one qualifying year; or
  b. having caught and processed at least 1,000 mt of Pacific whiting in any one qualifying year subsequent to December 31, 1996.

- For catcher vessels in the shore-based or mothership fishery (two alternative definitions for analysis) as:
  a. having landed at least 500 mt of Pacific whiting in any one qualifying year; or
  b. having landed at least 1,000 mt of Pacific whiting in any one qualifying year[1].

2.4 Alternatives Considered but Rejected for Further Analysis

The Council voted to establish a control date of September 16, 1999, and to initiate the development of recommendations to restrict AFA-qualified vessels from participating in the Pacific Coast groundfish fishery if, during a qualifying period between January 1, 1994, and September 16, 1999, the vessel: (1) did not harvest at least 50 metric tons (mt) of Pacific whiting in the mothership sector; (2) did not land at least 50 mt of Pacific whiting in the shore-based sector; or (3) did not land groundfish shoreside in the Pacific Coast groundfish fishery (not including fish landed in the Pacific whiting fishery) (64 FR 66158). The 2001 draft environmental assessment for Amendment 15 included a range of participation from 50 to 500 mt. The Council rejected the requirement of 50 mt as that was considered too low by industry. The 500 mt and 1000 mt values for participation in the current alternatives represent those recommended by the Groundfish Allocation Committee in their report to the Council in September 2001.

1 Significant historical participation for at-sea catcher vessels will be determined using observer data. Due to low sampling rates, estimated values of total catch, rather than Pacific whiting catch, may be used in the analysis. Since the bycatch rate in the Pacific whiting fishery is low (1-2%), total catch is assumed to be a reasonable substitute for Pacific whiting catch.

Table 1. List of AFA-permitted vessels, Alaska Department of Fish and Game (ADFG) permit number, U.S. Coast Guard permit number (USCG), AFA permit number, cooperative affiliation, and sector designation. Retrieved from the National Marine Fisheries Service Restricted Access Management program (NMFS, 2007).

VESSEL NAME	ADFG	USCG	PERMIT	CO-OP	SECTOR		
					C/P	MTH	INS
AJ	57934	599164	3405	PETER PAN	N	N	Y
ALASKA ROSE	38989	610984	515	UNALASKA	N	N	Y
ALASKAN COMMAND	57321	599383	3391	WESTWARD	N	N	Y
ALDEBARAN	48215	664363	901	AKUTAN	N	N	Y
ALEUTIAN CHALLENGER	50570	603820	1687	OPEN ACCESS	N	Y	N
ALSEA	40749	626517	2811	UNISEA	N	N	Y
ALYESKA	00045	560237	395	WESTWARD	N	Y	Y
AMERICAN BEAUTY	24255	613847	1688	PETER PAN	N	Y	Y
AMERICAN CHALLENGER	62152	633219	4120	OPEN ACCESS	Y	N	N
AMERICAN EAGLE	00039	558605	434	UNISEA	N	N	Y
ANITA J	00029	560532	1913	NORTHERN	N	N	Y
ARCTIC EXPLORER	57440	936302	3388	AKUTAN	N	N	Y
ARCTIC WIND	01112	608216	5137	WESTWARD	N	N	Y
ARCTURUS	45978	655328	533	AKUTAN	N	N	Y
ARGOSY	38547	611365	2810	UNISEA	N	N	Y
AURIGA	56153	639547	2889	UNISEA	N	N	Y
AURORA	56154	636919	2888	UNISEA	N	N	Y
BERING ROSE	40638	624325	516	UNALASKA	N	N	Y
BLUE FOX	62892	979437	4611	AKUTAN	N	N	Y
BRISTOL EXPLORER	55923	647985	3007	AKUTAN	N	N	N
CAITLIN ANN	59779	960836	3800	WESTWARD	N	N	N
CALIFORNIA HORIZON	33697	590758	412	OPEN ACCESS	N	N	Y
CAPE KIWANDA	61432	618158	1235	AKUTAN	N	N	N
CHELSEA K	62906	976753	4620	WESTWARD	N	N	N
COLLIER BROTHERS	54648	593809	2791	NORTHERN	N	N	N
COLUMBIA	39056	615729	1228	AKUTAN	N	N	N
COMMODORE	53843	914214	2657	NORTHERN	N	N	N
DEFENDER	56676	554030	3257	UNISEA	N	N	N
DESTINATION	60655	571879	3988	UNALASKA	N	N	N
DOMINATOR	08668	602309	411	AKUTAN	N	N	N
DONA MARTITA	51672	651751	2047	WESTWARD	N	N	N
ELIZABETH F	14767	526037	823	PETER PAN	N	N	N
EXCALIBUR II	54653	636602	410	NORTHERN	N	N	N
EXODUS EXPLORER	33112	598666	1249	AKUTAN	N	N	N
FIERCE ALLEGIANCE	55111	588849	4133	UNISEA	N	N	N
FORUM STAR	59687	925863	4245	OPEN ACCESS	Y	Y	N
GLADIATOR	32473	598380	1318	AKUTAN	N	N	N
GOLD RUSH	40309	521106	1868	NORTHERN	N	N	N
GOLDEN DAWN	35687	604315	1292	AKUTAN	N	N	Y
GOLDEN PISCES	32817	599585	586	AKUTAN	N	N	Y
GREAT PACIFIC	37660	608458	511	UNALASKA	N	N	Y

							SECTOR
GUN-MAR	41312	640130	425	UNISEA	N	N	Y
HALF MOON BAY	39230	615796	249	NORTHERN	N	N	Y
HAZEL LORRAINE	57117	592211	523	AKUTAN	N	N	Y
HICKORY WIND	47795	594154	993	WESTWARD	N	N	Y
INTREPID EXPLORER	64105	988598	4993	ARCTIC ENT	N	N	Y
LESLIE LEE	56119	584873	1234	AKUTAN	N	N	Y
LISA MELINDA	41520	584360	4506	AKUTAN	N	N	Y
MAJESTY	60650	962718	3996	AKUTAN	N	N	Y
MAR-GUN	12110	525608	524	UNISEA	N	Y	Y
MARCY J	00055	517024	2142	AKUTAN	N	N	Y
MARGARET LYN	31672	615563	723	AKUTAN	N	Y	Y
MARK I	06440	509552	1242	AKUTAN	N	Y	Y
MESSIAH	66196	610150	6081	UNALASKA	N	N	Y
MISS BERDIE	59123	913277	3679	NORTHERN	N	N	Y
MISTY DAWN	68858	926647	5946	OPEN ACCESS	N	Y	N
MORNING STAR	38431	610393	208	UNALASKA	N	N	Y
MORNING STAR	41009	618797	7270	OPEN ACCESS	N	Y	N
MORNING STAR	70323	1E+06	6204	PETER PAN	N	N	Y
MS AMY	56164	920936	2904	UNALASKA	N	N	Y
MUIR MILACH	41021	611524	480	OPEN ACCESS	Y	N	N
NEAHKAHNIE	32858	599534	424	OPEN ACCESS	Y	N	N
NORDIC EXPLORER	51092	678234	3009	AKUTAN	N	N	Y
NORDIC FURY	00200	542651	1094	NORTHERN	N	Y	Y
NORDIC STAR	00961	584684	428	UNISEA	N	N	Y
NORTHERN PATRIOT	55153	637744	2769	AKUTAN	N	N	Y
NORTHWEST EXPLORER	36808	609384	3002	AKUTAN	N	N	Y
OCEAN EXPLORER	51073	678236	3011	AKUTAN	N	N	Y
OCEAN HARVESTER	00101	549892	5130	OPEN ACCESS	Y	N	N
OCEAN HOPE 3	48173	652397	1623	WESTWARD	N	N	Y
OCEAN LEADER	00032	561518	1229	PETER PAN	N	Y	Y
OCEANIC	03404	602279	1667	PETER PAN	N	Y	Y
PACIFIC CHALLENGER	06931	518937	657	PETER PAN	N	Y	Y
PACIFIC EXPLORER	50759	678237	3010	AKUTAN	N	N	Y
PACIFIC FURY	00033	561934	421	NORTHERN	N	Y	Y
PACIFIC KNIGHT	54643	561771	2783	WESTWARD	N	N	Y
PACIFIC MONARCH	54645	557467	2785	UNISEA	N	N	Y
PACIFIC PRINCE	61450	697280	4194	WESTWARD	N	N	Y
PACIFIC RAM	61792	589115	4305	AKUTAN	N	N	Y
PACIFIC VIKING	00047	555058	422	AKUTAN	N	N	Y
PAPADO II	55512	536161	2087	OPEN ACCESS	N	Y	N
PEGASUS	57149	565120	1265	AKUTAN	N	N	Y
PEGGY JO	09200	502779	979	AKUTAN	N	N	Y
PERSEVERANCE	12668	536873	2837	AKUTAN	N	N	Y
POSEIDON	37036	610436	1164	NORTHERN	N	N	Y
PREDATOR	33744	547390	1275	AKUTAN	N	N	Y
PROGRESS	00006	565349	512	UNALASKA	N	N	Y
PROVIDIAN	70709	1E+06	6308	PETER PAN	N	N	Y

					SECTOR		
RAVEN	56395	629499	1236	AKUTAN	N	N	Y
ROYAL AMERICAN	40840	624371	543	AKUTAN	N	N	Y
ROYAL ATLANTIC	00046	559271	236	NORTHERN	N	N	Y
SEA STORM	40969	628959	420	OPEN ACCESS	Y	N	N
SEA WOLF	35957	609823	1652	UNALASKA	N	N	Y
SEADAWN	00077	548685	2059	UNISEA	N	N	Y
SEEKER	59476	924585	2849	AKUTAN	N	N	Y
SOVEREIGNTY	55199	651752	2770	AKUTAN	N	N	Y
STAR FISH	00012	561651	1167	UNISEA	N	N	Y
STARLITE	34931	597065	1998	UNISEA	N	N	Y
STARWARD	39197	617807	417	UNISEA	N	N	Y
STORM PETREL	39860	620769	1641	NORTHERN	N	N	Y
SUNSET BAY	35527	598484	251	NORTHERN	N	N	Y
TOPAZ	40250	575428	405	PETER PAN	N	N	Y
TRACY ANNE	54654	904859	2823	OPEN ACCESS	Y	N	N
TRAVELER	58821	929356	3404	AKUTAN	N	Y	Y
VANGUARD	39946	617802	519	UNALASKA	N	Y	Y
VESTERAALEN	38342	611642	517	OPEN ACCESS	N	Y	N
VIKING	00008	565017	1222	WESTWARD	N	N	Y
VIKING EXPLORER	36045	605228	1116	AKUTAN	N	N	Y
WALTER N	34919	257365	825	PETER PAN	N	N	Y
WESTERN DAWN	22294	524423	134	UNALASKA	N	Y	Y
WESTWARD I	53247	615165	1650	WESTWARD	N	N	Y

7.0 REFERENCES

National Marine Fisheries Service (2002). *Final Environmental Impact Statement for American Fisheries Act Amendments 61/61/13/8*. Retrieved May 1, 2007 from http://www.fakr.noaa.gov/sustainablefisheries/afa/afa_sf.htm

National Marine Fisheries Service Restricted Access Management (2007). *American Fisheries Act Catcher Vessel Permits*. Retrieved May 21, 2007 from http://www.fakr.noaa.gov/ram/daily/afa_cv.htm

DRAFT

AMENDMENT 15
(AMERICAN FISHERIES ACT IMPLEMENTATION FOR THE PACIFIC COAST WHITING FISHERY)

TO THE

PACIFIC COAST GROUNDFISH FISHERY MANAGEMENT PLAN

FOR THE CALIFORNIA, OREGON, AND WASHINGTON GROUNDFISH FISHERY

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JUNE 2007

Preface

This document shows proposed changes to the groundfish fishery management plan (FMP) developed by federal and state staff based on the range of alternatives identified by the Council at its April 2007 meeting for Amendment 15 to the FMP, which would implement the American Fisheries Act (AFA) for the Pacific Coast whiting fishery. Amendment 15 only affects FMP text in Chapter 11, "Groundfish Limited Entry."

In this document, suggested deletions are marked by ~~strikethrough~~ and insertions by <u>double underline</u>. Notes, for example explaining why the text of a particular sub-section of Chapter 11 may not appear herein, are in ***[boldface italic brackets]***. Readers interested in the substance of those sections of the FMP not provided herein are referred to the Council's FMP website: http://www.pcouncil.org/groundfish/gffmp/fmpthru19.html.

11.0 GROUNDFISH LIMITED ENTRY

All references to fishing activities in these proposals are references to catching activities occurring off the Washington, Oregon, and California coasts unless otherwise noted.

11.1 Introduction

[Note: This section is not proposed to be revised by Amendment 15; therefore, it is not provided here.]

11.2 Management, Allocation and General Rules on the Issuance and Use of Groundfish LE Permits, Gear Endorsements Size Endorsements, ~~and~~ Fixed Gear Sablefish Endorsements, and Trawl Whiting Endorsements.

11.2.1 Federal LE Permits Required Only for Gears Fishing on the Limited Access Quota

1. Federal groundfish LE permits will be required and issued only for those vessels catching Council-managed groundfish species[1/] with groundfish limited entry gears (trawl, longline or fishpot gear) under the limited access quota.[2/]

2. Vessels using exempted gears (all gears other than trawl, longline and fishpot) or using longline or fishpot gear[3/] without a permit endorsed for one of those gears may continue to catch groundfish under an open access system. (Exempted, longline and fishpot gears used by vessels without endorsements for those gears are termed open access gears.)

11.2.2 Allocations Between the Limited and Open Access Fisheries and Management of the Open Access Fishery

1. The division of the fleet into limited and open access participants will require that separate allocations be established for each group.

2. Allocations for the open access fishery will be based on historical catch levels for the period July 11, 1984 to August 1, 1988 by exempted, longline and fishpot gears used by vessels which did not receive an endorsement for the gear.

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[1] All references to "Council-managed groundfish" refer only to groundfish species specified in the Council groundfish FMP which are caught in the exclusive economic zone or adjacent state waters off Washington, Oregon and California.

[2] References to longline, pot and trawl gear are references to legal groundfish gears as defined by the groundfish FMP.

[3] Trawl gear may not be used without a permit because the open access fishery for limited entry gears is aimed at accommodating small producers and will likely be managed under restrictive trip limits. The fishing power of trawl gear would result in excessive discards under these trip limits. Additionally, while longline and fishpot vessels catching small quantities of groundfish will be prevented from qualifying by the structure of the minimum landing requirements (MLRs) (a day's landings must be greater than 500 pounds in order for the day to count toward meeting the MLR; Section 11.3.1.3), this structure will provide little barrier for most trawl vessels. Thus, there is no strong reason to provide the open access opportunity to compensate for the 500 pound per landing day threshold.

a. On the basis of landings over this period, a percentage of catch[4] for these gears will be determined and applied to harvest guidelines and quotas in order to establish the allocation for the open access portion of the fishery. The open access portion of harvest guideline or quota will be set aside before other allocations are made.

b. Limited/open access allocation percentages for specific species and species groups will be determined after this limited entry program is implemented and permitted and nonpermitted vessels are identified.

c. An open access allocation based on catch history will be determined for each separate species, species group and area for which the Council determines an allocation is necessary.

d. Initial determination and any subsequent revision of the species or species groups and areas for which an open access allocation will be made will occur through a rule making under the appropriate framework in Chapter 6 of this plan.

e. Open access allocations for species, species groups and areas identified for such allocation by the Council will be specified during the biennial process for setting specifications described in Section 5.7 of this plan.

f. A change in the catch history allocation method for determining the allocation for the open access fishery will require a plan amendment.

g. If a group of vessels that initially is to participate in the open access fishery later receives permits in the limited access fishery, the historical catch levels of those vessels shall be deducted from the historical catch levels used to calculate the open access allocation, and the percentages used in setting the open access allocation recalculated. For example, if a vessel whose gear is prohibited by a state or the Secretary of Commerce qualifies for a LE permit under Section 11.3.2.3(9), or if a small limited entry fleet is incorporated under Section 11.3.1.3(9) and its vessels are issued LE permits, their catch history with the banned gear or the limited entry gear for which they are now going to receive permits, shall be deducted from the open access fishery's historical catch levels and open access percentages will be recalculated.

h. Prior to expiration of “B” endorsements, vessels' catch history using gears for which they receive “B” endorsements is not included in the catch history used to calculate the percentage of catch for open access vessels. When “B” endorsements expire, the historic catch levels of vessels which received “B” endorsements for longline or fishpot gear when using that gear will then count toward determining the proportion allocated to the open access quota. The historic catch levels of vessels which received “B” endorsements for trawl gear

[4] Percentage of catch as determined through the Pacific Coast Fisheries Information Network database or some comparable database.

will continue to count toward determining the limited access quota and will not be transferred to the catch history used to determine the open access quota, even after trawl "B" endorsements expire.

3. For International North Pacific Fisheries Commission areas where quotas or harvest guidelines for a stock are not fully utilized, no limited/open access allocation will be established until it is anticipated the allowable catch for a species or group of species will be reached.

4. Any groundfish catch by vessels with an LE permit will be counted against the quota for the limited entry gears while the fishery for the limited entry gear for which its permit is endorsed is open. A vessel may not carry or deploy limited entry gear for which its permit is endorsed when the limited entry fishery for that gear is closed. Once the limited entry fishery for the gear for which the permit is endorsed has closed, any landings by the vessel with exempted gear, or limited entry gears for which no endorsement is held, will count toward the open access quota. The catch of vessels fishing without LE permits will count toward the open access quota regardless of what open access gear is used.

5. Allocations among gear types for species other than sablefish may be established in the future. If this occurs, portions of the new allocations may, in turn, be allocated to the open access fishery under the principles set forth in this section.

6. Management of the open access fishery.

   a. The open access portion of the fishery will be managed to provide year-round fishing opportunity.
   b. The purpose of providing an open access alternative for vessels using longline or fishpot gear is to allow a group of vessels which has historically fished at low levels, with minimal impacts on the resource (fewer than 5 or 6 landings greater than 500 pounds per vessel during the qualifying window period, July 1, 1984 through August 1, 1988), to remain in the fishery without creating permits which may be used at higher effort levels.

   c. The open access fishery will be managed with the intent of maintaining the historic fishing opportunities for the participant groups and to keep the overall catch in line with historic harvests. For example, trip limits for nonpermitted longline and fishpot gears operating in the open access fishery will likely be fairly low because the historic fishing levels of this group are low. Trip limits, when necessary, for some exempted gears will probably be higher because their historic fishing levels are higher.

11.2.3 Initial Issuance of LE Permits

1. Each qualifying vessel will entitle only the current owner[5] to one LE permit.

[5] An exception to this would occur in the case of a lost vessel (Section 11.2.9.1 paragraph 2), or if a contract transferring vessel ownership specified that the seller would retain the rights to the LE permit. In this case, a past owner (the seller) may

2. A vessel qualifies for an LE permit by meeting the initial issuance criteria for one or more gear endorsements (see Sections 11.2.5 and 11.3).

3. A given vessel will not result in the issuance of more than one LE permit.

11.2.4 Ownership Restriction and Changes in Ownership

1. Only entities (human beings, corporations, etc.) qualified to own a U.S. fishing vessel may be issued or may hold (by ownership or otherwise) an LE permit. (Foreign ownership of LE permits should be limited to the maximum degree possible given what is allowed under the law.)

2. Ownership of a permit will be considered to change when there is an ownership change on U.S. Coast Guard documents, however, an owner can submit documents to demonstrate that the controlling interest has not changed and therefore the change in documentation is not a change in ownership.

3. An entity qualified to hold an LE permit may hold more than one LE permit. If the Council authorizes an LE permit stacking program, in which a vessel could use multiple permits simultaneously, each LE fishery participant would be required to hold at least one LE "base" permit. An LE base permit is the initial permit necessary to participate in the LE fishery, and subject to all of the requirements described herein for LE permit ownership qualifications, and gear and length endorsements. Requirements and additional privileges for permits "stacked" on to base permits may be authorized by federal rulemaking.

4. For the purpose of provisions specifically identified by the Council, NMFS may promulgate regulations which define a change in ownership of a permit as a change in the identity or ownership interest of a corporation or partnership owning a permit.

11.2.5 Gear Endorsements

1. An LE permit confers no rights without a valid gear endorsement attached.

2. As of Amendment 13 to the FMP, there is only one functioning type of endorsement, the "A" endorsement. With Amendment 13, the provisional "A" endorsement, the "B" endorsement, and the designated species "B" endorsements were removed as expired or defunct.

3. Gear endorsements will be affixed to the LE permit and specify the type of limited entry gear which may be used to catch Council-managed groundfish.

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ultimately receive the LE permit.

4. A gear endorsement for a particular gear authorizes the catch of all Council-managed groundfish species with that gear, except in the case of fishing for which a fixed gear sablefish endorsement is required (see Section 11.2.6). Limited entry vessels using longline and fishpot gear to catch sablefish against the limited entry quota north of 36°N latitude are required to hold fixed gear sablefish endorsements during periods specified in the regulations, in addition to the required gear endorsement.

5. More than one gear endorsement may be affixed to a single LE permit.

6. An LE permit will not allow the use of limited entry gears to catch any Council-managed groundfish unless a valid gear endorsement for the specific gear is affixed to the LE permit. Trawl gear and Council-managed groundfish may not be on board a vessel at the same time, nor may the gear be deployed, without an LE permit registered for the vessel and endorsed for trawl gear. If a vessel has longline or fishpot gear on board, an LE permit registered for the vessel and the permit is endorsed for the gear on board, regulations for the limited access fishery will apply.

7. Depending on the type of gear endorsement (see Section 11.3 on the specific type of gear endorsements):

a. the period for which the gear endorsement is valid may be limited, and
b. the gear endorsement may or may not remain valid when the LE permit is transferred.[6]

8. Gear endorsements are not separable from the LE permit and therefore may not be transferred separately from the LE permit.[7]

9. Limitations which apply to a given gear endorsement shall not restrict the use of any other gear endorsement on the same LE permit.

10. Rules on the issuance of gear endorsements and other characteristics of the gear endorsements are specified under sections on each type of gear endorsement (see Section 11.3).

11.2.6 Fixed Gear Sablefish Endorsements

1. The permit and gear endorsement requirements of the license limitation program limit the number of vessels which may participate in the groundfish fishery, however, there is still substantial opportunity for vessels to shift between segments of the groundfish fishery.

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[6] Unless otherwise noted:

a. Transferable means separable from the vessel owner and vessel.

b. LE permit transferability, with respect to an owner, means the LE permit may be transferred, inherited, sold, bartered, traded, given or otherwise alienated from the LE permit owner.

c. LE permit transferability, with respect to a vessel, means the LE permit may be registered for use with a different vessel.

[7] The intent of this provision is to not allow the fishing capacity to expand by separate transfer of endorsements which might otherwise go unused.

One of the segments of the limited entry fishery subject to an increase in the number of vessels participating is the limited entry fixed gear sablefish fishery. To prevent the movement of vessels from nonsablefish segments of the limited entry fixed gear groundfish fishery to the sablefish segment of the fishery, a fixed gear sablefish endorsement for limited entry permits is required for longline and fishpot gear limited entry vessels to take sablefish against the fixed gear limited entry allocation and as part of the primary fishery, the major limited entry fixed gear sablefish harvest opportunities north of 36°N latitude. Such endorsements are not required to harvest under fixed gear limited entry daily-trip-limit or other regulations intended to allow low level or incidental harvest.

2. The fixed gear sablefish endorsement will be affixed to the permit.

3. The fixed gear sablefish endorsement will remain valid when the permit is transferred.

4. If permits are stacked such that a single permit has multiple sablefish endorsements, sablefish endorsements and associated cumulative limits may be transferred to other sablefish-endorsed permits so long as at least one sablefish endorsement and associated tier limit remains with the permit. Fixed gear sablefish endorsements may not be transferred from permits on which there is only one fixed gear sablefish endorsement.

5. Limitations which apply to the fixed gear sablefish endorsement and fishing thereunder shall not restrict the use of any trawl gear endorsement on the same LE permit, unless these restrictions are specific in their application to trawl gear.

6. Rules on the issuance of fixed gear sablefish endorsements and other characteristics of the endorsements are specified in Section 11.4.

11.2.7 Trawl Whiting Endorsements

The Council may recommend that NMFS implement via regulations a trawl whiting endorsement program. Such endorsements may be issued annually to any LE permit with a trawl gear endorsement. No vessel that is prohibited from participating in the Pacific Coast whiting fishery under the provisions of Section 11.5, "American Fisheries Act Implementation for the Pacific Coast Whiting Fishery" may be registered for use with a LE permit with a trawl whiting endorsement.

11.2.8 .7 Size Endorsement Will Specify the Vessel Length

The LE base permit will be endorsed with the length overall (as defined for purposes of U.S. Coast Guard documentation) of the vessel for which the LE permit is initially issued. The length for which the LE permit is endorsed will be changed only when LE permits are combined, as per Section 11.2.10, or, in the case of LE permits endorsed for trawl gear, when the size of the vessel used with the permit is more than five feet less than the originally endorsed length. In the latter case, the LE permit will be reissued with a size endorsement for the length of the smaller vessel.

Regulations may be promulgated to waive this downsizing requirement if the permit was transferred to a smaller vessel for the purposes of stacking (see Section 11.2.4, paragraph 3). Vessels which do not have documents stating their length overall will have to be measured by a marine surveyor or the U.S. Coast Guard and certified for that length.[8]

If the Council establishes a permit stacking program, that program may or may not require that permits stacked on top of the base LE permit be endorsed with the length overall of the vessel holding the permits.

11.2.9 ~~.8~~ An LE Permit and Necessary Gear Endorsements Will Be Held by the Owner of Record of the Vessel

1. The vessel owner is responsible for acquiring and holding an LE permit with the necessary gear endorsement(s) for each vessel that is required to have an LE permit to catch Council-managed groundfish under the limited entry system (vessels fishing limited entry gear under the limited access quota and regulations).

2. The vessel owner is responsible for acquiring and holding an LE permit with the longline or fishpot endorsement(s), and fixed gear sablefish endorsement(s), for each vessel that is required to have such endorsements to catch Council-managed sablefish under the limited entry system (vessels fishing longline and fishpot gear against the LE fixed gear sablefish allocation and under LE fixed gear sablefish regulations during fishing periods specified in the regulations and north of 36°N latitude).

3. The vessel owner is responsible for maintaining NMFS required documentation of the LE permit on board the vessel.

4. The LE permit will be used with one vessel only. That vessel must be declared and registered with the NMFS issuing authority. Registration is incomplete until acknowledged in writing by NMFS. (Transfer of an LE permit to a different vessel is allowed as per Section 11.2.8.)

5. A vessel owner may not use a vessel, or allow a vessel to be used, to catch any Council-managed groundfish with limited entry gear under the limited access quota and regulations unless the vessel owner holds an LE permit with gear endorsement(s) which explicitly allows such catch and the LE permit has been registered with NMFS for use with that vessel.

6. A vessel owner may not use a vessel, or allow a vessel to be used, to catch any Council-managed sablefish with longline or fishpot gear against the LE fixed gear sablefish allocation as part of the primary fixed gear sablefish fishery specified in the regulations and north of 36°N latitude, unless the vessel owner holds an LE permit with a longline or fishpot gear endorsement and a fixed gear sablefish endorsement, and the LE permit has been registered with National Marine Fisheries Service (NMFS) for use with that vessel.

[8] While not an immediate cap on vessel capacity, the size endorsement places an upward limit on the amount by which the capacity used with an LE permit may increase.

Sablefish endorsements are not required to harvest under fixed gear limited entry daily-trip-limit or other regulations intended to allow low level or incidental harvest.

11.2.10 ~~.9~~ Transfer of an LE Permit to Different Owners or Vessels of the Same Owner

1. LE permits may be transferred to other owners for use with other vessels or used with other vessels under the same ownership, but will continue to be restricted by size and gear endorsements unless otherwise designated through a permit stacking program.

2. Whenever an owner wishes to transfer an LE permit to a different owner or use an LE permit with a different vessel under the same ownership, the NMFS issuing authority must be notified of the change. Notification is not complete until acknowledged in writing by NMFS.

3. LE base permits may be used with vessels greater in length than the endorsed length provided the increase does not exceed five feet of the endorsed length. Original size endorsements will change only when LE permits are combined as per Section 11.2.109/, or when an LE permit with a trawl endorsement is transferred to a vessel five feet less in length than the endorsed length. In the latter case, the LE permit will be reissued with a size endorsement for the length of the smaller vessel. Regulations may be promulgated to waive this downsizing requirement if the permit was transferred to a smaller vessel for the purpose of stacking (see Section 11.2.4, paragraph 3).

4. The transfer of LE permits between vessels or owners may not be used to circumvent vessel landing limits.

5. When an LE permit is transferred to a different owner or vessel, provisional "A", "B" and designated species "B" gear endorsements will become invalid, unless the transfer is caused by the total loss of a vessel (as per Section 11.2.9) and ownership of the LE permit is not transferred.

11.2.11 ~~.10~~ Loss of a Vessel

11.2.11.1 ~~.10.1~~ Loss of a Vessel Prior to Permit Issuance

1. A "B" or provisional "A" endorsement will be issued for a vessel which qualified for a "B" or provisional "A" endorsement but is lost before the LE permits are issued. The vessel must be replaced within two years of the loss unless otherwise determined by the NMFS regional director, and the requirements of the third paragraph of Section 11.2.8 apply. The validity of the "B" or provisional "A" gear endorsement on transfer of the LE permit to the new vessel will be subject to review by the NMFS review authority.

[9] Allowance for a slight length increase over the endorsed length is made to provide flexibility in replacing vessels.

2. For a vessel that would qualify an owner for an "A" endorsement, in the case of a vessel's sinking or total loss, all rights to a permit from the fishing history of the vessel prior to the sinking or total loss remain with the owner at the time of sinking or total loss unless specifically transferred. The vessel must be replaced within two years of the loss, unless otherwise determined by the NMFS regional director, and the requirements of the third paragraph of Section 11.2.8 apply.

11.2.11.2 ~~.10.2~~ Loss of a Vessel after Permit Issuance

In the event that a vessel is totally lost, the provisional "A" or "B" gear endorsements on an LE permit will remain valid if the LE permit is transferred to a different vessel owned by the same LE permit owner, subject to the following: (1) the replacement vessel may not exceed the endorsed length by five feet of the official length overall and (2) the lost vessel is replaced within two years of the loss unless otherwise determined by the NMFS regional director, and the requirements of the third paragraph of Section 11.2.8 apply. The validity of the provisional "A" or "B" gear endorsements on transfer of the LE permit to the new vessel will be subject to review by the NMFS review authority.

11.2.12 ~~.11~~ Combining LE Permits

1. Two or more LE permits with "A" gear endorsements for the same type of limited entry gear (either trawl, longline or fishpot) may be combined (based on specific criteria) to "step-up" to a permit with a larger size endorsement. NMFS, with professional advice of marine architects and other qualified individuals, and after consultation with the Council and review board, will develop and implement a standardized measure of harvest capacity for the purpose of determining the appropriate endorsed length for LE permits created by combining two or more permits possessing smaller length endorsements. The capacity represented by the appropriate length endorsement for the combined permit should not exceed the sum of the capacities of the LE permits being combined.

2. LE permits may not be divided to "step-down" to more than one permit with smaller size endorsements.

3. When LE permits are combined, "A" endorsements identical on both LE permits will remain valid. Provisional "A", "B" and designated species "B" gear endorsements will generally become invalid because they are not separable from the vessel for which they are initially issued. (See table below for examples.) Fixed gear sablefish endorsements will remain valid only if all the longline or fishpot permits being combined have fixed gear sablefish endorsements.

1st Permit Endorsement on 1st LE Permit	+	2nd Permit Endorsements on 2nd LE Permit	=	Combined Permit Endorsements on the Combined LE Permit
"A" - Trawl		"A" - Pot		None
"A" - Longline		"A" - Longline		"A" - Longline
"A" - Trawl		Provisional "A" - Trawl		None
"A" – Pot		"B" - Pot		None

"A" - Trawl	Designated Species "B" - Shortbelly - Trawl	None

11.2.13 ~~.12~~ Permit Renewal

1. Permits must be renewed each year between October 1 and November 30 in order to remain valid for the following calendar year.

2. Notice of upcoming renewal periods will be sent by September 1 each year to the most recent address as provided to the permit issuing authority by the permit holder. It shall be the permit holder's responsibility to provide the permit issuing authority with address changes in a timely manner.

3. An annual fee will be charged which reflects the administrative costs of maintaining the permit system.

4. Failure to renew during this period will result in expiration of the permit at the end of the calendar year.

5. Once a permit has expired because of failure to renew during the renewal period, it may not subsequently be renewed or reissued, except through an appeals process.

6. If a permit expires because of failure to renew, the permit holder may appeal for reissuance, provided the appeal is received by the issuance review authority by March 31 of the following year. Conditions for reissuance of a permit are listed in Section 11.4.1 paragraph 1.h.

11.2.14 ~~.13~~ Owner-on-board Requirements

In order to preserve the social and historic characteristics and practices in the fishery or to encourage the flow of fishery benefits to fishing communities, on the Council's recommendation, as it deems appropriate and consistent with the goals of the groundfish FMP and National Standards, NMFS may require permit owners to be on-board a vessel during fishing operations.

[Amended: 9 & added 12.2.6, 13, 14]

11.3 Multilevel Gear Endorsement System

[Note: This section is not proposed to be revised by Amendment 15; therefore, it is not provided here.]

11.4 Fixed Gear Sablefish Endorsement

[Note: This section is not proposed to be revised by Amendment 15; therefore, it is not provided here.]

11.5 American Fisheries Act (AFA) Implementation for the Pacific Coast Whiting Fishery

[Note: At its April 2007 meeting, the Council recommended a range of alternatives for implementing the AFA in the Pacific Coast whiting fishery. The following proposed amendatory language shows how the FMP might be revised under either of the Action Alternatives (i.e. those alternatives other than status quo.)]

Alternative 2 FMP amendatory language:

In order to protect traditional participants in the Pacific Coast whiting fishery from potential harm from the participation of AFA-permitted vessels in the fishery, AFA-permitted vessels are prohibited from participating in the shoreside, catcher-processor, and mothership sectors of the Pacific whiting fishery, unless those vessels have significant historic participation in those sectors between January 1, 1994 and January 1, 2006.

Alternative 3 FMP amendatory language:

In order to protect traditional participants in the Pacific Coast whiting fishery from potential harm from the participation of AFA-permitted vessels in the fishery, AFA-permitted vessels are prohibited from participating in the shoreside, catcher-processor, and mothership sectors of the Pacific whiting fishery, unless those vessels have significant historic participation in those sectors between January 1, 1994 and January 1, 2007.

[Note: Under either Alternative 2 or 3, the Council would make recommendations on how to define the term "significant historic participation." Alternative definitions for that term are provided below for each sector of the non-tribal whiting fishery.]

"Significant historic participation" is defined as:

For catcher/processors vessels:

a. having caught and processed at least 1,000 metric tons (mt) of whiting in any one qualifying year; ***[or]***

b. having caught and processed at least 1,000 mt of whiting in any one qualifying year subsequent to December 31, 1996.

For motherships:

a. having received at least 1,000 mt of whiting in any one qualifying year; ***[or]***

b. having received at least 1,000 mt of whiting in any one qualifying year subsequent to December 31, 1996.

For catcher vessels participating in the shore-based or mothership fishery:

a. having landed at least 500 mt of whiting in any one qualifying year; ***[or]***

b. having landed at least 1,000 mt of whiting in any one qualifying year.

NMFS will publish a *Federal Register* notice announcing the names and U.S. Coast Guard vessel documentation numbers of those AFA-permitted vessels that do not have significant historic participation in the fishery, and who are therefore prohibited from future participation in the fishery. "AFA-permitted" vessels are those vessels identified in 50 CFR Part 679 – Fisheries of the Exclusive Economic Zone Off Alaska, as eligible for AFA permits under 679.4(l).

11.6 ~~.5~~ LE Permit Issuance Review Board

[Note: This section is re-numbered, but is otherwise not proposed to be revised by Amendment 15; therefore, it is not provided here.]

11.7 ~~.6~~ Implementation, Application and Appeals Process

[Note: This section is re-numbered, but is otherwise not proposed to be revised by Amendment 15; therefore, it is not provided here.]

11.8 ~~.7~~ Council Review and Monitoring

[*Note: This section is re-numbered, but is otherwise not proposed to be revised by Amendment 15; therefore, it is not provided here.]*

NMFS REPORT ON NATIONAL ENVIRONMENTAL POLICY ACT (NEPA) ANALYSIS NEEDS FOR AMENDMENT 15 TO THE FMP – IMPLEMENTING THE AMERICAN FISHERIES ACT (AFA) FOR WEST COAST GROUNDFISH FISHERIES

NMFS conducted an internal scoping meeting prior to the Council's May 23, 2007 briefing book deadline to assess whether restricting participation in the non-tribal Pacific whiting fishery under implementation of the AFA for West Coast groundfish fisheries should be analyzed via an Environmental Impact Statement (EIS) or an Environmental Assessment (EA). Staff discussed a potential Purpose and Need statement for this action, the potential action alternatives, and the potential effects that such a program could have on various environmental resources within the West Coast Exclusive Economic Zone, the "action area." Based on that meeting, NMFS is recommending that the action alternatives be analyzed under NEPA via an EA, accompanied by appropriate analyses under other applicable laws, including among others, the Magnuson-Stevens Fishery Conservation and Management Act, the Regulatory Flexibility Act.

One of the first steps in the NEPA public process is to identify a Purpose and Need for the action under discussion. Because this action is driven by legislative requirements, the Council should develop a Purpose and Need statement based on those requirements. The AFA's original direction to the Pacific Council for the shoreside sector and for catcher vessels in the mothership fishery was that the Council:

> …"*shall recommend for approval by the Secretary conservation and management measures to protect fisheries under its jurisdiction and the participants in those fisheries from adverse impacts caused by this Act or by any fishery cooperatives in the directed pollock fishery."* (Section 211(c) (3)(A).)

The AFA also authorizes the NMFS, as the representative of the Secretary of Commerce, to:

> …"*implement adequate measures including, but not limited to, restrictions on vessels which harvest Pollock under a fishery cooperative which will prevent such vessels from harvesting Pacific groundfish, and restrictions on the number of processors eligible to process Pacific groundfish."* (Section 211(c)(3)(B).)

The AFA's original direction for considering the effects of the AFA on catcher/processors and motherships was:

> *The catcher/processors eligible under paragraphs (1) through (20) of section 208(e) and motherships eligible under section 208(d) are hereby prohibited from harvesting fish in any fishery under the authority of any regional fishery management council established under section 302(a) of the Magnuson-Stevens Act (16 U.S.C. 1852(a)) other than the North Pacific Council, except for the Pacific whiting fishery, and from processing fish in any fishery under the authority of any such regional fishery management council other than the North Pacific Council, except in the Pacific whiting fishery, unless the catcher/processor or mothership is authorized to harvest or process fish under a*

fishery management plan recommended by the regional fishery management council of jurisdiction and approved by the Secretary. (Section 211(b)(5).)

These separate directives for catcher vessels in the shoreside and mothership sectors and for catcher/processors and motherships mean that the Council needs to determine in its Purpose and Need statement whether Amendment 15 is intended just to address the mandates of the AFA, or whether the Council wishes Amendment 15 to address participation in the whiting fisheries more generally. If the Council intends just to address the mandates of the AFA, then the universe of vessels it will be addressing is: "AFA-permitted" for the shoreside sector and catcher vessels in the mothership fleet, meaning those vessels that currently hold AFA permits, and "AFA-qualified" for the catcher/processor sector and for motherships, meaning those vessels explicitly named as receiving benefits in the act.[*] The Council also needs to explicitly decide whether it intends to address the AFA authorization under Section 211(c)(3)(B) to place restrictions on vessels within pollock cooperatives that prevent those vessels from harvesting groundfish other than whiting.

At its April 2007 meeting, the Council had provided two initial action alternatives to status quo, as follows:

- *In order to protect traditional participants in the Pacific Coast whiting fishery from potential harm from the participation of AFA-qualified vessels in the fishery, AFA-qualified vessels are prohibited from participating in the shoreside, catcher-processor, and mothership sectors of the Pacific whiting fishery, unless those vessels have significant historic participation in those sectors between January 1, 1994 and January 1, 2006.*

- *In order to protect traditional participants in the Pacific Coast whiting fishery from potential harm from the participation of AFA-qualified vessels in the fishery, AFA-qualified vessels are prohibited from participating in the shoreside, catcher-processor, and mothership sectors of the Pacific whiting fishery, unless those vessels have significant historic participation in those sectors between January 1, 1994 and January 1, 2007.*

For both of these action alternatives, "significant historic participation" was to be considered as having alternative definitions for each of the three non-tribal whiting sectors:

For catcher/processors vessels:

a. having caught and processed at least 1,000 metric tons (mt) of whiting in any one qualifying year; [or]

[*] Federal regulations for fisheries off Alaska (50 CFR 679) divide AFA-permitted vessels into three categories:
1. Those vessels explicitly named in the AFA as qualifying for participation in the Bering Sea pollock fishery – §679.4(l)(2)(i), §679.4(l)(3)(i)(A)(1), §679.4(l)(3)(i)(B)(1), §679.4(l)(3)(i)(C)(1), and §679.4(l)(4);
2. "Unlisted" vessels, which are vessels that were not explicitly named within the AFA, but which met minimum landing requirements within the same class as those vessels named within the AFA – §679.4(l)(2)(ii), §679.4(l)(3)(i)(A)(2), §679.4(l)(3)(i)(B)(2), and §679.4(l)(3)(i)(C)(2); and
3. Replacement vessels, which are vessels that may replace either of the above two types of vessels, provided the initially-permitted vessel was totally lost of suffered a constructive total loss – §679.4(l)(7).

b. having caught and processed at least 1,000 mt of whiting in any one qualifying year subsequent to December 31, 1996.

For motherships:

a. having received at least 1,000 mt of whiting in any one qualifying year; [or]

b. having received at least 1,000 mt of whiting in any one qualifying year subsequent to December 31, 1996.

For catcher vessels participating in the shore-based or mothership fishery:

a. having landed at least 500 mt of whiting in any one qualifying year; [or]

b. having landed at least 1,000 mt of whiting in any one qualifying year.

In addition to these alternatives, NMFS recommends the Council consider expanding its range of alternatives in order to more fully address the purpose and need for the action. NMFS specifically recommends that the Council consider alternatives that would:

- *limit participation in the whiting fishery sectors only to those vessels that would qualify for participation in the 2007 fishery under the emergency rule;*
- *limit the participation of AFA vessels in the whiting fishery to the average annual aggregate historic participation of those vessels now registered for use with AFA permits vessels from 1994-1999 (the start of the limited entry program through to the passage of the AFA,) based on number of vessels (e.g., if an average of 5 AFA-permitted vessels participated in the whiting fishery annually from 1994-1999, the date from which limited entry was implemented to which the AFA was implemented, then no more than 5 AFA-permitted vessels may participate in the whiting fishery in future years.)*

In addition to addressing participation in the whiting fishery, NMFS believes that the Council needs to specifically address that portion of the AFA that authorizes regulations to "*implement adequate measures including, but not limited to, restrictions on vessels which harvest pollock under a fishery cooperative which will prevent such vessels from harvesting Pacific groundfish, and restrictions on the number of [AFA] processors eligible to process Pacific groundfish*." Under Federal regulations at 50 CFR 660.306(a)(12), it is unlawful to "*Transfer fish to another vessel at sea unless a vessel is participating in the primary whiting fishery as part of the mothership or catcher-processor sectors, as described at §660.373(a).*" If the Council believes that current Federal regulations are adequate to address the AFA provision that concerns non-whiting groundfish, then it should make a statement to that effect, providing the reasoning for its decision, in the section of its EA entitled "Alternatives Considered but Rejected for Further Analysis." If the Council does not believe that current Federal regulations address this provision, then it should modify its action alternatives to include considerations for non-whiting groundfish.

With regard to the physical, biological, and socio-economic resources that Amendment 15 could potentially affect, NMFS believes that the effects of such a program on following resources should be analyzed within the EA:

- *Salmonids Listed as Threatened or Endangered under the Endangered Species Act (ESA)* - Low potential for significant impact. The bycatch of listed salmonids in the whiting fishery has been regularly analyzed in a Section 7 Biological Opinion and in supplemental opinions. NMFS has concluded in those opinions that the effects of the

whiting fishery to ESA-listed sockeye, coho, chum, and steelhead were negligible. Of the listed Chinook ESUs, NMFS concluded that four (Snake River fall Chinook, Lower Columbia River Chinook, Upper Willamette Chinook, and Puget Sound Chinook) were the ones most likely to be subject to measurable impacts. This action would not affect overall groundfish harvest levels. If the Council were to choose an alternative that restricted the number of vessels participating in the fishery, rather than simply restricting the number of AFA-vessels that could participate in the fishery, this action would have a low potential for a positive impact, because it would slow the race for fish in this fishery and allow participants to more carefully avoid salmon bycatch. If the status quo alternative is chosen, salmon bycatch could potentially increase modestly over time, concurrent with expected increases in the fishery's vessel capacity over time.

- *Overfished Groundfish* – Low potential for significant impact. This action is not expected to affect the overall harvest levels of groundfish, but it could reduce capacity and participation in the whiting fishery, which could in turn have a beneficial effect on overfished groundfish species by reducing interactions with the overfished species most commonly taken as bycatch in that fishery: canary, darkblotched, and widow rockfish, and Pacific ocean perch.

- *Groundfish Species at Healthy and Precautionary Levels of Abundance* -- Low potential for significant impact. This action is not expected to affect the overall harvest levels of groundfish, but it could reduce capacity and participation in the whiting fishery, which could in turn have a beneficial effect on groundfish species by reducing interactions with the healthy and precautionary species most commonly taken as bycatch in that fishery, particularly yellowtail rockfish.

- *Community Economic Impacts* – Low to moderate potential for significant impact. This action would not affect overall harvest levels of whiting, nor would it prevent any community from receiving deliveries of whiting. Depending on the alternative chosen, a community that has been receiving whiting from vessels that only participated in a particular sector of the whiting fishery in 2006 may have to make new arrangements for receiving whiting from vessels with more historic participation for the fishing years 2008 and beyond. In 2006, NMFS completed an Environmental Impact Statement (EIS) for Amendment 16-4 to the FMP and the 2007-2008 Groundfish Specifications and Management Measures. That EIS included a comprehensive analysis of West Coast groundfish fishing communities and their engagement in various groundfish fisheries, including the Pacific whiting fishery. Appendix A to the EIS evaluated fishing communities for their engagement in the groundfish fishery, their dependence on groundfish resources, and for their vulnerability to changes in availability of groundfish harvest. Port cities that Appendix A identified as both having some history of whiting landings and a relatively higher engagement in the groundfish fishery are: Astoria, Coos Bay, Crescent City, Eureka, Ilwaco, Newport, and Westport.

- *Environmental Justice* – Low potential for significant impact. This action does not target low income or minority communities; it would affect all population segments equally. Members of low income communities and minorities generally participate in the whiting

fisheries as workers in either at-sea or shore-based processing plants. This action would not re-allocate whiting between the fishery sectors, so job opportunities for low income and minority participants would be expected to remain the same between sectors. Because some communities would need to adjust to having their processing plants purchase fish from different vessels, there could be a temporary lull in job opportunities for shore-based plant workers in communities dependent on deliveries from vessels that only participated in the fishery in 2006 – depending on the alternative chosen. This action does not affect tribal fisheries, nor treaty rights to or allocations of groundfish.

- *Safety of Human Life at Sea* – Depending on how the action alternatives would be implemented, specifically on whether vessel substitutions are allowed, this action has a low potential for significant impact. If vessels that are permitted to participate in this fishery in 2008 and beyond age and are not allowed to be replaced by more sound vessels, vessel owners may choose to fish with their less sound, yet permitted, vessels. This issue could be fixed via regulation, but needs attention to ensure that impacts do not occur.

- *Cumulative Impacts* - This action would not affect the overall harvest levels of West Coast groundfish. Depending on the alternative chosen, it could prohibit vessels that had only participated in the fishery in 2006 (and in no year prior to 2006) from participating in the fishery in 2008 and beyond. Other alternatives either do not prohibit expansion into the fishery by non-AFA vessels, or only prohibit fishery participation by vessels with no history in the fishery. The cumulative impacts of this action on the biological environment, if any, are expected to be negligible, unmeasurable, and insignificant. The cumulative impacts of this action on the socio-economic environment are also expected to be insignificant, because no alternative chosen would remove the ability of a fishing community or processing plant to participate in the whiting fishery, and the only vessels that would be prohibited from participating in the fishery would be those with no significant dependence on the fishery, or no participation in the fishery at all.

Revised Table 3. Alternatives specific to Purpose and Need 2, the Pacific whiting fishery, AFA-permitted and non-AFA vessels.

Alternative 1 (No action) Status quo	**Alternative 2 (2005 season) Significant historical sector-specific participation**	**Alternative 3 (2006 season) Significant historical sector-specific participation**	**Alternative 4 (72 CFR 27759) 2007 Temporary Rule**
Do not limit participation in the Pacific whiting fishery	January 1, 1994 – January 1, 2006	January 1, 1994 – January 1, 2007	Prohibit any vessel from participating in either the mothership, catcher-processor or shoreside delivery sector of the directed Pacific whiting (whiting) fishery off the west coast if it does not have a history of sector-specific participation in the whiting fishery between January 1, 1997 and January 1, 2007
	2A Sector Allocation Date	**3A Sector Allocation Date**	
	December 31, 1996 – January 1, 2006 for catcher-processors and motherships	December 31, 1996 – January 1, 2007 for catcher-processors and motherships	
	2B Post - 1st Control Date (64 FR 66158)	**3B Post - 1st Control Date (65 FR 55214)**	
	September 16, 1999 – January 1, 2006	September 16, 1999 – January 1, 2007	
	2C Post - 2nd Control Date (65 FR 55214)	**3C Post - 2nd Control Date (65 FR 55214)**	
	June 29, 2000 – January 1, 2006	June 29, 2000 – January 1, 2007	
	2D Post - AFA Passage Date	**3D Post - AFA Passage Date**	
	January 1, 1999 – January 1, 2006	January 1, 1999 – January 1, 2007	

OREGON DEPARTMENT OF FISH AND WILDLIFE REPORT ON THE DRAFT ENVIRONMENTAL ASSESSEMENT FOR AMENDMENT 15

The interagency work group, composed of state and federal representatives, prepared a draft environmental assessment for Amendment 15, the American Fisheries Act (AFA) issues, for Council consideration (Agenda Item E.11.b Attachment 1). During this process several questions arose regarding the purpose and need, proposed action, and range of alternatives. We request clarification from the Council on the following items.

Purpose and Need
Based on previous Council action, three Purpose and Need statements were developed (Table 1). We request the Council choose a Purpose and Need and associated alternatives (Tables 2-4).

Range of Alternatives
The Council's preferred alternative for Amendment 15 analysis in September 2001 included restricting participation of AFA-permitted vessels in the non-whiting groundfish fisheries. We request that the Council state the rationale for including or excluding an alternative in the current Amendment 15 analysis that addresses participation of AFA-permitted vessels in the non-whiting groundfish fisheries. Currently, there are no alternatives developed to prevent harm to the non-whiting groundfish fisheries. Including non-whiting groundfish would considerably lengthen the amount of time for the analysis, which would prevent a 2008 implementation date.

The suite of alternatives proposed by the Council at the April Council meeting only constrain participation by AFA-permitted vessels in the Pacific whiting fishery; impacts to the Pacific whiting fishery by non-AFA vessels may still occur. The National Marine Fisheries Service (NMFS) requests an alternative that prohibits any vessel from participating in either the mothership, catcher-processor or shoreside delivery sector of the directed Pacific whiting fishery off the west coast if it does not have a history of sector-specific participation in the whiting fishery between January 1, 1997, and January 1, 2007 (Agenda Item E.11.b Attachment 3). This alternative reflects the NMFS temporary rule (72 CFR 27759) for the 2007 Pacific whiting fishery. We request that the Council state the rationale for including or excluding an alternative in the current analysis that addresses participation of non-AFA vessels in the Pacific whiting fishery.

The National Marine Fisheries Service (NMFS) also requests that the Council consider an alternative which limits the participation of AFA vessels in the whiting fishery to the average annual aggregate historic participation of those vessels now registered for use with AFA permits from January 1, 1994 – January 1, 1999 (the start of the limited entry program through to the passage of the AFA) based on number of vessels.

Participation Dates
The Council chose the following participation dates to characterize the timeline for historical participation:

- Alternative 2 - January 1, 1994 and January 1, 2006
- Alternative 3 - January 1, 1994 and January 1, 2007

For catcher-processors and motherships, a subalternative includes a start date of December 31, 1996, the year in which the at-sea sector received a Pacific whiting allocation.

The range of alternatives include, but are not specific to, the control dates specified by the Council (64 FR 66158 and 65 FR 55214) or the passage of the AFA (1999). We request that the Council state the rationale for including or excluding alternatives in the current analysis that specifically address these dates.

Significant Historical Participation
The Council defined significant historical participation for Alternatives 2 and 3 as

- 500 or 1000 mt for catcher vessels in the shoreside and mothership fishery, and
- 1000 mt for catcher/processors and motherships.

We request that the Council confirm that the rationale for defining significant historical participation was based on recommendations by the Groundfish Allocation Committee in their report to the Council in September 2001.

Did the Council intend to have landings outside the directed whiting fishery count toward the cumulative total for significant historic participation? Or did the Council intend that the analysis would only include landings with in the directed Pacific whiting fishery? If the later, the directed whiting fishery would be defined by the use of mid-water gear, primary season dates, and landings greater than 10,000 pounds. Landings of Pacific whiting by vessels using bottom trawl gear would not be included in the analysis.

Significant historical participation for at-sea catcher vessels will be determined using observer data. Due to low sampling rates, estimated values of total catch, rather than Pacific whiting catch, may be used in the analysis. Since the bycatch rate in the Pacific whiting fishery is low (1-2%), total catch is assumed to be a reasonable substitute for Pacific whiting catch.

Impact Analysis
Data for the at-sea sector are confidential due to the limited number of participants in some years and therefore the NMFS cannot release the data to the interagency workgroup. Thus, the NMFS will be responsible for summarizing the at-sea data impacts (i.e., providing tables) relative to the alternatives as well as the environmental analysis. Members of the interagency workgroup will be responsible for analyzing those data.

Members of the current interagency work group do not have the expertise to complete the socioeconomic analysis; therefore we ask that the Council identify staff that can complete this task.

Table 1. Purpose and Need Statements for Amendment 15.

PURPOSE AND NEED "The proposed action is to develop conservation and management measures to protect the…		
Purpose and Need 1 **Whiting fishery and AFA-permitted vessels**	**Purpose and Need 2** **Whiting fishery, AFA-permitted and non-AFA vessels**	**Purpose and Need 3** **Whiting and non-whiting groundfish fisheries, AFA-permitted vessels**
"…west coast non-tribal Pacific whiting fishery and the participants in the fishery from adverse impacts caused by the AFA or by any fishery cooperatives in the directed pollock fishery; specifically vessels with no sector-specific significant historical participation in the Pacific whiting fishery." (continue to Table 2 for alternatives specific to this Purpose and Need)	"…west coast non-tribal Pacific whiting fishery and the participants in the fishery from adverse impacts caused by the AFA or by any fishery cooperatives in the directed pollock fishery and non-AFA vessels; specifically vessels with no sector-specific significant historical participation in the Pacific whiting fishery." (continue to Table 3 for alternatives specific to this Purpose and Need)	"..west coast non-tribal Pacific whiting fishery and nonwhiting groundfish fisheries and the participants in the fisheries from adverse impacts caused by the AFA or by any fishery cooperatives in the directed pollock fishery, specifically vessels with no significant historical participation in the fisheries. For the Pacific whiting fishery, significant historical participation is sector specific." (continue to Table 4 for the alternative specific to this Purpose and Need)

Table 2. Alternatives specific to Purpose and Need 1, the Pacific whiting fishery and AFA-permitted vessels.

Alternative 1 (No action) Status quo	**Alternative 2 (2005 season) Significant historical sector-specific participation**	**Alternative 3 (2006 season) Significant historical sector-specific participation**	**Alternative 5 (NMFS proposal) Aggregate annual participation**
Do not limit participation in the Pacific whiting fishery by AFA-permitted vessels	January 1, 1994 – January 1, 2006	January 1, 1994 – January 1, 2007	Limit the participation of AFA vessels in the whiting fishery to the average annual aggregate historic participation of those vessels now registered for use with AFA permits from January 1, 1994 - January 1, 1999 (limited entry through passage of the AFA) based on number of vessels
	2A Sector Allocation Date	**3A Sector Allocation Date**	
	December 31, 1996 – January 1, 2006 for catcher-processors and motherships	December 31, 1996 – January 1, 2007 for catcher-processors and motherships	
	2B Post - 1st Control Date (64 FR 66158)	**3B Post - 1st Control Date (64 FR 66158)**	
	September 16, 1999 – January 1, 2006	September 16, 1999 – January 1, 2007	
	2C Post - 2nd Control Date (65 FR 55214)	**3C Post - 2nd Control Date (65 FR 55214)**	
	June 29, 2000 – January 1, 2006	June 29, 2000 – January 1, 2007	
	2D Post - AFA Passage Date	**3D Post - AFA Passage Date**	
	January 1, 1999 – January 1, 2006	January 1, 1999 – January 1, 2007	

Table 3. Alternatives specific to Purpose and Need 2, the Pacific whiting fishery, AFA-permitted and non-AFA vessels.

Alternative 1 **(No action)** **Status quo**	**Alternative 4** **(72 CFR 27759)** **2007 Temporary Rule**
Do not limit participation in the Pacific whiting fishery by AFA-permitted and non-AFA permitted vessels	Prohibit any vessel from participating in either the mothership, catcher-processor or shoreside delivery sector of the directed Pacific whiting (whiting) fishery off the west coast if it does not have a history of sector-specific participation in the whiting fishery between January 1, 1997 and January 1, 2007

Table 4. Alternatives specific to Purpose and Need 3, Pacific whiting and non-whiting groundfish fisheries, AFA-permitted vessels[a].

Alternative 1 **(No action)** **Status quo**
Do not limit participation in the Pacific whiting fishery and non-whiting groundfish fisheries by AFA-permitted vessels

[a] If Purpose and Need 3 is chosen, a range of alternatives would be developed.

GROUNDFISH ADVISORY SUBPANEL REPORT ON AMENDMENT 15: AMERICAN FISHERIES ACT ISSUES

The Groundfish Advisory Subpanel (GAP) strongly urges the Council to act to prevent conservation and socio-economic harm in the Pacific whiting fishery. This action is an interim measure, which would sunset upon implementation of a rationalization program for the whiting fishery. Because potential harm stems from new entry into the whiting fishery, the GAP recommends broadening the scope of Amendment 15 to apply to American Fisheries Act (AFA) and non-AFA-qualified vessels. The GAP urges the Council, state, and federal agencies to marshal the staff and resources necessary to complete this action in time for the 2008 whiting fishery (specifically, implementation no later than May 15, 2008).

Under the authority of the Magnuson-Stevens Act, the purpose and need for this action is:

> To prevent an accelerated race-for-fish, which would likely cause serious conservation and socio-economic harm, including excessive bycatch of overfished rockfish, excessive catch of endangered and threatened salmon, excessive catch of undersize and unmarketable whiting, and severe disruption of other groundfish fishery sectors. This action will help maintain stability in the whiting fishery and other groundfish fishing sectors while the Council completes its fishery management plan amendment to rationalize the groundfish and whiting fisheries for the long term.

Due to the urgent need to implement protective measures in time for the 2008 fishery, the GAP recommends a narrow range of alternatives. The alternatives provide an efficient mechanism by which participation in the whiting fishery could be restricted. Again, these restrictions are an interim measure to prevent conservation and socio-economic harm in the whiting fishery.

The GAP recommends the following alternatives, which would apply to AFA-qualified and non-AFA-qualified vessels participating in the shorebased, mothership, and catcher-processor sectors of the Pacific whiting fishery:

A vessel shall not fish for or land whiting, or process whiting at sea, while participating in a specific sector with a vessel that has no history of participation within that specific sector of the whiting fishery in the period after December 31, 1993 and prior to January 1, 2006.

A vessel shall not fish for or land whiting, or process whiting at sea, while participating in a specific sector with a vessel that has no history of participation within that specific sector of the whiting fishery in the period after December 31, 1996 and prior to January 1, 2006.

A vessel shall not fish for or land whiting, or process whiting at sea, while participating in a specific sector with a vessel that has no history of participation within that specific sector of the whiting fishery in the period after December 31, 1993 and prior to January 1, 2007.

A vessel shall not fish for or land whiting, or process whiting at sea, while participating in a specific sector with a vessel that has no history of participation within that specific sector of the whiting fishery in the period after December 31, 1996 and prior to January 1, 2007.

GROUNDFISH MANAGEMENT TEAM REPORT ON AMENDMENT 15: AMERICAN FISHERIES ACT ISSUES

The Groundfish Management Team (GMT) reviewed the Draft Environmental Assessment (EA) for Amendment 15, which contained the range of alternatives set by the Council in April 2007 (Agenda Item E.11.b, Attachment 1). The GMT also reviewed the Oregon Department of Fish and Wildlife (ODFW) Supplemental Report on Amendment 15 (Agenda Item E.11.b, Supplemental ODFW Report), which summarized alternatives from the EA, included suboptions for participation dates, and alternatives for analysis recommended for Council consideration by the National Marine Fisheries Service (NMFS) (Agenda Item E.11.b, Attachment 3). The GMT thinks that the supplemental report captures an appropriate range of purpose and need options as well as matching those to an appropriate suite of action alternatives.

The GMT notes that this action is intended to be only an interim measure and will sunset upon implementation of trawl rationalization. Also, it is the GMT's understanding that the Council desires implementation by the 2008 whiting season. The GMT suggests that 2008 implementation be an over-arching need and has ranked the purpose and need statements provided in the ODFW report according to the feasibility of implementation by the deadline:

Purpose and Need 2. Purpose and Need 2 is reflective of the action taken under the NMFS emergency rule and thus may be easier to implement for the 2008 season because an EA has already been completed.

Purpose and Need 1. The scope is narrower than Purpose and Need 2 & 3, but lacks the existing analysis of Purpose and Need 2.

Purpose and Need 3. The GMT believes a purpose and need that considers alternatives for the non-whiting groundfish fishery is a non-starter relative to the goal of a 2008 implementation

The GMT recognizes that eliminating the requirement for some level of significant historical participation, in order to be included among the pool of whiting fishers under any of the alternatives, simplifies the analysis and likely reduces potential controversy surrounding individual qualification. This should help to streamline the development of a final alternative and enhance the likelihood that the alternative could be implemented in time for the 2008 whiting season. However, removing this requirement would also have the effect of broadening the pool of participants. While this expansion would likely be small, the GMT was unable to quantify that level.

PFMC
06/14/07

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RE: *Groundfish Management/Amendment 15 – American Fisheries Act*

Dear Chairman Hansen:

This letter presents comments from Mark I, Inc. with respect to the preliminary range of Amendment 15 alternatives adopted by the Pacific Fishery Management Council (PFMC) at its April 2007 meeting. Mark I believes that focusing the analysis on potential adverse impacts to the Pacific whiting fishery from American Fisheries Act (AFA) vessels rather than on all new entrants to the fishery will not result in sustainable and effective solutions.

As a preliminary procedural matter, it is highly questionable whether the Council has the statutory authority at this time to proceed under subsection 211(c)(3)(A) of the AFA. The subsection states:

> ***By not later than July 1, 2000,*** the Pacific Fishery Management Council . . . ***shall*** recommend for approval by the Secretary conservation and management measures to protect fisheries under its jurisdiction and the participants in those fisheries from adverse impacts caused by this Act or by any fishery cooperatives in the directed pollock fishery.

(Emphasis added). Subsection 211(c)(3)(B) then mandates that "[i]f the Pacific Council does not recommend such conservation and management measures by such date [July 1, 2000]," the Secretary may, but is not required to, implement management measures "by regulation." The Secretary is not given a definite deadline by which to act, but the deadline for the Council could not be clearer, and by implication the Secretary is to act in a timely fashion if the Council's deadline passes. Not by any measure does the Council have the statutory authority under the AFA to take up the issue seven years after the deadline.

The information currently before the Council does suggest that an overcapacity problem exists in the Pacific whiting fishery, but it is inappropriate to lay that problem solely at the feet of the AFA. The facts do not support the contention that AFA vessels are the sole cause of all problems in the fishery. NMFS recognized the wider scope of the problem in the emergency rule published on May 17, 2007 and prohibited all new entrants in to the fishery, not just new AFA entrants. *See* 72 Fed. Reg. 27759-27765. Part of NMFS' stated rationale for the emergency rule was that it will provide stability in the fishery while allowing the Council to complete action on managing the fishery over the long term, including conservation and management measures to deal with otherwise unlimited entry into the fishery. As the emergency rule illustrates, analyzing alternatives related only to AFA participants is unlikely to result in rationalization of the fishery or long-term solutions.

Mark I believes that a full rule-making process under the Magnuson-Stevens Act is the appropriate mechanism for looking at rationalization and any measures that would limit participation in the fishery. Mark I supports the Washington Department of Fish and Wildlife's proposal to address issues related to new entrants through a comprehensive process that allows continued participation by vessels that have participated to date, and that thoroughly analyzes the effects of each alternative on those participants.

Rationalization of the whiting fishery needs to be considered without further delay. However, the issue needs to be analyzed and debated within the normal rulemaking process. We urge the Council to refocus the issues before it so that it can develop a full range of management alternatives that can be the basis for a fair process under the Magnuson-Stevens Act.

Sincerely,

Linda R Larson

Linda R. Larson

LRL:rfc

cc: Robert Lohn
Frank Lockhart
Chris Garbrick
Eileen Cooney