CONSIDERATION OF INSEASON ADJUSTMENTS

The Council set optimum yield (OY) levels and various management measures for the 2006 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 Monday, September 11, 2006 (see Ancillary B and Ancillary C agendas) to discuss and recommend inseason adjustments to ongoing 2006 groundfish fisheries.

Under this agenda item, the Council is to consider advisory body advice and public comment on the status of ongoing fisheries and recommended inseason adjustments prior to adopting final changes as necessary. The Council may provide guidance to the GMT and GAP prior to making final inseason adjustments under Agenda Item C.9 on Friday, September 15, 2006, or make final inseason adjustments under this agenda item. If the latter course is chosen, there will be opportunity to confirm or clarify the Council decision under Agenda Item C.9.

Council Action:

- 1. Consider information on the status of ongoing fisheries.
- 2. Consider and adopt inseason adjustments as necessary.

Reference Materials:

1. Agenda Item C.3.e, Public Comment.

Agenda Order:

- a. Agenda Item Overview
- b. Report of the Groundfish Management Team
- c. Agency and Tribal Comments
- d. Reports and Comments of Advisory Bodies
- e. Public Comment
- f. **Council Action**: Adopt Preliminary or Final Recommendations for Adjustments to 2006 Fisheries

PFMC 08/18/06

John DeVore Susan Ashcraft

Agenda Item C.3.e Public Comment September 2006 July 29, 2006

To: D. Robert Lohn Administer NW Region, NMFS Attn: Jamie Goen

> 7600 Sandpoint Way NE Seattle, WA 98115-0070

Subject: I.D. 062706B

Re: Inseason Adjustments and Inseason Triggers for Groundfish Management of Darkblotched Rockfish

Dear Mr. Robert Lohn,

I am submitting my comment in reference to the July 1st, 2006 Inseason Adjustments and Inseason Triggers regarding the Darkblotched Rockfish and the Canary Rockfish.

I very much agree with some of the recent management measures that were put in place to curtail the Whiting Trawl Fishery and the Non-Whiting Trawl fishery that impacts the Darkblotched Rockfish. I have been waiting to see fairer PFMC management practices and decisions applied to ALL fishers involved in taking certain species. This recent decision in regards to the Darkblotched Rockfish OY is finally one of those equitable decisions. The persons impacting the species the most certainly are the ones that should endure the consequences the most. It's not right when only one sector of the fishery or only a handful of fishermen severely impact the fishery and the entire coastal fishery has to suffer the consequences for their actions. By implementing the Bycatch and Trip Limit portion of the Inseason Adjustment for the Darkblotched Rockfish OY I can see that the Council has finally taken this into consideration.

I do have some serious concerns though, and they are in regards to where the Council's considerations truly lay. As written in the Federal Register (July 3, 2006 – Volume 71, Number 127), the NMFS Public Notice (July 06 Public Notice), the PFMC recommendations (June 2006 Council Meeting List of Decisions), and the GMT's report to the Council (Agenda Item F.4.b, Supplemental GMT Report, June 2006) - the major consideration for the Inseason Adjustment is to keep the Petrale fishery open in Period 6. There is nothing written stating consideration for keeping the small boat nearshore fishery open in Period 6. On the contrary, in the Inseason Triggers management plan it threatens to close the nearshore fishery down completely if 7.75mt of Canary rockfish are caught, mainly because of boats that move inshore when the seaward RCA line is pushed further seaward. By the Council's own words (or the lack of them), the inequity of the regard and consideration between the harvester groups is obvious.

Quoted from the Federal Register – Volume 71, Number 127:

"However, if Darkblotched rockfish mortality continues to be higher than projected or approaches the OY even with these inseason actions, there will not be an opportunity for a Period 6 Petrale fishery."

"In addition, it (the Inseason Adjustments) should <u>ensure an opportunity for a Period 6</u> Petrale sole fishery by reducing the mortality of Darkblotched rockfish."

PFMC's own words show an obvious preference for the Petrale fishery... and no regard for how that will effect the small boat nearshore fishery. My concerns and questions are these; why does the Council and NMFS place such high regard and consideration on the Petrale fishery (particularly Period 6), when it has absolutely no regard or concern for completely shutting down the small boat nearshore fishery? Why isn't there equal concern and consideration for keeping the nearshore fishery open all year just as there is for the Petrale fishery? Why is the Petrale fishery viewed as more important or valuable to the Council? The nearshore boats have an equal right to fish all year.

As the Council and NMFS are well aware of, there is a trawl fishery sector that is made up of small boats, many of them family owned and operated. Generally these boats are 60' or less in length and are incapable of fishing in deep waters. Many of these boats are not even large enough to carry the wenches and wire that are required to fish seaward of the RCA.

When an OY is met and the coastal fishery is shut down from the seaward RCA line (200 or 250fm) to the shore we are finished fishing until it is opened back up again... which is usually the next year. This means that we have no other alternatives. We can not continue to fish seaward of the RCA line like the larger boats can. We are forced to suffer the impact of no income for several months until the fishery opens back up again.

This is a <u>huge</u> and <u>catastrophic</u> economic hardship for many fishermen and boat owners. We have been suffering through this hardship for the past several years with Period 5 and 6 closures from the RCA shoreward. First it was the Period 6 closures and we did not say anything because this was tolerable for us. But when you began closing October too, that's when the hardship became intolerable. It's not just suffering a 25% loss in our fishing time, but it's that October is a big month for us. For some of us, a third of our income comes from October. I ask anyone who is in favor of these closures to consider losing a third of your income every year. It's not a good situation for anyone to be in. You can't go get another job for only three months every year... no one will hire you for only three months. Now the closures have become a yearly event and have increased from two months to three.

To make this even harder for us to tolerate is the fact that the statistics show that the small boat nearshore fishery does not contribute significantly to the over-fished OY species. Most of the impacts are coming from the sectors that fish deeper than 100fm (PacFin QSM data). Yet, we are the ones forced to suffer the greatest impact by not being allowed to fish for the rest of the year.

When we tried to address our concerns to the Council previously, we were told by the Council that it is not the Council's fault that our boats are small and we can not fish in deep waters... that we would just have to "deal with it". I would like to point out that it is not 'our' fault either. The type of boat that someone owns and operates is no ones 'fault'. It is simply a matter of fact. And each permitted boat whether large or small, has an equal right to participate in the fishery under the laws of the Magnuson Stevens Act... and the right to equal consideration by the PFMC.

The other serious concern I have is that I do not agree with the Inseason Triggers for the LE trawl fishery. I do agree with trip limitations, but I do not agree with moving the shoreward RCA line in to the shoreline. Again, this would only facilitate to force the small boats to bear the brunt of the management actions. The larger boats would simply go back out past the seaward RCA line where they could continue to fish for the remainder of the year and the small nearshore boats would be shut down completely, unable to participate equally in the fishery.

The Council's rationalization for this is, that if the nearshore gets too much pressure... such as catching 7.75mt of Canary rockfish in any month... because boats are moving in-shore when the seaward RCA line gets pushed out, then the shoreward RCA line will be moved in to the shoreline. This is so incongruous. The larger boats that are impacting the nearshore can just move back out past the seaward RCA line and continue fishing for the rest of the year, but the small boats that have not impacted the nearshore are shut down. That is discrimination. It's like the nearshore fishery is being used as a management tool itself... with no regard for the fishermen that depend on it.

Also, as quoted from the PFMC in the Federal Register (Vol. 71, No. 127, July 3, 2006):

"At its June 2006 meeting, the Pacific Council recommended this mechanism (the In-season Triggers) for addressing <u>concern for the potential loss of the period 6 Petrale fishery</u>, and concern over potential effects on Canary rockfish <u>if trawl effort increases in areas shoreward</u> of the RCA."

I ask again, why does the Council place such high regard and concern for the Petrale fishery and it does not share that same regard and concern for the small boat nearshore fishery? Why does one sector have more importance than another does? The Council's concerns should be equal for all sectors. That is how the Council is mandated to operate. But by the Council's own words and actions, it is not doing that. By knowingly allowing a situation to occur (seaward boats move inshore) that could have the potential to shut down an entire sector (small nearshore boats), that is not equal consideration.

The Council should be capable of managing this fishery in a way that is non-discriminatory for ALL fishers. Either manage the fishery in a way that ensures all sectors to have equal opportunity to fish all year or if the fishery needs to be closed, then shut it down to ALL sectors. No preferred harvester groups.

By adopting and implementing the Inseason Trigger portion of these Inseason Adjustments the Council has once again shown it's total disregard and lack of concern for the small boat nearshore fishing fleet. Applying an Inseason Trigger of 7.75mt for Canary rockfish caught in one month is nothing more than a band-aid. It is a band-aid that is beneficial to the fleet that can fish seaward of the RCA only. It will be detrimental to the small boat nearshore fleet. When the 7.75mt of Canary Rockfish is met... mostly because of the large boat pressure, the large boats will simply go back out past the RCA to continue fishing and the small boat nearshore fleet will be forced to stop fishing and tie up their boats. The large boats will move in and take the quota and the small boats will suffer the worst consequence because of it.

I can not stress enough how disastrous any closure in Period 5 is for the small boat nearshore fleet. Period 5 is a very important time of year for us. It is a time for particular abundance of certain species of fish... just like the Petrale fishery is for the larger boats. This is a clean harvest and it helps us make it through the Winter months. A closure in Period 6 is not too bad for most small boats as we are controlled by the bad weather during that time of year. I request that the Council make as much effort to keep Period 5 open for the small boat nearshore fishery that it does to keep Period 6 open for the Petrale fishery. Both sectors should have equal consideration and opportunity to fish when harvest is abundant.

I ask that the Council please DO continue the Bycatch Inseason Adjustment, but I ask that the Council please DO NOT implement the Trigger portion of the Inseason Adjustment or close the area between the RCA and the shoreline during Period 5 for any reason. Give the small boat nearshore fishery the same equal opportunity and consideration that you give to the Petrale fishery. Thank you for your time in reading my letter and I hope you will consider my concerns.

Sincerely,

Lee Ann Hightower 2260 Hastings Ave. W. Port Townsend, WA 98368 F/V Sea Otter August 20, 2006

To: Pacific Fishery Management Council 7700 NE Ambassador Place, Suite 101 Portland, Oregon 97220-1384

Attn: Mr. Donald K. Hansen, Chairman

Re: Inseason Adjustments to Groundfish Management and Equal Opportunity for All Harvester Sectors

Dear Mr. Hanson and members of the Council,

I would like to submit my concerns in regards to the July 1st, 2006 Inseason Adjustments and Inseason Triggers regarding the Darkblotched Rockfish and the Canary Rockfish for the LE trawl fishery. And my concerns about the Council managing ALL trawl harvest sectors equally and fairly. My husband and I own a small groundfish trawler that we operate in the nearshore fishery off the coast of Washington state. Because of the size of our boat we can not fish in the deep waters seaward of the RCA. We can only fish between the RCA and the Three Mile shore line.

I very much agree with some of the recent management measures that were put in place to curtail the Whiting Trawl Fishery and the Non-Whiting Trawl fishery that impacts the Darkblotched Rockfish. I have been waiting to see fairer PFMC management practices and decisions applied to ALL fishers involved in taking certain species. This recent decision in regards to the Darkblotched Rockfish OY is finally one of those equitable decisions. The persons impacting the species the most certainly are the ones that should endure the consequences the most. It's not right when only one sector of the fishery or only a handful of fishermen severely impact the fishery and the entire coastal fishery has to suffer the consequences for their actions. By implementing this Inseason Adjustment for the Darkblotched Rockfish OY I can see that the PFMC has finally taken this into consideration. As a small, family owned and operated nearshore trawler we appreciate the Council's consideration.

I do have some serious concerns though, and they are in regards to where the Council's considerations truly lay. As written in the Federal Register (July 3, 2006 – Volume 71, Number 127), NMFS Public Notices (July 06 Public Notice), the PFMC recommendations (June 2006 Council Meeting List of Decisions), and the GMT's report to the Council (Agenda Item F.4.b, Supplemental GMT Report, June 2006) - the major consideration for the In-season Adjustment is to keep the Petrale fishery open in Period 6. There is nothing written stating consideration for keeping the small boat nearshore fishery open in Period 6. On the contrary, in the Inseason Triggers management plan it threatens to close the nearshore fishery down completely if 7.75mt of Canary rockfish are caught in any month, mainly because of boats that move inshore when the seaward RCA line is pushed further seaward. By the Council's own words (or the lack of them), the inequity of the regard and consideration between the harvester groups is obvious.

Quoted from the Federal Register:

"However, if Darkblotched rockfish mortality continues to be higher than projected or approaches the OY even with these inseason actions, there will not be an opportunity for a Period 6 Petrale fishery."

"In addition, it (the In-season Adjustments) should <u>ensure an opportunity for a Period 6 Petrale sole</u> <u>fishery</u> by reducing the mortality of Darkblotched rockfish."

PFMC's own words show an obvious preference for the Petrale fishery... and no regard for how that will effect the small boat nearshore fishery. My concerns and questions are these; why does the Council and NMFS place such high regard and consideration on the Petrale fishery (particularly Period 6), when it has absolutely no regard or concern for completely shutting down the small boat nearshore fishery? Why isn't there equal concern and consideration for keeping the nearshore fishery open all year just as there is for the Petrale fishery? Why is the Petrale fishery viewed as more important or valuable to the Council? The nearshore boats have an equal right to fish all year.

As the Council and NMFS are well aware of, there is a trawl fishery sector that is made up of small boats, many of them family owned and operated. Generally these boats are 60' or less in length and are not capable of fishing in deep waters. Many of these boats are not even large enough to carry the wenches and wire that are required to fish seaward of the RCA.

When an OY is met and the coastal fishery is shut down from the seaward RCA line (200 or 250fm) to the shore we are finished fishing until it is opened back up again... which is usually the next year. This means that we have no other alternatives. We can not continue to fish seaward of the RCA line like the larger boats can. We are forced to suffer the impact of no income for several months until the fishery opens back up again. This is a <u>huge</u> and <u>catastrophic</u> economic hardship for many fishermen and boat owners. We have been suffering through this hardship for the past several years with Period 5 and 6 closures from the RCA shoreward. I ask anyone reading this letter to consider the financial hardship of you not being able to work and generate income for 60 to 90 days every year. The impact is devastating. To make this even harder for us to tolerate is the fact that the statistics show that the small boat nearshore fishery does not contribute greatly to the over-fished OY species. Most of the impacts are coming from the sectors that fish deeper than 100fm (PacFin, QSM data). Yet, we are the ones forced to suffer the greatest impact by not being allowed to fish for the rest of the year.

When we tried to address this concern to the Council previously, we were told by the Council that it is not the Council's *fault* that our boats are small and we can not fish in deep waters... that we would just have to "deal with it". I would like to point out that it is not 'our' fault either. The type of boat that someone owns and operates is no ones 'fault'. It is simply a matter of fact. And each permitted boat whether large or small, has the right to participate equally and fairly in the fishery under the laws of the Magnuson Stevens Act... and the right to equal regard and consideration by the PFMC. Anything that differs from these equal rights should be considered discrimination.

The other serious concern I have is that I do not agree with the Inseason Triggers for the LE trawl fishery. I do agree with trip limitations, but I do not agree with moving the shoreward RCA line in to the shoreline. Again, this would only facilitate to force the small boats to bear the brunt of the management actions. The larger boats would simply go back out past the seaward RCA line where they could continue to fish for the remainder of the year and the small nearshore boats would be shut down completely, unable to participate equally in the fishery.

The Council's rationalization for this is, that if the nearshore gets too much pressure... such as catching 7.75mt of Canary rockfish in any month... because boats are moving in-shore when the seaward RCA line gets pushed out, then the shoreward RCA line will be moved in to the shoreline. This is so incongruous. The larger boats that are impacting the nearshore can just move back out past the seaward RCA line and continue fishing for the rest of the year, but the small boats that have not impacted the nearshore are shut down. That is discrimination.

Also, as quoted from the PFMC in the Federal Register (Vol. 71, No. 127, July 3, 2006):

"At its June 2006 meeting, the Pacific Council recommended this mechanism (the In-season Triggers) for addressing <u>concern for the potential loss of the period 6 Petrale fishery</u>, and concern over potential effects on <u>Canary rockfish if trawl effort increases in areas shoreward of the RCA</u>."

Why does the Council place such high regard and concern for the Petrale trawl fishery and it does not share that same regard and concern for the small boat nearshore trawl fishery? Why does one sector have more importance than another does? The Council's concerns should be equal for all sectors. That is how the Council is mandated to operate. But by the Council's own words, it is not doing that. By knowingly allowing a situation to occur (seaward boats move inshore) that could have the potential to shut down an entire sector (small nearshore boats), that is not equal consideration.

The Council should be capable of managing the trawl fishery in a way that is non-discriminatory for ALL fishers. Either manage the fishery in a way that ensures all trawl sectors to have equal opportunity to fish all year or if the fishery needs to be closed, then shut it down to **ALL** harvesting sectors. No preferred harvester groups.

Knowing that the Council likes suggested solutions to the problems that we voice, I have a few suggested solutions. The Council already practices sector management, my suggestions are just additional solutions using the same practice.

My first suggested solution is an important one that could greatly lessen the impact of the nearshore trawl fishery from all fishers. Most larger boats will probably not agree with it, but it would even out the playing field of the nearshore fishery and greatly slow down the harvest rate of important species that are always close to reaching their OY.

1) Reduce the length of the footrope for the Selective Trawl net to 65 - 70' for ALL boats fishing shoreward of the RCA line regardless of the boat size. The main boats fishing the nearshore fishery are the smaller ones (for obvious reasons already stated) and most of their Selective Trawl footropes are no longer than 70'. When the larger deep-water boats move in to fish the nearshore area, many of them are using a Small footrope or Selective Trawl net that has a footrope length of 100' or more. This gives a big and uneven advantage to the large boats using large nets and only serves to speed up the rate at which the OY's are reached. Creating a uniform footrope length of 65-70' for <u>ALL</u> nets and for <u>ALL</u> boats fishing shoreward of the RCA would greatly lessen the impact and would provide a longer and more equal fishing opportunity for the nearshore fleet.

- 2) Make trip limits for boats fishing shoreward of the RCA and boats fishing seaward of the RCA separate.
- 3) Make each sector accountable for their own impact on the fishery. If an OY is met by a sector that fishes seaward of the 100fm line then that sector is closed and can not move shoreward to continue harvesting. Equally, if an OY is met be a sector that fishes shoreward of the 100fm line then that sector is closed and can not move seaward to continue harvesting. This makes each sector accountable for their own actions.
- 4) Distinguish between fishing boat capabilities by creating a 60' or 65' limit for nearshore fishers... much like Alaska's 58' Seine limit and the 32' Gillnet limit. Boats fishing between the RCA and the shoreline would be restricted to 60-65' in length.
- 5) Manage the coastal fishery with state boundaries, where each state has it's own quota and OY systems. That way each state is accountable for it's own impacts and fishers can not over-harvest in another state. These lat/long coordinates have already been created and entered into the PFMC and NMFS database.
- 6) Be more diligent in having equal regard and consideration for all trawl fishery harvester sectors. Do not value one sector more than another. Ensure that all trawl fishery harvester sectors have an equal opportunity in order to uphold equal fishing rights as stated in the MSA.

I ask that the Council please DO continue the Bycatch Inseason Adjustment, but I ask that the Council please DO NOT implement the Trigger portion of the Inseason Adjustment. Please DO NOT close the area between the RCA and the shoreline during Period 5 for any reason. Give the small boat nearshore trawl fishery the same equal opportunity and consideration that you give to the Petrale fishery. Thank you for your time in reading my letter and I hope you will consider my concerns and solutions.

Sincerely,

Lee Ann and Alan Hightower F/V Sea Otter 2260 Hastings Ave. W. Port Townsend, WA 98368

OPEN ACCESS FISHERY LIMITATION: PLANNING FOR A POSSIBLE FISHERY MANAGEMENT PLAN (FMP) AMENDMENT

Transitioning the current open access groundfish fishery into one where participation is limited by a federal permit is an important Pacific Council objective. As outlined in the Council's Groundfish Strategic Plan, the objective is to bring "the current open access participants ... into the limited entry program and the number of participants reduced to those who are most dependent on and committed to the fishery." While this has been an important Council objective discussed at several Council meetings, there have been more urgent objectives that have taken precedence over open access limitation and little progress has been made to date. Key steps in this process that have been made are the setting of a control date of November 5, 1999, which may be used to decide eligibility requirements for a new limited entry program (i.e., catch history after this date may not be considered for deciding permit eligibility), and the new requirement to install a vessel monitoring system (VMS) for those West Coast open access fishermen who want to land groundfish starting next year.

The Council is scheduled to discuss development of a regional operating agreement (ROA) for groundfish limited entry in the open access fishery under Agenda Item B.2. This ROA uses open access fishery limitation as a test case for how to implement regulatory streamlining. The distinction between Agenda Item B.2 and this agenda item is this item delves into more detailed procedural steps for accomplishing open access limitation. At the June 2006 meeting, the Council scheduled formal planning as the next step in accomplishing open access limitation.

A draft process and timeline is attached (Agenda Item C.4.a, Attachment 1), which depicts the procedural steps to pursue open access limitation as if it were the Council's number one priority. The minimum time to implement open access limitation if it were given top priority and no unexpected conflicts arose, would be a little more than two years. Issues to consider in this draft process and timeline are: 1) scheduling of public meetings outside of the Council process either in Phase 1 as scoping for an environmental impact statement (EIS), or in Phase 2 as public information meetings; 2) Phase 3 (Council final action) currently has a tight timeline, roughly one month--not enough time if the Council chooses a preferred alternative different from those already analyzed, including if they choose a preferred alternative that is a combination of other alternatives; and 3) in order to streamline the open access permitting program for the open access sector should mirror the existing limited entry permit program as much as possible. For example, if there is a permitting program, permits should be tied to the vessel and not the person, transfers would only be allowed once per calendar year, etc.

The other Council initiative closely linked to open access limitation is intersector allocation. Under the intersector allocation process, allocations of groundfish species to accommodate the open access sector targeting groundfish (i.e., directed open access) and those sectors incidentally taking groundfish species while targeting non-groundfish species (i.e., incidental open access) are contemplated. Given the limits of staff resources to do this work, a discussion of how to coordinate the intersector allocation and open access limitation in an efficient manner, along with the demands of the ongoing trawl individual quota program, may be beneficial.

The Council task under this agenda item is to discuss this objective and process and provide guidance on how to proceed. Such guidance includes how open access limitation should be prioritized with respect to other Council objectives, how the National Environmental Policy Act analyses should be done (i.e., will an Environmental Assessment suffice or is an EIS needed), the timeline the Council wants to recommend for this process, and whether the November 5, 1999, control date should be used to analyze and decide eligibility requirements for the new limited entry program.

Council Task:

1. Discuss and provide guidance on pursuing open access fishery limitation.

Reference Materials:

1. Agenda Item C.4.a, Attachment 1: Description of the Process for Open Access Limitation FMP Amendment & Draft Timeline.

Agenda Order:

- a. Agenda Item Overview
- b. Agency and Tribal Comments
- c. Reports and Comments of Advisory Bodies
- d. Public Comment
- e. Council Discussion and Guidance

PFMC 08/28/06

John DeVore

Description of the Process for Open Access Limitation FMP Amendment & Draft Timeline

[Note: This is a hypothetical timeline that assumes the Council began work immediately as the number one priority and ignores coordination with other high priority ongoing efforts such as IQ, intersector allocation, response to MSA reauthorization, etc.]

Step	Dates
Phase 1: Planning and Scoping	August 2006 – March 2007
Draft Work Plan	September 2006
Determine type of NEPA (GC)	September 2006
Publish NOI (if EIS)	October 2006
Council meeting: scoping (COP 11)	November 2006
Finalize Work Plan	November 2006
Phase 2: Identification of Alternatives and Document	March – June 2007
Development	4 12007
Interagency Work Group (IWG) develops preliminary range	April 2007
of alternatives for Council consideration, with input from	
GMT, GAP, etc.	Annil May 2007
IWG prepares preliminary analysis of alternativesNMFS provides consultation assessment memo (optional)	April-May 2007
Council meeting: adopt preliminary range of alternatives and	April 2007
preliminary preferred alternative (optional) for public review	April 2007
IWG prepares preliminary draft EA/EIS	May-June 2007
Phase 3: Council Final Action	June – August 2007
Council meeting: final adoption of preferred alternative	June 2007
Initiate section 7 consultation (optional)	
If EIS, DEIS sent from Council office	August 3, 2007
If EIS, DEIS received by NMFS HQ	August 6, 2007
If EIS, DEIS submitted to EPA	August 10, 2007
If EIS, EPA publishes DEIS NOA, 45-day comment begins	August 17, 2007
Phase 4: Secretarial Review	July 2007 – February 2008
Council transmittal of FMP	July 30, 2007
NMFS transmits NOA/Am. package (Pr. Rule/PRA) to HQ	July 30, 2007
Am. NOA publishes with 60-day comment period	August 3, 2007
Proposed Rule publishes, 30-day comment period	August 29, 2007
End of 30-day comment period on Proposed Rule	September 28, 2007
If EIS, end of 45-day public comment period on DEIS	October 1, 2007
End of 60-day comment period on Am. NOA	October 2, 2007
If EIS, FEIS sent from Council office	October 19, 2007
If EIS, FEIS received by NMFS HQ	October 26, 2007
If EIS, FEIS submitted to EPA	November 2, 2007
If EIS, FEIS NOA published, 30-day cooling off period	November 9, 2007
begins	

If EIS, FEIS 30-day cooling off period ends	December 9, 2007
FONSI /ROD signed	December 12, 2007
NMFS transmits Final Rule package to HQ; PRA clears	December 14, 2007
Secretarial approval of FMP amendment	January 24, 2008
Final rule published, 30-day APA cooling off period	January 31, 2008
APA cooling off periods ends, rule effective	February 29, 2008
Permitting Process/Implementation	January – December 2008
Send out information/permitting applications	
or qualifying letters	January 2008
Deadline for applications	February 2008
Send out 2 nd notice for applications	February 2008
2 nd deadline for applications	March 2008
NMFS decision	April 2008
Appeals process	May-June 2008
NMFS final decision	July 2008
FPO limited entry annual permit renewals	September 1, 2008
Permits issued for 2009	October-December 2008
Permits Issued	January 2009

EXCERPT 1 FROM: Stage 1 Document IFQs and Permit Stacking Alternatives in the Limited Entry Trawl Fishery—Final draft

CHAPTERS 1, 2, 4 AND APPENDICES A-C

NORTHERN ECONOMICS, INC. (AUGUST 2006) VERSION MODIFIED BY COUNCIL STAFF

Stage 1 Document

IFQs and Permit Stacking Alternatives in the Limited Entry Trawl Fishery

Final Draft

Stage 1 Document in the Development of an Environmental Impact Statement/ Regulatory Impact Review/ Social Impact Analysis/ Initial Regulatory Flexibility Analysis

Prepared for the

Pacific Fishery Management Council as partial fulfillment of Contract No. PFMC05IQ02

August 2006 (Version Modified by Council Staff)



880 H Street, Suite 210, Anchorage, AK 99501 T: 907.274.5600 F: 907.274.5601 1801 Roeder Ave., Suite 124 Bellingham, WA 98225 T: 360.715.1808 F: 360.715.3588

W: www.northerneconomics.com E: mail@norecon.com

In association with MRAG Americas, Inc. EDAW, Inc. URS, Inc. Dr. Edward Waters Dr. Richard Marasco

PROFESSIONAL CONSULTING SERVICES IN APPLIED ECONOMIC ANALYSIS

Anchorage

880 H St., Suite 210, Anchorage, AK 99501 TEL: 907.274.5600 FAX: 907.274.5601

President & Principal Economist: Patrick Burden, M.S. Vice President & Senior Economist: Marcus L. Hartley, M.S. Senior Consultant, Planning Services: Caren Mathis, MCP, AICP Economists: Leah Cuyno, Ph.D., Jonathan King, M.S. Policy Analyst: Nancy Mundy, Ph.D. Socioeconomic Analyst: Don Schug, Ph.D. Analysts: Michael Fisher, MBA, Cal Kerr, MBA Office Manager: Diane Steele Document Production: Terri McCoy

Bellingham

1801 Roeder Ave., Ste. 124, Bellingham, WA 98225 TEL: 360.715.1808 FAX: 360.715.3588

Senior Economist: Susan Burke, Ph.D. Economist: Kelly Baxter, M.S. Associate Economist: Hart Hodges, Ph.D.



E-mail: norecon@norecon.com Web: www.northerneconomics.com

Preface

This document is the Stage I Draft of the *Environment Impact Statement (EIS) of IFQs and Permit Stacking Alternatives in the Limited Entry Trawl Fishery* produced under Contract No. PFMC01IQ02 with the Pacific Fishery Management Council.

This version of the document has been completely reorganized from the draft that was provided in April to the Trawl IFQ Workshop. The reorganization decision was in collaboration with the PFMC. The document should be viewed as a work in progress, and as such the Consulting Team has focused its effort on document content rather than on formatting. We apologize for any inconvenience this may cause reviewers, and very much appreciate any editing and proofreading comments.

The document is currently 396 pages long including this front material, and while significant portions of the document contain only section headings, reviewers are encouraged to examine the entire document and to provide comments on the overall structure of the outline. The bulleted list provides an overview of the various chapters along with an indication of content levels.

- Chapter 1 contains introductory text for the EIS. The content is relatively complete.
- Chapter 2 provide summary of the alternatives for analysis. The Council has forwarded a main suite of 5 Alternatives including the No-Action Alternative. In addition there are numerous options that are also included but which are not part of the main suite of alternatives. The Council has not rejected these options and therefore wishes to include them in the EIS. The Components Table, shown in the second half of Chapter 2, organizes the alternatives forwarded by the Council in a step-by-step manner that allows decision-makers and stakeholders to investigate and understand the ramifications of each of the little decisions that must be made when overhauling the management regime. The PFMC and the Consulting Team are in the process of revising earlier versions of the component table, and consequently the full table is unavailable at this time. The full table will be included in the final draft.
- Chapter 3 contains the annotated outline of the past and baseline conditions of potentially affected resource and stakeholder groups.
- Chapter 4 contains an annotated outline of the direct, indirect, and cumulative effects analysis for each potentially affected resource and stakeholder group.
- Chapter 5 contains an outline of the summary of other environmental management Issues
- Chapter 6 describes the consistency of the alternatives with the West Coast Groundfish FMP and MSA national standards and other provisions.
- Chapter 7 contains an outline of the analysis of cross-cutting mandates.
- Chapters 8 11 are reserved for a list of preparers, glossary, list of acronyms, index and list of cited literature.
- Appendix A contains an annotated outline of the RIR/IRFA
- Appendix B is a technical appendix to the social impact assessment. The appendix contains introductory text and an example of the content that would be provided for potentially affected communities.
- Appendix C contains an outline of a components analysis.

Contents

Section

1	Introduction	1
1.1	Purpose and Need for the Proposed Action	1
1.1.1	Need for Action (Problems for Resolution)	1
1.1.2	Purpose of the Proposed Actions	2
1.1.2.1	Goals	3
1.1.2.2	Objectives	
1.1.2.3	Constraints and Guiding Principles	
1.1.3	Background to Purpose and Need	
1.1.3.1	Biological Context of West Coast Groundfish	
1.1.3.2	Groundfish Fisheries Context	
1.1.3.3	Groundfish Management Context	
1.1.3.4 1.1.3.5	Groundfish Limited Entry (License Limitation)	
1.1.3.5	Limited Entry Fixed Gear Capacity Rationalization Current Groundfish Management System	
1.1.3.0	Scoping Summary	
1.2.1	Background to Scoping	
1.2.2	Council and Agency NEPA Scoping	
1.2.3	Summary of Comments Received	
1.2.5	Relationship to Other NEPA Documents	
1.5	•	
1 /	Organization of This Decument	21
1.4	Organization of This Document	21
1.4 2	Organization of This Document Description of Proposed Alternatives	
	-	23
2	Description of Proposed Alternatives	23 23
2 2.1	Description of Proposed Alternatives Overivew of the Alternatives	23 23 44
2 2.1 2.2	Description of Proposed Alternatives Overivew of the Alternatives Alternatives Considered but Excluded from Detailed Analysis	23 23 44 44
2 2.1 2.2 2.3	Description of Proposed Alternatives Overivew of the Alternatives Alternatives Considered but Excluded from Detailed Analysis Management Regime and IFQ Program Component Tables	23 23 44 44 110
2 2.1 2.2 2.3 2.4	Description of Proposed Alternatives Overivew of the Alternatives Alternatives Considered but Excluded from Detailed Analysis Management Regime and IFQ Program Component Tables Comparison of the Direct, Indirect and Cumulative Effects of the Alternatives	23 23 44 44 110 113
2 2.1 2.2 2.3 2.4 3	Description of Proposed Alternatives Overivew of the Alternatives Alternatives Considered but Excluded from Detailed Analysis Management Regime and IFQ Program Component Tables Comparison of the Direct, Indirect and Cumulative Effects of the Alternatives Resource and Stakeholder Profiles	23 23 44 44 110 113
 2.1 2.2 2.3 2.4 3.1 	Description of Proposed Alternatives Overivew of the Alternatives Alternatives Considered but Excluded from Detailed Analysis Management Regime and IFQ Program Component Tables. Comparison of the Direct, Indirect and Cumulative Effects of the Alternatives Resource and Stakeholder Profiles Introduction	
 2.1 2.2 2.3 2.4 3 3.1 3.1.1 	Description of Proposed Alternatives Overivew of the Alternatives Alternatives Considered but Excluded from Detailed Analysis Management Regime and IFQ Program Component Tables Comparison of the Direct, Indirect and Cumulative Effects of the Alternatives Resource and Stakeholder Profiles Introduction Historical Conditions	23
2 2.1 2.2 2.3 2.4 3.1 3.1.1 3.1.1 3.1.2	Description of Proposed Alternatives Overivew of the Alternatives Alternatives Considered but Excluded from Detailed Analysis Management Regime and IFQ Program Component Tables. Comparison of the Direct, Indirect and Cumulative Effects of the Alternatives Resource and Stakeholder Profiles Introduction. Historical Conditions. Baseline Conditions	
 2.1 2.2 2.3 2.4 3.1 3.1.1 3.1.2 3.2 	Description of Proposed Alternatives Overivew of the Alternatives Alternatives Considered but Excluded from Detailed Analysis Management Regime and IFQ Program Component Tables Comparison of the Direct, Indirect and Cumulative Effects of the Alternatives Resource and Stakeholder Profiles Introduction Historical Conditions Baseline Conditions Major Fishery Data Sets Used in Describing Historical and Baseline Conditions	23
2 2.1 2.2 2.3 2.4 3 3.1 3.1.1 3.1.2 3.2 3.2.1	Description of Proposed Alternatives Overivew of the Alternatives Alternatives Considered but Excluded from Detailed Analysis Management Regime and IFQ Program Component Tables. Comparison of the Direct, Indirect and Cumulative Effects of the Alternatives Resource and Stakeholder Profiles Introduction. Historical Conditions. Baseline Conditions Major Fishery Data Sets Used in Describing Historical and Baseline Conditions Shoreside Non-whiting Commercial Fishery Data	23 23 44 44 110 113 113 113 113 113 114 114
2 2.1 2.2 2.3 2.4 3 3.1 3.1.1 3.1.2 3.2 3.2.1 3.2.1.1	Description of Proposed Alternatives Overivew of the Alternatives Alternatives Considered but Excluded from Detailed Analysis Management Regime and IFQ Program Component Tables Comparison of the Direct, Indirect and Cumulative Effects of the Alternatives Resource and Stakeholder Profiles Introduction Historical Conditions Baseline Conditions Major Fishery Data Sets Used in Describing Historical and Baseline Conditions Shoreside Non-whiting Commercial Fishery Data Landings Data Discards and Incidental Catch Data Whiting Commercial Fishery Data	23
2 2.1 2.2 2.3 2.4 3 3.1 3.1.1 3.1.2 3.2 3.2.1 3.2.1.1 3.2.1.2	Description of Proposed Alternatives Overivew of the Alternatives Alternatives Considered but Excluded from Detailed Analysis Management Regime and IFQ Program Component Tables. Comparison of the Direct, Indirect and Cumulative Effects of the Alternatives Resource and Stakeholder Profiles Introduction. Historical Conditions. Baseline Conditions Major Fishery Data Sets Used in Describing Historical and Baseline Conditions Shoreside Non-whiting Commercial Fishery Data Landings Data Discards and Incidental Catch Data	23

3.2.4.1	Ex-vessel Prices	115
3.2.4.2	Ex-processor Prices	115
3.2.4.3	Vessel Costs	116
3.2.4.4	Processor Costs	
3.3	List of Potentially Affected Resource and Stakeholder Groups	116
3.4	Limited-entry Trawl Groundfish Catcher Vessels and Permits	117
3.4.1	Classification of Potentially Affected Trawl Catcher Vessels and Permits	
3.4.2	Condition Indicators for Trawl Catcher Vessels	
3.4.3	Summary of Past and Present Conditions of Trawl Catcher Vessels	119
3.4.3.1	Number of Active Permit Owners and Vessels	119
3.4.3.2	Total Landings and Ex-vessel Value	
3.4.3.3	Ex-Vessel Value, Landings and Incidental Catch Rates by Target Strategy	
3.4.3.4	Distribution of Landings by Species and Month	
3.4.4	Past and Present Conditions of Specific Trawl Catcher Vessel Classes	143
3.4.4.1	At-sea Whiting Trawl Catcher Vessel Class	143
3.4.4.2	Shoreside Whiting Trawl Catcher Vessels	
3.4.4.3	Combination Whiting Trawl Catcher Vessels	
3.4.4.4	Large Diversified Trawl Catcher Vessels	
3.4.4.5	Small Diversified Trawl Catcher Vessels	
3.4.4.6	Bought-out Trawl Catcher Vessels and Permits	
3.5	Trawl Catcher Processors	
3.5.1	Potentially Affected Trawl Catcher Processors	
3.5.2	Condition Indicators for Trawl Catcher Processors	
3.6	Processors of Trawl-Caught Groundfish	
3.6.1	Classifications of Potentially Affected Processors	167
3.6.2	Condition Indicators for Processors of Trawl Groundfish	
3.6.3	Summary of Past and Present Conditions of Trawl Groundfish Processors	170
3.6.3.1	Number of Processor Groups, Facilities and Buying Stations	170
3.6.3.2	Relative Dependence on Trawl Groundfish	
3.6.3.3	Total Purchases of Trawl-Caught Groundfish by Species	
3.6.3.4	Distribution of Purchases	
3.6.4	Past and Present Conditions of Trawl Groundfish Processor Classes	
	Large Shoreside Processing Groups	
3.6.4.2	Small Shoreside Processing Groups	
3.6.4.3	Independent Buyers	
3.6.4.4	Motherships	
3.7	Non-Trawl Commercial Harvesters	
3.7.1	Potentially Affected Non-Trawl Commercial Harvesters	
3.7.2	Condition Indicators for Non-Trawl Commercial Harvesters	
3.7.3	Past and Present Conditions of Non-Trawl Commercial Harvester Classes	
3.7.3.1	Limited Entry Fixed Gear Harvesters	
3.7.3.2	Directed Open Access Fixed Gear Harvesters	
3.7.3.3	Exempted Trawl Incidental Open Access Harvesters	
3.7.3.4	Dungeness Crab Harvesters	
3.7.3.5	Highly Migratory Species Harvesters	
3.7.3.6	Salmon Troll Harvesters	
3.8	Buyers and Processors That Do Not Purchase Trawl Groundfish	

3.8.1	Condition Indicators for Other Buyers and Processors	204
3.8.2	Past and Present Conditions of Other Buyers and Processors	204
3.9	Recreational Harvesters of Groundfish	208
3.9.1	Condition Indicators for Recreational Harvesters of Groundfish	208
3.9.2	Past and Present Conditions of Recreational Harvesters of Groundfish	208
3.10	Communities	
3.10.1	Potentially Affected Communities	
3.10.2	Condition Indicators for Communities	
3.11	Tribes	
3.11.1	Potentially Affected Tribes	
	The Hoh Tribe	
	The Makah Tribe	
	The Quileute Tribe	
	The Quinault Indian Nation	
3.11.2	Condition Indicators for Tribes	213
3.12	Input Suppliers	214
3.12.1	Condition Indicators for Input Suppliers	215
3.12.2	Past and Present Conditions of Input Suppliers	215
3.12.2.1	Fuel Suppliers	215
	Trawl Gear Suppliers	
	Suppliers of Groundfish Observers	
3.12.2.4	Permit Brokerages	216
3.13	Wholesalers and Retailers	216
3.13.1	Condition Indicators for Wholesalers and Retailers	216
3.14	Consumers	217
3.14.1	Condition Indicators for Consumers	217
3.15	General Public	217
3.15.1	Condition Indicators for General Public	219
3.16	Management agencies	220
3.16.1	Potentially Affected Management Agencies	
3.16.2	Condition Indicators for Management Agencies	
3.16.3	Data	
3.16.4	Past and Present Conditions of Management Agencies	
	Pacific Fisheries Management Council	
	NOAA Fisheries NW Regional Office	
	NOAA Fisheries SW Regional Office	
	NOAA Fisheries Enforcement	
3.16.4.5	NOAA General Counsel	223
	Pacific States Marine Fishery Commission	
	State of California	
	State of Oregon	
	State of Washington	
	US Coast Guard	
3.17	Groundfish Resources	
3.17.1	Potentially Affected Groundfish Resources	223

3.17.2	Condition Indicators for Groundfish Resources	. 226
3.17.3	Data	. 226
3.17.4	Past and Present Conditions of Overfished Groundfish Species	. 227
3.17.4.1	Bocaccio (Sebastes paucispinis)	. 227
	Cowcod (S. levis)	
	Canary Rockfish (S. pinniger)	
	Darkblotched rockfish (S. crameri)	
3.17.4.5	Pacific Ocean Perch (S. alutus)	. 230
	Widow Rockfish (S. entomelas)	
	Yelloweye Rockfish (S. ruberrimus)	
	Past and Present Conditions of Non-Overfished Groundfish Species	
3.17.5.1	Cabezon (Scorpaenichthys marmoratus)	. 230
3.17.5.2	Chilipepper (S. goodei)	. 230
	Lingcod (Ophiodon elongates)	
3.17.5.4	Pacific Cod (Gadus macrocephalus)	. 230
	Pacific Whiting (Merluccius productus)	
	Shortbelly Rockfish (<i>S. jordani</i>)	
	Yellowtail Rockfish (S. flavidus)	
	Splitnose Rockfish (S. diploproa)	
	Slope Rockfish Complex	
) Arrowtooth Flounder (<i>Atheresthes stomias</i>)	
	I Petrale Sole (Eopsetta jordani)	
	2 English Sole (Parophrys vetulus)	
	3 Other Flatfish Complex	
	4 DTS Complex	
	5 Spiny dogfish (Squalus acanthias)	
	6 Big Skate (Raja binoculata)	
	7 Leopard Shark (Triakis semifasciata)	
3.18	Other Fish Resources	
3.18.1	Potentially Affected Other Fish Resources	
3.18.2	Condition Indicators for Other Fish Resources	. 232
3.18.3	Data	. 232
3.18.4	Past and Present Conditions of Other Affected Fish Resources	. 232
3.18.4.1	Pacific halibut (<i>Hippoglossus stenolepis</i>)	. 232
	California halibut (Paralichthys californicus)	
3.18.4.3	Pink shrimp (Pandalus jordani)	. 235
	Spot prawn (Pandalus platyceros)	
	Ridgeback prawn (Sicyonia ingentis)	
3.18.4.6	Dungeness crab (Cancer magister)	. 235
	Jack mackerel (Trachurus symmetricus)	
3.18.4.8	Pacific mackerel (Scomber japonicus)	. 235
	Walleye pollock (Theragra chalcogramma)	
	Common thresher shark (Alopias vulpinus)	
	I Eulachon (thaleichthys pacificus)	
3.19	Marine Mammals	. 236
3.19.1	Potentially Affected Marine Mammals	. 236
3.19.2	Condition Indicators for Marine Mammals	. 236
3.19.3	Data	. 238

3.19.4	Past and Present Effects on Marine Mammals	.238
3.19.4.1	Pinnipeds	.238
3.19.4.2	Sea otters	.241
3.19.4.3	Cetaceans	.241
3.20	Seabirds	.241
3.20.1	Potentially Affected Seabirds	.241
3.20.2	Condition Indicators for Seabirds	.242
3.20.3	Data	.243
3.20.4	Past and Present Conditions of Seabirds	.244
3.20.4.1	Albatross	.244
	California brown pelican	
	Northern Fulmars	
	Shearwaters	
	Cormorants	
	Puffins	
3.21	Other Protected Resources	
3.21.1	Potentially Affected Other Protected Species	
3.21.2	Condition Indicators for Other Protected Species	
3.21.3	Data	
3.21.4	Past and Present Conditions of Other Protected Resources	.249
	Sea Turtles	
	Salmon	
3.22	Habitat	
3.22.1	Potentially Affected Habitat	.251
3.22.1.1		
	Marine Protected Areas and Areas Closed to Trawling	
3.22.2	Condition Indicators for Habitat	.255
3.22.3	Data	256
3.22.4	Past and Present Conditions of Habitat	.257
3.23	Trophic Relationships	.257
3.23.1	Potentially Affected Trophic Relationships	.257
3.23.1.1	Predators	.257
3.23.1.2	Prey	258
3.23.2	Condition Indicators for Trophic Relationships	.258
3.23.3	Data	.258
4	Effects of Alternatives	261
4 .1		
	Analytical Framework	
4.1.1	Comparative Baseline	
4.1.2	Analytical Timeline	
4.1.3	Types of Effects Analyzed	
4.1.4	Analytical Scenarios	
4.1.4.1	Scenarios for Analyzing All of the Alternatives	
4.1.4.2	Scenarios for Analyzing the No-Action Alternative	
4.1.4.3	Scenarios for Analyzing the Action Alternatives	
4.1.5	Cumulative Effects Analysis	.266

4.1.6	Significance Criteria and Ratings	267
4.1.7	Data and Models for Estimating Impacts	268
4.1.7.1	Data Collection	
4.1.7.2	Models	
4.2	Summary of the Potential Effects of the Alternatives	
4.2.1	No-Action Alternative (Alternative 1)	
4.2.2	IFQ Alternatives (Alternatives 2 - 4)	
4.2.2.1	Potential Effects of Management Measures on Harvesters and Processors	
4.2.2.2	Potential Effects of Initial Allocation of IFQs on Harvesters and Processors	
4.2.2.3	Potential Indirect Effects	
4.2.3	Permit Stacking (Alternative 5)	
4.2.3.1	Potential Effects of Management Measures on Harvesters and Processors	
4.2.4	Comparative Summary of the Significance of the Effects of the Alternatives	
4.3	Limited Entry Trawl Groundfish Catcher Vessels	
4.3.1	Format of Effects Analysis	
4.3.2	Analytical Framework	
4.3.2.1	Potential Impacts and Impact Mechanisms	
4.3.2.2	Measurement Criteria and Significance Criteria	
4.3.2.3	Data and Models.	
4.3.3	Alternative 1: The No-Action Alternative	
4.3.3.1	Direct and Indirect Effects Analysis	
4.3.3.2	Cumulative Effect Analysis	
4.3.4	Alternative 2: IFQs for Whiting and Trawl Target Species	
4.3.4.1	Direct and Indirect Effects Analysis	
4.3.4.2	Cumulative Effect Analysis	
4.3.5	Alternative 3: IFQs for All Groundfish except Other Species	295
4.3.5.1	Alternative 3A: IFQ for all but Other Species with 50/50 QS Allocation Split between	
	Harvesters and Processors	295
4.3.5.2	Alternative 3Ba: IFQ for all but Other Species with a 100/0 QS Allocation Split between	205
4252	Harvesters and Processors	295
4.3.5.3	Alternative 3Bb: IFQ for all but Other Species with a 90/10 QS Allocation Split between	204
4.3.5.4	Harvesters and Processors Alternative 3Bc: IFQ for all but Other Species with a 50/50 QS Allocation Split between	290
4.3.3.4	Harvesters and Processors for Whiting and a 100/0 Split for Non-whiting	206
4.3.5.5	Alternative 3C: IFQ for all but Other Species with 75/25 QS Allocation Split between	270
4.3.3.3	Harvesters and Processors	296
4.3.6		
4.3.6.1	Direct and Indirect Effects Analysis	
4.3.6.2	Cumulative Effect Analysis	
4.3.7	Alternative 5: Permit Stacking	
4.3.7.1	Direct and Indirect Effects Analysis	
4.3.7.2	Cumulative Effect Analysis	
4.4	Trawl Catcher Processors	
4.4.1	Analytical Framework	
4.4.1.1	Potential Impacts and Impact Mechanisms	
4.4.1.1	Measurement Criteria and Significance Criteria	
4.4.1.3	Data and Models	
		- / /

4.5	Processors of Trawl Groundfish	
4.5.1	Analytical Framework	
4.5.1.1	Potential Impacts and Impact Mechanisms	
4.5.1.2	Measurement Criteria and Significance Criteria	
4.5.1.3	Data and Models	
4.6	Non-Trawl Commercial Harvesters	
4.6.1	Analytical Framework	
4.6.1.1	Potential Impacts and Impact Mechanisms	
4.6.1.2	Measurement Criteria and Significance Criteria	
4.6.1.3	Data and Models	
4.7	Buyers and Processors That Do Not Purchase Trawl Groundfish	
4.7.1	Analytical Framework	
4.7.1.1	Potential Impacts and Impact Mechanisms	
4.7.1.2	Measurement Criteria and Significance Criteria	
4.7.1.3	Data and Models	
4.8	Recreational Harvesters	
4.8.1	Analytical Framework	
4.8.1.1	Potential Impacts and Impact Mechanisms	
4.8.1.2	Measurement Criteria and Significance Criteria	
4.8.1.3	Data and Models	
4.9	Communities	
4.9.1	Analytical Framework	
4.9.1.1	Potential Impacts and Impact Mechanisms	
4.9.1.2	Measurement Criteria and Significance Criteria	
4.9.1.3	Data and Models	
4.10	Tribes	
4.10.1	Analytical Framework	
4.11	Input Suppliers	
4.11.1	Analytical Framework	
4.11.1.1	Potential Impacts and Impact Mechanisms	
	Measurement Criteria and Significance Criteria	
	Data and Models	
4.12	Wholesalers and Retailers	
4.12.1	Analytical Framework	
4.12.1.1	Potential Impacts and Impact Mechanisms	
	Measurement Criteria and Significance Criteria	
4.12.1.3	Data and Models	
4.13	Consumers of Groundfish Products	
4.13.1	Analytical Framework	
4.13.1.1	Potential Impacts and Impact Mechanisms	
	Measurement Criteria and Significance Criteria	
	Data and Models	
4.14	General Public	
4.14.1	Analytical Framework	
	Potential Impacts and Impact Mechanisms	
4.14.1.2	Measurement Criteria and Significance Criteria	

4.14.1.3	Data and Models	
4.15	Management Agencies	
4.15.1.1	Analytical Framework	
4.15.1.2	Potential Impacts and Impact Mechanisms	
4.15.1.3	Measurement Criteria and Significance Criteria	
4.15.1.4	Data and Models	
4.16	Groundfish Resources	
4.16.1	Analytical Framework	
4.16.1.1	Potential Impacts and Impact Mechanisms	
	Measurement Criteria and Significance Criteria	
	Data and Models	
4.17	Other Fish Resources	
4.17.1	Analytical Framework	
4.17.1.1	Potential Impacts and Impact Mechanisms	
	Measurement Criteria and Significance Criteria	
	Data and Models	
4.18	Marine Mammals	
4.18.1	Analytical Framework	
	Potential Impacts and Impact Mechanisms	
	Measurement Criteria and Significance Criteria	
	Data and Models	
4.19	Seabirds	
4.19.1	Analytical Framework	
	Potential Impacts and Impact Mechanisms	
	Measurement Criteria and Significance Criteria	
	Data and Models	
4.20	Other Protected Resources	
4.20.1	Analytical Framework	
	Potential Impacts and Impact Mechanisms	
	Measurement Criteria and Significance Criteria	
	Data and Models	
4.21	Habitat	
4.21.1	Analytical Framework	
4 21 1 1	Potential Impacts and Impact Mechanisms	326
	Measurement Criteria and Significance Criteria	
	Data and Models	
4.22	Trophic Relationships	
4.22.1	Analytical Framework	
4.22.1.1		
	Measurement Criteria and Significance Criteria	
	Data and Models	
5	Summary of Other Environmental Management Issues	
5.1	Short-Term Uses versus Long-Term Productivity	
5.2	Irreversible Resource Commitments	
5.3	Energy Requirements and Conservation Potential of the Alternatives	
5.5	Energy requirements and conservation retential of the Alternatives	
5.4	Urban Quality, Historic Resources, and the Design of the Built Environment	200

5.5	Possible Conflicts between the Proposed Action and Other Plans and Policies for the Affected Area	330
5.6	Significant and Unavoidable Adverse Impacts	
5.7	Mitigation	
6	Consistency with the IFQ program, West Coast Groundfish FMP and with MSA National Standards and Requirements	333
6.1	Consistency with ITQ Project Goals, Objectives, Constraints and Guiding Principles	
6.2	Consistency with FMP Goals and Objectives	
6.3	Consistency with MSA National Standards	
6.4	Consistency with MSA Requirements for a Limited Access System	
6.5	Consistency with MSA Requirements for Individual Fishing Quotas	
6.6	MSA Fishery Impact Statement	
7	Cross-Cutting Mandates	337
7.1	Other Federal Laws	
7.1.1	Coastal Zone Management Act	
7.1.2	Endangered Species Act	
7.1.3	Marine Mammal Protection Act	
7.1.4	Migratory Bird Treaty Act	
7.1.5	Paperwork Reduction Act	
7.1.6	Regulatory Flexibility Act	
7.2	Executive Orders	
7.2.1	EO 12866 (Regulatory Impact Review)	339
7.2.2	EO 12898 (Environmental Justice)	339
7.2.2.1	Public Participation among Minority Populations and Low-Income Populations	339
7.2.2.2	Identification of Affected Minority Populations and Low-Income Populations	
7.2.2.3	Effects of the Proposed Actions on Low-Income and Minority Population	
7.2.3	EO 13132 (Federalism)	
7.2.4	EO 13175 (Consultation and Coordination with Indian Tribal Government)	
7.2.5	EO 13186 (Responsibilities of Federal Agencies to Protect Migratory Birds)	342
8	List of Preparers	343
9	Acronyms and Glossary	345
10	Literature Cited and References	349
11	Index	353
12	Appendix A: Regulatory Impact Review/Initial Regulatory Flexibility Analysis	355
12.1	Regulatory Impact Review	
12.1.1	Introduction	
12.1.2	Economic analysis of the Alternatives	
	Changes in Net Benefits within a Benefit-Cost Framework	
	Changes in the Distributional Effects	
	Changes in Income and Employment	
12.2	Initial Regulatory Flexibility Analysis	357

12.2.1	Introduction	. 357
12.2.2	Reasons for Considering the Proposed Rule	. 358
12.2.3	Objectives and Legal Basis of the Proposed Rule	. 358
12.2.4	Description and Number of Small Entities to which the Proposed Rule will Apply	. 358
12.2.4.1	Definition of a Small Entity	. 358
12.2.4.2	Description of Small Entities to Which the Rule will Apply	. 359
	Estimate of the Number of Small Entities to Which the Rule will Apply	. 359
12.2.5	Description of the Projected Reporting, Record Keeping and Other Compliance Requirements of the Proposed Rule	. 360
12.2.5.1	Description of Compliance Requirements of the Proposed Rule	. 360
	Description of Compliance Costs Associated with the Proposed Rule	
	Estimate of the Regulatory Burden and Distributional Effects	
	Description of Potential Benefits of the Proposed Rule to Small Entities	
12.2.6	Identification of Relevant Federal Rules that may Duplicate, Overlap or Conflict with the Proposed Rule	
1007	Description of Significant Alternatives to the Proposed Rule	
12.2.7		
13	Appendix B: Social Impact Assessment Technical Appendix	. 363
13.1	Introduction	
13.2	Overview of Trawl Community Socioeconomic Profiles	. 366
13.3	Background and Methodology	. 366
13.4	Community Variability	. 366
13.4.1	Location and Historical Ties to the Fishery	. 366
13.4.2	Community Socioeconomic Structures	. 366
13.5	Social Impact Experience with IQ or Other Rationalization Programs	. 366
13.5.1	Summary Review of Relevant Literature	. 366
13.5.2	Region Specific Experience	. 367
13.5.3	Structure of Proposed Community Options	
13.5.3.1		
13.5.3.2	Community Involvement Option	
13.5.3.3	Existing Community Impact Control Mechanism Options	. 369
13.6	Community Profiles	. 369
13.6.1	Community #1	. 369
	Community Demographics	
	Local Economy and Links to the Trawl Fishery	
	Community Revenues (estimated revenues in community revenue context)	
	Summary of Recent Community Rationalization Experience (including lessons learned).	
13.6.2	Differential Impacts of Trawl Fishery Management Alternatives (general level discussion) Community #2 (etc.)	
14	Appendix C: Components Analysis	
14.1	Analysis of Components, Elements, and Options	
14.1.1	Analysis of Elements and Options Contained in Component 1	
14.1.2	Analysis of Elements and Options Contained in Component 2	
14.2	Preliminary Analysis of Distributions of Catch History and Potential QS by Species	. 371

Tables	Page
Table 2-1. Management Regime Alternatives for Analysis	
Table 2-2. IFQ Program Design Alternatives for Analysis	
Table 2-3. Alternative management regimes: components and options by alternative	
Table 2-4. IFQ program alternatives components, elements, and options	70
Table 2-5. Ownership cap, control cap, and vessel cap options to define QS/QP accumulation	
in IFQ Program Alternatives. Within each cell, a single percentage value needs to be selec	
Table 2-6. Comparison of the Cumulative Effects of the Alternatives	
Table 3-1. Preliminary Specification of Trawl Catcher Vessel Classes	118
Table 3-2. Active Permits by Trawl CV Class, 1994-2005	
Table 3-3. Ownership Patterns over All Vessel Classes, 1994-2005	
Table 3-4. Ownership Patterns in by Vessel Classes in 2005	121
Table 3-5. Permit Ownership Tenure by Vessel Classes in 2005	
Table 3-6. Active Permits from all Trawl CV Classes by Species, 1994-2005	123
Table 3-7. Active Permits by Trawl CV Class and Species, 1994-2005	124
Table 3-8. Active Permits by Trawl CV Class and Species, 2005	125
Table 3-9. Total Landings by Trawl CV Class, 1994-2005	126
Table 3-10. Total Ex-Vessel Value by Trawl CV Class, 1994-2005	126
Table 3-11. Landings from all Trawl CV Classes by Species and Year, 1994-2005	127
Table 3-12. Total Landings as a Percent of Optimum Yield by Species and Year, 1994-2005	128
Table 3-13. Ex-Vessel Value for all Trawl CV Classes by Species and Year, 1994-2005	129
Table 3-14. Total Landings by Trawl CV Class and Species, 1994-2005	130
Table 3-15. Landings by Trawl CV Class as a Percent of Total Landings, 1994-2005	131
Table 3-16. Landings by Trawl CV Class as a Percent of Total Landings, 2005	132
Table 3-17. Ex-vessel Value by Trawl CV Class and Species, 1994-2005	133
Table 3-18. Ex-vessel Value by Trawl CV Class as a Percent of Total Ex-Vessel Value, 1994-200	5134
Table 3-19. Ex-vessel Value by CV Class as a Percent of Total Ex-Vessel Value, 2005	135
Table 3-20. Ex-Vessel Value by Target Strategy and Vessel Class, 1994-2005	136
Table 3-21. Ex-Vessel Value by Target Strategy and Vessel Class, 2005	136
Table 3-22. Target Strategy as a Percent of Ex-Vessel Value by Vessel Class, 1994-2005	137
Table 3-23. Target Strategy by Vessel Class as a Percent of Ex-Vessel Value, 2005	137
Table 3-24. Estimated Catches of Target Species by Target Strategy and Vessel Class, 2001-200)5138
Table 3-25. Estimated Catches of Target Species by Vessel Class as a Percent of All Classes, 200 2005	
Table 3-26. Estimated Catches of Target Species by Target Strategy and Vessel Class, 2005	139
Table 3-27. Estimated Catches of Target Species by Vessel Class as a Percent of All Classes, 200	05 139
Table 3-28. Estimated Incidental Catch Rates of Overfished Species by Target Strategy, 2001-2	
Table 3-29. Trawl Groundfish Landings as a Percent of Volume by Species and Month, 1994-2	
Table 3-30. Trawl Groundfish Landings as a Percent of Volume by Species and Month, 2005	
Table 3-31. Trawl Groundfish Landings as a Percent of Volume by Trawl CV Class and Month, 2005	1994-
Table 3-32. Trawl Groundfish Landings as a Percent of Volume by Trawl CV Class and Month,	

Table 3-33. Trawl Groundfish Landings as a Percent of Value by Trawl CV Class and Month, 1994-2005.	
Table 3-34. Trawl Groundfish Landings as a Percent of Value by Trawl CV Class and Month, 2005	142
Table 3-35. Ownership Patterns in At-sea Whiting Trawl Catcher Vessel Class, 1994-2005	144
Table 3-36. Permit Ownership Tenure in the At-Sea Whiting Trawl CV Class in 2005	144
Table 3-37. Number of At-sea Whiting CVs Participating in Selected Fishery, 1994-2004	145
Table 3-38. Ex-Vessel Value Generated in Selected Fisheries by At-sea Whiting Catcher Vessels by Species, 1994-2004	145
Table 3-39. Ex-Vessel Value of Species Harvested by At-sea Whiting Trawl CVs by Season, 2003-20	004146
Table 3-40. Number of Operations by Fishery and Season, 2003-2004	146
Table 3-41. Active Permits in the At-sea Whiting Trawls CV Class by Species, 1994-2005	147
Table 3-42. Landings of At-sea Whiting Trawl CV by Species, 1994-2005	148
Table 3-43. Ex-Vessel Value of At-sea Whiting Trawl CV by Species, 1994-2005	149
Table 3-44. Number of Permits for the At-sea Whiting Trawl CV Class by Target Strategy, 1994-200	05151
Table 3-45. Total Landings of At-sea Whiting Trawl CVs by Target Strategy, 1994-2005	151
Table 3-46. Ex-Vessel Value of At-sea Whiting Trawl CVs by Target Strategy, 1994-2005	151
Table 3-47. Average Trips per Vessel of At-sea Whiting Trawl CVs by Target Strategy, 2000-2005	151
Table 3-48. Average Days per Trip by At-sea Whiting Trawl CVs by Target Strategy, 2000-2005	151
Table 3-49. Catch per Day by At-sea Whiting Trawl CVs by Target Strategy and period, 2000-2005	5152
Table 3-50. Ex-Vessel Value per Day by At-sea Whiting Trawl CVs by Target Strategy and period,	
2000-2005	
Table 3-51. Average Incidental Catch by Target Strategy, 2001-2005	
Table 3-52. Incidental Catch Rate per Dollar of Target Species, 2001-2005	154
Table 3-53. Estimated Total Catch of Target Species by Season in Each Target Fishery by Period, 2001-2005	155
Table 3-54. Average Incidental Catch Rates by Target Strategy and Period, 2001-2005	156
Table 3-55. Estimated Total Catch of Target Species by Management Area, 2001-2005	
Table 3-56. Average Incidental Catch Rates by Management Area, 2001-2005	
Table 3-57. Number of Active At-sea Whiting Trawl CV Operation by Management Area, 1994-20	05159
Table 3-58. Ex-Vessel Value of Harvest by At-sea Whiting Trawl CVs by Management Area, 1994-2005	159
Table 3-59. Number of Processors to which At-sea Whiting TCV Deliver, 1994-2005	161
Table 3-60. Number of Active At-sea Whiting Trawl Operations by Permit Holders Residence, 199 2005	
Table 3-61. Ex-Vessel Revenue of At-sea Whiting Trawl CVs by Permit Holders' Region of Residend 1994-2005	
Table 3-62. Estimated Number of Crewmembers and Crewmember Months in West Coast Ground Trawl Fishery by At-sea Whiting CVs, 1994-2004	163
Table 3-63. Payments to Labor by Species Group by At-sea Whiting CVs in West Coast Groundfish Trawl Fishery by Period, 1994-2004	
Table 3-64. Crewmember Months of At-sea Whiting Trawl CVs by Regional Residence of Vessel Owner, 1994-2005	
Table 3-65. Payments to Labor of At-sea Whiting Trawl CVs by Regional Residence of Vessel Owner 1994-2004	

Table 3-66. Active Processors and Buyers by Processor Class, 1994-2005
Table 3-67. Total Purchases of All Species (Groundfish and non-Groundfish) of Trawl Groundfish Processors and Buyers by Processor Class, 1994-2005
Table 3-68. Relative Dependency of Active Processors on Limited Entry Trawl Fisheries, 1994-2005172
Table 3-69. Relative Dependency of Active Processors on Limited Entry Trawl Fisheries by Processing
Class, 1994-2005
Table 3-70. Total Purchases of Limited Entry Trawl Groundfish by Processor Class, 1994-2005174
Table 3-71. Total Volume of Processor Purchases of Trawl Caught Groundfish by Species, 1994-2005175
Table 3-72. Total Ex-vessel Value of Processor Purchases of Trawl Caught Groundfish by Species, 1994-2005
Table 3-73. Total Volume of Processor Purchases of Trawl Groundfish by Species, 1994-2005177
Table 3-74. Total Ex-Vessel Value (in 2005\$) of Processor Purchases of Trawl Groundfish by Species, 2005
Table 3-75. Average Ex-Vessel Prices Paid for Trawl Groundfish by Species and Processor Class, 1994-2005
Table 3-76. Average Ex-Vessel Prices Paid for Trawl Groundfish by Species and Processor Class, 2005180
Table 3-77. Number of Trawl Groundfish Landings by Month, 1994-2005
Table 3-78. Number of Trawl Groundfish Landings as a Percent of Total Landing by Month, 1994- 2005 181
Table 3-79. Trawl Groundfish Landings Volume by Month, 1994-2005
Table 3-80. Trawl Groundfish Landings as a Percent of Volume by Month, 2005
Table 3-81. Total Ex-Vessel Value Trawl Groundfish Landings by Month, 1994-2005
Table 3-82. Trawl Groundfish Landings as a Percent of Value by Month, 2005
Table 3-83. Ex-Vessel Prices Paid by Month by Species and Month, 1994-2005
Table 3-84. Active Large Processors and Associated Buyers, 1994-2005 184
Table 3-85. Active Large Processors and Associated Buyers by Community, 1994-2005
Table 3-86. Active Large Processors and Associated Buyers by 2-Month Period, 1994-2005
Table 3-87. Total Volume of Large Processor Purchases of Trawl Caught Groundfish by Species, 1994-
2005
Table 3-88. Ex-Vessel Value of Large Processor Purchases by Species, 1994-2005 186 Table 3-88. Ex-Vessel Value of Large Processor Purchases by Species, 1994-2005 186
Table 3-89. Ex-Vessel Price Paid by Large Shoreside Processors by Species, 1994-2005 Table 3-89. Ex-Vessel Price Paid by Large Shoreside Processors by Species, 1994-2005
Table 3-90. Ex-Vessel Price Paid by Large Shoreside Processors by Species, 1994-2005 188
Table 3-91. Product Types and Volume of Large Shoreside Processors by Species, 2005 189
Table 3-92. Wholesale Value of Large Shoreside Processors by Product and Species, 2005
Table 3-93. Relative Dependency of Large Shoreside Processors on Limited Entry Trawl Fisheries, 1994-2005
Table 3-94. Annual Operating Days and Employment Estimates of Large Shoreside Processors, 1994- 2005 191
Table 3-95. Average Estimated Operating Costs, Wholesale Value of Production and Net Revenues of Large Shoreside Processors, 1994-2005
Table 3-96. Number of Motherships, 1994-2005
Table 3-97. Total Volume of Purchases of Trawl Caught Groundfish by Species, 1994-2005
Table 3-98. Ex-Vessel Value of Mothership Purchases by Species, 1994-2005
Table 3-99. Product Types and Volume Produced by Motherships by Species, 2005

Table 3-100. Wholesale Value of Motherships by Product and Species, 2005	
Table 3-101. Relative Dependency of Motherships on Limited Entry Trawl Fisheries, 1994-2005 197	
Table 3-102. Average Estimated Operating Costs and Net Revenues of Motherships in the West Coast	
Groundfish Trawl Fishery, 1994-2005197	
Table 3-103. Number of Active Operations in the Limited Entry Fixed Gear Fishery, 1994-2005 199	
Table 3-104. Volume of Landings in the Limited Entry Fixed Gear Fishery by Species, 1994-2005. 199	
Table 3-105. Ex-Vessel Value in the Limited Entry Fixed Gear Fishery by Species, 1994-2005 200	
Table 3-106. Ex-Vessel Prices in the Limited Entry Fixed Gear Fishery by Species, 1994-2005 201	
Table 3-107. Total Ex-Vessel Value of Landings in the Limited Entry Fixed Gear Fishery, 1994-2005202	
Table 3-108. Average Ex-Vessel Value per Operation in the Limited Entry Fixed Gear Fishery, 1994-2005	
Table 3-109. Volume of Landings Limited Entry Fixed Gear Fishery by Management Area, 1994-2005.20	3
Table 3-110. Ex-Vessel Value of Landings in the Limited Entry Fixed Gear Fishery by Management	J
Area, 1994-2005	
Table 3-111. Ex-Vessel Value of Limited Entry Fixed Gear Operations by Community of Residence,	
1994-2005	
Table 3-112. Participation of Other Buyers and Processors by Fishery, 1994-2005	
Table 3-113. Volume of Landings of Other Buyers and Processors by Fishery, 1994-2005	
Table 3-114. Ex-Vessel Value of Other Buyers and Processors by Fishery, 1994-2005	
Table 3-115. Relative Market Share of Other Buyers and Processors by Fishery, 1994-2005	
Table 3-116. Participation of Other Buyers and Processors by Fishery and Region, 1994-2005 207	
Table 3-117. Participation of Other Buyers and Processors by Fishery and Region, 2005	
Table 3-118. Ex-Vessel Value of Other Buyers and Processors by Fishery and Region, 1994-2005207	
Table 3-119. Ex-Vessel Value of Other Buyers and Processors by Fishery and Region, 2005	
Table 3-120. Volume of Landings in the Recreational Groundfish Fishery by Species and Year, 1994-	
2005	
Table 3-121. Volume of Recreation Groundfish Landings by State, 1994-2005.	
Table 3-122. Categories of Possible Economic Values Assigned to a Marine Ecosystem and Associated	
Species	
Table 3-123. Latitudinal and Depth Distributions of Groundfish Species (Adults) Managed under the	
Pacific Coast Groundfish Fishery Management Plan	
Table 3-124. Stock Assessments Based on Publication in the SAFE, 1994-2005	
Table 3-125. Estimated Total Catch Mortality of Selected Groundfish Species from West Coast	
Commercial, Tribal and Recreational Fisheries (mt), 2002	
Table 3-126. Estimated Total Catch Mortality of Selected Groundfish Species from West Coast	
Commercial, Tribal and Recreational Fisheries (mt), 2003	
Table 3-127. Existing Management tools, Management Tools Adopted under the ProgrammaticBycatch EIS and Management Tools that would Remain in Place under an IFQ Program	
Table 3-128. Retained and Discarded Catch of Bocaccio by Fishery, 2000- 2004 (mt)	
Table 3-129. Stock Status Information for Bocaccio Taken from the 2005 Stock Assessment (mt) 228	
Table 3-130. Projected Abundance of Bocaccio	
Table 3-131. Bycatch of Pacific Halibut taken by Limited Entry Trawl Vessels, 2000-2005	
Table 3-132. Interactions between Marine Mammals and West Coast Groundfish Trawl Fishery Documented by West Coast Groundfish Observers between September 2001 and October 2002236)

Table 3-133 Interactions between Seabirds and West Coast Groundfish Fisheries Documented by	/
West Coast Groundfish Observers between September 2001 and October 2002.	242
Table 3-134. Marine Sanctuaries and other Protected Areas	255
Table 3-135. Other Areas Closed to Trawling	255
Table 3-136. Other Areas Closed to Bottom Contact Gear	255
Table 4-1. Hypothetical Example of Cumulative Trip Limits under Status Quo	279
Table 4-2. Hypothetical Example of Cumulative Trip Limits under Permit Stacking	280
Table 4-3. Summary of the Direct and Indirect Effects of the Alternatives	283
Table 4-4. Summary of the Cumulative Effects of the Alternatives	286
Table 4-5. Overview of Analytical Approach Used to Compare Baseline and Future Conditions of Trawl Catcher Vessels under the Alternatives.	
Table 4-6. Overview of Analytical Approach Used to Compare Baseline and Future Conditions of Trawl Catcher Processors under the Alternatives	
Table 4-7. Overview of Analytical Approach Used to Compare Baseline and Future Conditions of Processors of Trawl Groundfish under the Alternatives	
Table 4-8. Overview of Analytical Approach Used to Compare Baseline and Future Conditions of Non-Trawl Commercial Harvesters under the Alternatives.	
Table 4-9. Overview of Analytical Approach Used to Compare Baseline and Future Conditions ofBuyers and Processors That Do Not Purchase Trawl Groundfish under the Alternatives	
Table 4-10. Overview of Analytical Approach Used to Compare Baseline and Future Conditions of Recreational Harvesters under the Alternatives.	
Table 4-11. Overview of Analytical Approach Used to Compare Baseline and Future Conditions of Communities under the Alternatives.	306
Table 4-12. Overview of Analytical Approach Used to Compare Baseline and Future Conditions of Input Suppliers under the Alternatives	
Table 4-13. Overview of Analytical Approach Used to Compare Baseline and Future Conditions of Wholesalers and Retailers under the Alternatives	
Table 4-14. Overview of Analytical Approach Used to Compare Baseline and Future Conditions of Consumers of Groundfish Products under the Alternatives	
Table 4-15. Overview of Analytical Approach Used to Compare Baseline and Future Conditions of General Public under the Alternatives	
Table 4-16. Overview of Analytical Approach Used to Compare Baseline and Future Conditions of Management Agencies under the Alternatives	
Table 4-17. Overview of Analytical Approach Used to Compare Baseline and Future Conditions of Groundfish Resources under the Alternatives	of 317
Table 4-18. Overview of Analytical Approach Used to Compare Baseline and Future Conditions of Other Fish Resources under the Alternatives	
Table 4-19. Overview of Analytical Approach Used to Compare Baseline and Future Conditions of Marine Mammals under the Alternatives.	321
Table 4-20. Overview of Analytical Approach Used to Compare Baseline and Future Conditions of Seabirds under the Alternatives	
Table 4-21. Overview of Analytical Approach Used to Compare Baseline and Future Conditions of Other Protected Resources under the Alternatives	
Table 4-22. Overview of Analytical Approach Used to Compare Baseline and Future Conditions of Habitat under the Alternatives	

Table 4-23. Overview of Analytical Approach Used to Compare Baseline and Future Conditions	of
Trophic Relationships under the Alternatives	327
Table 13-1. Regions, Homeports and Landings Ports with Trawl Activity	364
Table 14-1. Shoreside Landings of Limited Entry Trawl Permit Groups by Species, 1994-2003	373

Figures	Page
Figure 1-1. Latitude and Depth Association of Selected Groundfish Species	5
Figure 1-2. West Coast Groundfish Management Areas and Other Key Management Lines	14
Figure 1-3. Configuration of the trawl RCA and Cowcod Conservation Area during January-Februa 2005	
Figure 1-4. Configuration of the trawl RCA and Cowcod Conservation Area during March-Octobe 2005	r
Figure 2-1 Overview of organization of Tables 2-1 and 2-3 management regime alternatives	
Figure 2-2. Overview of organization of Tables 2-2 and 2-4, IFQ program alternatives.	
Figure 3-1. Histogram of Lengths of Vessels Associated with Permits in the in At-sea Whiting Traw Catcher Vessel Class, 2005	
Figure 3-2. Histogram of Years of Participation of Permits in At-sea Whiting Trawl Catcher Vessel Class, 1994-2005	144
Figure 3-3. Histogram of Duration of Permit Ownership by Permit in At-sea Whiting Trawl Catcher Vessel Class, 1994-2005	
Figure 3-4. Ex-Vessel Value of Harvest by At-sea Whiting CVs by Fishery, 1994-2004	144
Figure 3-5. Distribution of Landings of Species X by the At-sea Whiting Trawl CV Class	
Figure 3-6. Average Annual Whiting Catch by At-sea Whiting CVs by Lat/Long, 1994-2005	
Figure 3-7. Ex-Vessel Value Paid to At-sea Whiting Trawl CVs by Processor Class, 1994-2005 (Hypothetical Data)	160
Figure 3-8. Number of Receivers of Trawl Groundfish by State, 1994-2003	.171
Figure 3-9 Landings of All Species of Large Shoreside Processors by Month, 1994-2005	. 191
Figure 3-10. Landings by Species and Month in the Limited Entry Fixed Gear Fishery, 1994-2005.	. 202
Figure 3-11. Buyers and Processors of West-Coast Species, 1994-2003	. 205
Figure 3-12. Landings of Rockfish in the Recreational Fishery by Two-Month Period, 1994-2005	.210
Figure 3-13. Landings of Other Groundfish in the Recreational Fishery by Two-Month Period, 199	
2005	.210
Figure 3-14. Geographic Distribution of Rockfish and Allied Species (Lingcod, Cabezon, Kelp	
Greenling, and California Scorpionfish)	
Figure 3-15. 40-10 Rule	
Figure 3-16. HAPCs Designated in Amendment 19	
Figure 4-1. Trawl IFQ Program Analytical and Implementation Timeline	
Figure 14-1. Dover Sole Catch Distribution—Post Buyback Permits 1994-2003	
Figure 14-2. Thornyhead Catch Distribution—Post Buyback Permits 1994-2003	
Figure 14-3. Sablefish Catch Distribution—Post Buyback Permits 1994-2003	
Figure 14-4. Petrale Sole Catch Distribution—Post Buyback Permits 1994-2003	
Figure 14-5. Shoreside Whiting Catch Distribution—Post Buyback Permits 1994-2003	
Figure 14-6. Canary Rockfish Catch Distribution—Post Buyback Permits 1994-2003	
Figure 14-7. Widow Rockfish Catch Distribution—Post Buyback Permits 1994-2003	
Figure 14-8. Yelloweye Rockfish Catch Distribution—Post Buyback Permits 1994-2003	
Figure 14-9. Lingcod Catch Distribution—Post Buyback Permits 1994-2003	
Figure 14-10. Butter Sole Catch Distribution—Post Buyback Permits 1994-2003	
Figure 14-11. Cabezon Catch Distribution—Post Buyback Permits 1994-2003	379

1 Introduction

This introduction discusses the purpose and need for the proposed action. It also provides a historical background and a summary of actions and events that have led to the Council proposals. This introduction also lists the suite of alternatives to be analyzed and a summary of the scoping process. The introductory chapter ends with a description of how the remainder of the document is organized.

Terminology Note: In this analysis, QP is the annual catch amount allocated to an individual, whereas QS is the individual's portion as a percentage of the total allocation. IFQs refer to both QS and QP. At this time, IFQs are the primary individual quota tool being considered for use in the trawl individual quota program. Other types of individual quotas were considered

1.1 Purpose and Need for the Proposed Action

The Pacific Fishery Management Council (Council) is considering an individual fishing quota (IFQ) program that would change the primary management tool used to control trawl catch of West Coast groundfish from a system of periodic landing limits to one based on total catch quota shares (QS) where each quota pound (QP) derived from QS could be caught at any time during an open season. The status quo alternative (No Action) is also considered. From the set of alternatives analyzed in this draft analysis, the Council will identify a preferred alternative that will be termed "the proposed action."

1.1.1 Need for Action (Problems for Resolution)

Despite the recently completed buyback program, management of the West Coast limited entry groundfish trawl fishery (West Coast groundfish trawl fishery) is still marked by serious biological, social, and economic concerns, similar to those cited in the US Commission on Ocean Policy's 2004 report. The trawl fishery is currently viewed as economically unsustainable given the current number of participating vessels, the current status of certain groundfish stocks, and the various measures in place to protect those stocks.

One major source of concern stems from the management of bycatch (discarded incidental catch), particularly of overfished species. Over the past several years the Council's groundfish management efforts have been preoccupied with drafting rebuilding plans for overfished species, and general developing management schemes for minimizing bycatch and specific management of overfished species incidental catch. Through the groundfish Strategic Plan and the draft Amendment 18 process, the Council has indicated its support for future use of IFQ programs to manage commercial groundfish fisheries. These programs will give individual fishery participants more flexibility in how they participate in the fishery, and more accountability for how individual actions affecting incidental catch of overfished species impact the groundfish fishery as a whole.

Upon the recommendations of its Trawl Individual Quota Committee (TIQC), the Council sent the following problem statement out for public review during the public scoping period.

As a result of the legal requirement to minimize bycatch of overfished species, considerable harvest opportunity is being forgone in an economically stressed fishery. The West Coast groundfish trawl fishery is a multi-species fishery in which fishermen exert varying and limited control of the mix of species in their catch. The optimum yields (OYs) for many overfished

species have been set at low levels, placing a major constraint on the industry's ability to fully harvest the available OYs of the more abundant target species that co-occur with the overfished species, wasting economic opportunity. Average discard rates for the fleet are applied to project bycatch of overfished species. These discard rates determine the degree to which managers must constrain the harvest of target species that co-occur with overfished species. These discard rates are developed over a long period of time and do not rapidly respond to changes in fishing behavior by individual vessels or for the fleet as a whole. Under this system, there is little direct incentive for individual vessels to do everything possible to avoid take of species for which there are conservation concerns, such as overfished species. In an economically stressed environment, uncertainties about average bycatch rates become highly controversial. As a consequence, members of fishing fleets tend to place pressure on managers to be less conservative in their estimates of bycatch. Given all of these factors, in the current system there are uncertainties about the accuracy of bycatch estimation, few incentives for the individual to reduce personal bycatch rates, and an associated loss of economic opportunity related to the harvest of target species.

The current management regime is not responsive to the wide variety of fishing business strategies and operational concerns. For example, historically the Pacific Council has tried to maintain a year-round groundfish fishery. Such a pattern works well for some business strategies in the industry, but there has been substantial comment from fishermen who would prefer to be able to pursue a more seasonal groundfish fishing strategy. The current management system does not have the flexibility to accommodate these disparate interests. Nor does it have the sophistication, information, and ability to make timely responses necessary to react to changes in market, weather, and harvest conditions that occur during the fishing year. The ability to react to changing conditions is a key factor in conducting an efficient fishery in a manner that is safe for the participants.

Fishery stock depletion and economic deterioration of the fishery are concerns for fishing communities. Communities have a vital interest in the short-term and long-term economic viability of the industry, the income and employment opportunities it provides, and the safety of participants in the fishery.

In summary, management of the fishery is challenged with the competing goals of: minimizing bycatch, taking advantage of the available allowable harvests of more abundant stocks, increasing management efficiency, and responding to community interest. "Taking advantage of the available allowable harvests" includes conducting safe and efficient harvest activities in a manner that optimizes net benefits over both the short and long term.

1.1.2 Purpose of the Proposed Actions

The TIQC was charged with the task of assisting the Council in identifying the elements of a trawl individual quota program and scoping alternatives and potential impacts of those alternatives in support of the requirements of the Magnuson-Stevens Fishery Conservation and Management Act (MSA) and National Environmental Policy Act (NEPA). At its first meeting in October 2003, the TIQC drafted a set of goals and objectives. The Independent Experts Panel (IEP) and TIQC subsequently recommended modifying some of the goals and objectives. The participation of the TIQC, the IEP, and other entities in the scoping process is described below in Section 1.2.

The following list of "goals, objectives, and constraints and guiding principles" outlines the purpose of the proposed action. This list is based on recommendations of the IEP, as modified by the TIQC and

Council. The Council adopted this list in June 2005 while recommending moving forward with consideration of an Individual Fishing Quota (IFQ) program for the trawl fishery.

1.1.2.1 Goals

- 1. Increase regional and national net benefits including improvements in economic, social, environmental and fishery management objectives.
- 2. Achieve capacity rationalization through market forces and create an environment for decision making that can rapidly and efficiently adjust to changing conditions.

1.1.2.2 Objectives

- 1. Provide for a viable, profitable and efficient groundfish fishery.
- 2. Minimize negative ecological impact while taking the available harvest.
- 3. Reduce bycatch and discard mortality.
- 4. Promote individual accountability responsibility for catch (landed catch and discards).
- 5. Increase stability for business planning.
- 6. Increase operational flexibility.
- 7. Minimize adverse effects from an IFQ program on fishing communities to the extent practical.
- 8. Promote measurable economic and employment benefits through the seafood catching, processing, distribution elements, and support sectors of the industry.
- 9. Provide quality product for the consumer.
- 10. Increase safety in the fishery.

1.1.2.3 Constraints and Guiding Principles

- 1. Taking into account the biological structure of the stocks including such factors as populations and genetics.
- 2. Taking into account the need to ensure that the total OYs and Allowable Biological Catch (ABC) for the trawl and all other sectors are not exceeded.
- 3. Accounting for total groundfish mortality.
- 4. Avoiding provisions where the primary intent is a change in marketing power balance between harvesting and processing sectors.
- 5. Avoiding excessive quota concentration.
- 6. Providing efficient and effective monitoring and enforcement.
- 7. Designing a responsive review evaluation and modification mechanism.
- 8. Take into account the management and administrative costs of implementing and overseeing the IFQ program and complementary catch monitoring programs and the limited state and federal resources available.

The relative performance of each of the alternatives with respect to these "goals, objectives, and constraints and guiding principles" is summarized in Section 6.1. Many of these elements are also addressed elsewhere in the analysis, for example other sections in the Chapter 6 discuss of consistency with the Pacific Coast Groundfish Fishery Management Plan (Groundfish FMP) and MSA national standards; and in Appendices A and B where impacts on net national benefits, small entities and communities are addressed.

1.1.3 Background to Purpose and Need

This section examines the natural, exploitation, and management history of the West Coast groundfish trawl fishery.

1.1.3.1 Biological Context of West Coast Groundfish

The groundfish covered by the Groundfish FMP include species that live on or near the bottom of the eastern Pacific Ocean within 200 miles of the US West Coast. These include the following species groups:

- **Rockfish.** The FMP covers 64 different species of rockfish, including widow, yellowtail, canary, shortbelly, and vermilion rockfish; bocaccio, chilipepper, cowcod, yelloweye, thornyheads, darkblotched rockfish, and Pacific Ocean perch.
- Flatfish. The FMP covers 12 species of flatfish, including various soles, starry flounder, turbot, and sanddab.
- **Roundfish.** The six species of roundfish included in the FMP are lingcod, cabezon, kelp greenling, Pacific cod, Pacific whiting (hake), and sablefish.
- Sharks and skates. The six species of sharks and skates in the FMP are leopard shark, soupfin shark, spiny dogfish, big skate, California skate, and longnose skate.
- Other species. These include ratfish, finescale codling, and Pacific rattail grenadier.

The list of current trawl target species includes flatfish, roundfish, thornyheads and a few species of rockfish. Primary flatfish target species include petrale sole and Dover sole. Roundfish target species include Pacific whiting, Pacific cod and sablefish. Some rockfish species, especially Pacific Ocean perch and widow rockfish were important trawl targets until the mid 1990s. Rockfish include three genera under the family Scorpaenidae. One genus, *Scorpaena*, forms only a small fishery off southern California. The thornyheads, genus *Sebastolobus*, are occasionally referred to as rockfish, however biologically they are quite different. The genus most commonly referred to as rockfish, *Sebastes*, is a very diverse group. Figure 1-1 shows the distribution of members of the genus *Sebastes* and other groundfish species by latitude and depth association.

	Continental Slope Species	Continental Shelf Species	Nearshore Species
North	Principal Species Aurora rockfish (<i>Sebastes aurora</i>) Darkblotched rockfish (<i>Sebastes rameri</i>) Pacific ocean perch (<i>Sebastes alutus</i>) Redbanded rockfish (<i>Sebastes alutus</i>) Rougheye rockfish (<i>Sebastes alutianus</i>) Sharpchin rockfish (<i>Sebastes alutianus</i>) Shortraker rockfish (<i>Sebastes barealis</i>) Splitnose rockfish (<i>Sebastes diplopraa</i>) Yellowmouth rockfish (<i>Sebastes reedi</i>) Secondary Species Bank rockfish (<i>Sebastes rufus</i>) Blackgill rockfish (<i>Sebastes melanostomus</i>)	Principal Species Canary rockfish (<i>Sebastes pinniger</i>) Lingcod (<i>Ophiodon elongatus</i>) Tiger rockfish (<i>Sebastes nigrocintus</i>) Vermillion rockfish (<i>Sebastes miniatus</i>) Widow rockfish (<i>Sebastes ruberrimus</i>) Yelloweye rockfish (<i>Sebastes ruberrimus</i>) Secondary Species Greenstriped rockfish (<i>Sebastes ruberrimus</i>) Redstripe rockfish (<i>Sebastes proriger</i>) Rosethorn rockfish (<i>Sebastes helvomaculatus</i>) Sablefish (seasonal) (<i>Anoplopoma fimbria</i>) Silvergray rockfish (<i>Sebastes brevispinis</i>) Yellowtail rockfish (<i>Sebastes flavidus</i>)	Principal Species Black rockfish (<i>Sebastes melanops</i>) Blue rockfish (<i>Sebastes mystinus</i>) Cabezon (<i>Scarpaenichthys marmoratus</i>) China rockfish (<i>Sebastes nebulosus</i>) Copper rockfish (<i>Sebastes caurinus</i>) Lingcod (<i>Ophiodon elongates</i>) Kelp greenling (<i>Hexagrammus decagrammus</i>) Quillback rockfish (<i>Sebastes maliger</i>) Secondary Species Brown rockfish (<i>Sebastes miniatus</i>) Vermillion rockfish (<i>Sebastes miniatus</i>)
			Cape Mendocino
South	Principal Species Aurora rockfish (<i>Sebastes aurora</i>) Bank rockfish (<i>Sebastes rufus</i>) Blackgill rockfish (<i>Sebastes rufus</i>) Redbanded rockfish (<i>Sebastes babock</i>) Rougheye rockfish (<i>Sebastes aleutianus</i>) Splitnose rockfish (<i>Sebastes aleutianus</i>) Splitnose rockfish (<i>Sebastes diplopra</i>) Secondary Species Darkblotched rockfish (<i>Sebastes ramer</i>) Pacific ocean perch (<i>Sebastes alutus</i>) Sharpchin rockfish (<i>Sebastes sacentrus</i>) Shortraker rockfish (<i>Sebastes borealis</i>) Yellowmouth rockfish (<i>Sebastes reedi</i>)	Principal Species Bocaccio (<i>Sebastes paucispinis</i>) California scorpionfish (<i>Scorpaena gutatta</i>) Canary rockfish (<i>Sebastes pinnige</i>) Chilipepper (<i>Sebastes goode</i>) Cowcod (<i>Sebastes levis</i>) Lingcod (<i>Ophiodon elongatus</i>) Vermillion rockfish (<i>Sebastes miniatus</i>) Widow rockfish (<i>Sebastes niniatus</i>) Yelloweyer rockfish (<i>Sebastes ruberrimus</i>) Secondary Species Mexican rockfish (<i>Sebastes maclonald</i>) Tiger rockfish (<i>Sebastes nigrocintus</i>) Yellowtail rockfish (<i>Sebastes flavidus</i>)	Principal Species Black rockfish (<i>Sebastes melanops</i>) Blue rockfish (<i>Sebastes mystinus</i>) Brown rockfish (<i>Sebastes auriculatus</i>) Cabezon (<i>Scorpaenichthys marmoratus</i>) California scorpionfish (<i>Scorpaena gutatta</i>) Copper rockfish (<i>Sebastes caurinus</i>) Copher rockfish (<i>Sebastes caurinus</i>) Copher rockfish (<i>Sebastes caurinus</i>) Copher rockfish (<i>Sebastes caurinus</i>) Olive rockfish (<i>Sebastes serranoides</i>) Treefish (<i>Sebastes serriceps</i>) Secondary Species Black-and-yellow rockfish (<i>Sebastes chryomelas</i>) Calico rockfish (<i>Sebastes statte dilige</i>) Kelp rockfish (<i>Sebastes attrovirens</i>)

Figure 1-1. Latitude and Depth Association of Selected Groundfish Species

West Coast flatfish and roundfish stocks are relatively abundant, short-lived, and productive. Large initial catches of rockfish gave the impression that these stocks were also highly productive. However, increased scientific knowledge of the natural history and stock status of several rockfish species made it clear that most members of the genus *Sebastes* are not able to withstand the level of removals made possible by high intensity fishing pressure using modern fishing methods. There are several reasons for this:

- 1. Most rockfish are viviparous. Fertilization is internal and the female retains the eggs until they hatch, giving "birth" to live young. This limits the number of eggs that are produced annually.
- 2. Extreme longevity. Specimens of several rockfish species have been estimated at over 60 years of age, and some over 100 years.
- 3. Long generation times. Many rockfish species require 10 or more years to reach sexual maturity.
- 4. Low natural mortality. Rockfish are adapted to relatively slow natural population turnover, unlike species such as Pacific whiting, sablefish and most flatfish.
- 5. Fecundity increases with age. Evidence shows that older female rockfish actually produce more young than younger ones.

- 6. Infrequent recruitment success. Ocean conditions or other factors seem to create large variability in recruitment success.
- 7. Specific habitat requirements vary with life stage. Eggs, larvae, juvenile and adult forms of many rockfish use different types of habitat over their lifecycle.
- 8. Relatively low mobility of adults. Many rockfish tend to inhabit a particular site for much of their adult life making them particularly susceptible to capture.

The traits of long life, slow growth, viviparity and increasing fecundity with age may have evolved to deal with environmental variability. The ability of Rockfish to live a long time and produce more young with age increases the odds that they will be able to "wait out" poor environmental conditions and produce enough young that a few offspring will likely survive. However, these characteristics also lead to a relatively low productivity for a given biomass and predispose most rockfish to being unable to support large, sustained removals. Low productivity coupled with a tendency to associate with other target species increases management difficulty. This is especially problematic when the associated species differ markedly in life history traits such as generation time, fecundity and natural mortality rate.

1.1.3.2 Groundfish Fisheries Context

The West Coast groundfish trawl fishery consists of a several species of flatfish, roundfish, rockfish, and other species taken using trawl, trap and hook-and-line gears, including recreational gear. The commercial fishery is prosecuted over a wide range of depths, from 20 fathoms for English sole and sanddabs to as deep as 700 fathoms for Dover sole, thornyheads, and sablefish. Fishing may occur on smooth mud/sand substrates, rocky reefs, pinnacles, and canyons. Recreational groundfish fisheries typically occur closer inshore than most commercial fisheries.

West Coast groundfish range from semi-pelagic species like Pacific whiting, shortbelly rockfish, and widow rockfish to demersal species such as Dover sole, lingcod, and thornyheads. Most species primarily inhabit the continental shelf, but Dover sole, thornyheads, rex sole, petrale sole, and some others occur in greatest abundance on the continental slope. The close spatial relationship of certain species often results in large catches of a mix of species. This is particularly true in the case of bottom trawl catches. For example, vessels catching Dover sole also catch large amounts of other valuable species such as thornyheads, sablefish, and darkblotched rockfish. Several species of rockfish may be caught in a single trawl tow, and the species mix changes from north to south. Historically, widow rockfish, yellowtail rockfish, and canary rockfish were caught in the Vancouver and Columbia management areas, while bocaccio and chilipepper rockfish have been significant catch components in the Monterey and Conception areas. Currently, only a few rockfish species are trawl targets, including yellowtail rockfish in northern midwater fisheries and splitnose rockfish and associated species in the southern slope fishery.

Fishermen can In order to exercise some control over the mix of various species in their catches, fishermen can modify the depth and area of their fishing effort as well as the manner in which gear is fished. However, it is often impossible to avoid catch of some non-target species. The fishery's multi-species nature is further complicated by seasonal changes in fish availability, weather, and by market conditions (prices and poundage limits)—factors which may cause a trawler to fish on several species' assemblages in a single fishing trip. Many gear types are used in the commercial groundfish fishery, including trawl nets, traps, and longlines. However, trawl nets (both bottom and midwater types) account for the major portion of the groundfish catch.

In the trawl fishery, some incidental catch of non-targeted groundfish is unavoidable, and for economic or regulatory reasons, some of the catch is discarded. In multi-species fisheries such as this, it is practically impossible to optimize harvests—achieve MSY—for all stocks simultaneously. Optimally harvesting any one stock may result in either under-harvest or over-harvest of co-occurring stocks. While under-harvest is not necessarily a concern from a biological standpoint, it may have social and economic impacts in terms of forgone protein supply, revenues, and incomes. With the declaration of several species as overfished, under-harvest of co-occurring species has become an acute problem.

Under the Groundfish FMP, when a species is declared overfished, mortality levels for that species must be reduced substantially in order to allow the species to recover to a target biomass capable of supporting MSY. To keep the groundfish fishery within the species-specific catch limits for overfished species (landings plus discard mortality), limits are imposed on the landings of healthy stocks with the goal to reduce the take of the incidentally caught overfished species. The entire fishery may thus be managed based on the constraints imposed by a few species, even if those species are not targeted in any particular fishery, and are only caught incidentally.

The current number of overfished species and their occurrence in different areas and habitats along the West Coast means that virtually all groundfish fisheries are managed in ways that constrain the harvest of the healthy stocks. For this reason, overfished species are sometimes referred to as "constraining stocks," and managing fisheries to prevent overfishing of these stocks is likely to require forgoing substantial potential harvests.

1.1.3.3 Groundfish Management Context

The West Coast groundfish trawl fishery is jointly managed by state and federal authorities under the Magnuson-Stevens Act (MSA), which was passed in 1976 to "Americanize" US fisheries. In addition to establishing eight regional fishery management councils, the MSA extended US fishery management authority in territorial waters from 12 miles out to 200 miles from the shore. This created an exclusive economic zone (EEZ), which including US Federal territorial waters, extends from 3 to 200 miles off shore. For the West Coast (California, Oregon, and Washington), the Council coordinates federal management of fisheries in the Federal EEZ with state management of fisheries occurring in state waters (i.e., between the shoreline and 3 miles offshore).

The Secretary of Commerce approved the Groundfish FMP in 1982. The Groundfish FMP initially focused on species targeted by the midwater trawl fishery (widow rockfish and Pacific whiting). Over the following decade, several additional species were added to the list of actively managed species, with established optimum yield (OY) catch amounts and, in some cases, sector quotas. Under the MSA, catch by foreign fleets in the EEZ was eliminated by 1992. However, this decline was more than offset by expansion of the US domestic fleet, which was encouraged by government subsidies.

In 1996, the Sustainable Fisheries Act amended and reauthorized the MSA. National standards adopted under the reauthorization include a requirement to prevent overfishing while maintaining, optimum yield (OY). Optimum yield is the harvest amount that will achieve the maximum sustainable yield (MSY), as reduced by relevant economic, social, or ecological factors. Under National Standard 1(d), a stock is considered overfished if current stock biomass is less than 25 percent of the virgin biomass.

The Groundfish FMP currently covers more than 80 species. The Council manages the commercial fishery primarily with bimonthly trip limits set to prevent fishing mortality from exceeding OYs (the primary exceptions are the trawl whiting fishery, which is managed using quotas and season closures, and the fixed gear sablefish fishery, which is managed using a restrictive individual quota program).

However, despite increasingly stringent management measures, seven groundfish species are currently overfished as defined under the MSA (bocaccio, canary rockfish, cowcod, darkblotched rockfish, Pacific Ocean perch, widow rockfish and yelloweye rockfish). The first species (bocaccio, lingcod, and Pacific Ocean perch, were declared overfished in 1999. In January 2000, the Secretary of Commerce declared the West Coast groundfish fishery a federal disaster. In the summer of 2002, the Council first began implementing depth-based area closures. These measures were designed to exclude fishing effort from those depth zones particularly inhabited by overfished species.

The Council has been developing programs to reduce capacity in the groundfish fisheries since the mid-1980s, culminating with this proposal to consider an IFQ program. Groundfish FMP Amendments 6, 8, 9 and 14 were drafted specifically to reduce capacity in groundfish fisheries. A vessel buyback program implemented in 2003 reduced the number of groundfish trawl vessels by one-third. Draft FMP Amendment 18 is also expected to lead to capacity reduction by authorizing bycatch accountability conditions. The adoption of a framework and plans for rebuilding overfished species (Amendment 16) has led to the implementation of a vessel monitoring system (VMS) to insure that proscribed fishing does not occur in the RCAs.

1.1.3.4 Groundfish Limited Entry (License Limitation)

In 1987, the Council appointed an ad hoc Limited Entry Committee to design a groundfish fisheries license limitation program. In 1991, the Council adopted Amendment 6 to the groundfish FMP, a groundfish license limitation program that led to the creation of federal limited entry permits. At that time the Council acknowledged that the license limitation program, while expected to limit the growth of groundfish harvesting capacity, would not resolve the problem of overcapacity in the aroundfish fishery. An IFQ program was also considered as a major alternative to the license limitation program. However, at that time there was a great deal of opposition to IFQs across all sectors of industry (vessel owners, operators, crew, processors, and support industries). The license limitation program was seen as a first step toward rationalization of the fleet with further capacity reduction measures to follow. NMFS implemented Amendment 6 in 1993, issuing 388 initial limited entry permits with trawl endorsements, in addition to permits issued with endorsements for longline and/or pot (trap) gear. Within the limited entry fishery, gear endorsements were used to constrain the number of participants using a particular gear type (trawl, longline or pot) in the limited entry segment of the groundfish fishery. Vessels using other gears (or using longline or pot gear without an endorsement) were allowed to continue as part of an open access fishery. An allocation was established between the limited entry and open access fisheries. The open access allocation is generally much smaller than the limited entry allocation. As of January 1, 1994, all vessels participating in the limited entry segment of the fishery (all vessels fishing against the limited entry allocation) were required to have permits endorsed for one of the three limited entry gears.

1.1.3.5 Limited Entry Fixed Gear Capacity Rationalization

Amendment 8 to the Groundfish FMP was an attempt to implement an IFQ program in the fixed gear sablefish fishery. However this program languished first because of a congressional request for delay and then because of the Magnuson-Stevens Act moratorium on the creation of new IFQ programs. Instead, Amendment 9 was adopted in 1997 establishing additional entry limits on this economically valuable fishery. Amendment 9 required that in order to fish in the primary fixed gear sablefish fishery (April 1 to October 31), participating vessels must possess a new sablefish endorsement in addition to a fixed gear limited entry permit. Amendment 14, implemented in 2001, attempted to further rationalize this fishery by establishing a "permit stacking" system. Permit stacking allows a sablefish-

endorsed fixed gear permit holder to acquire up to two additional permits and stack them for use on a given vessel. Each sablefish endorsed permit is assigned to one of three tiers based on the original catch history associated with the permit. Each tier has a different landing limit. A vessel with stacked permits is then eligible to take the landing limit associated with the tier of each permit assigned to the vessel. For example, a vessel with three permits (all of the same tier) is eligible to land up to three times as much sablefish as a vessel with only one permit for that same tier. The duration of the season during which these limits may be taken is long enough such that each tier limit effectively functions as a vessel quota.

Since the stacked permits confer additional harvest opportunity only for sablefish and only during the primary sablefish season, the main effort-reducing effect of Amendment 14 was to reduce the number of vessels using fixed gear to take species other than sablefish. Vessels surrendering their permits for stacking by another vessel may still shift to other non-permitted fisheries if a viable opportunity exists. The sablefish quota (tier) for each permit, created in association with the sablefish endorsement, extended season and permit stacking regime, has also succeeded in eliminating many of the characteristics of a "derby fishery" that plaqued this fishery in the past. Derby fisheries result when overcapacity combined with restrictive catch limits serves to concentrate fishing into a very short season. By 1995 the primary sablefish season lasted only one week, which was followed by a brief "mop up" period to reach the established limit or allocation. Permit stacking essentially gives each vessel a fixed quota, which can be caught at any time during the six-month primary season. Although the quota is not tradable separate from the permit, this system confers a set amount of sablefish harvest opportunity and allows it to be more efficiently allocated among vessels through permit transactions. The permit seller also captures economic rent through the sale. However, since the transferable units are fairly "lumpy", there is no ability to finely divide the amount or timing of quota purchases in this fishery as would be the case under a true transferable quota system with highly divisible quota shares.

As of 2002, about one half (83) of the 164 sablefish-endorsed permits were registered to vessels holding more than one permit. Of the vessels with multiple sablefish-endorsed permits, 25 had two permits and 11 had three permits (PFMC 2003b).

1.1.3.5.1 Overfished Species and the Strategic Plan

Under the reauthorized MSA, the National Marine Fisheries Service (NMFS) is required to report to Congress any managed species considered to be overfished or approaching a condition of being overfished. For any fish stock determined to be overfished, the Council is required to prepare a plan to rebuild that stock. The Council developed Amendments 11, 12 and 13 to the FMP to implement this and other new provisions of the 1996 Sustainable Fisheries Act. Following the completion of Amendment 11 in 1998, NMFS declared bocaccio, lingcod, and Pacific Ocean perch to be overfished. Subsequently NMFS declared six additional species to be overfished: canary rockfish and cowcod (in 2000), darkblotched and widow rockfish (in 2001), and yelloweye rockfish and Pacific whiting (in 2002). Pacific whiting was declared rebuilt in 2004, and lingcod was found to be rebuilt following a stock assessment conducted in 2005.

Since the declaration of the first three overfished species in 1999, the Council's groundfish management efforts have largely focused on developing management measures to reduce directed and incidental take of overfished species. To varying degrees, all of the overfished species co-occur with several more healthy and abundant stocks. One of the Council's primary strategies for reducing incidental catch of overfished species has been to limit access to the healthy co-occurring stocks. In response to the consequent severe reductions in available catch, the Secretary of Commerce declared the groundfish fishery to be a commercial fishery failure in January 2000. This declaration freed disaster relief funds for the three West Coast states

The Council completed its Strategic Plan on managing the groundfish fisheries In October 2000. One element of the Strategic Plan was an evaluation of overcapacity in the commercial groundfish fleets. This was done by comparing the potential harvest capacity of participating vessels with the amount of fish actually available for harvest. For the non-whiting groundfish trawl fishery, the SSC calculated that 26 to 40 percent of the vessels then participating in the fishery were capable of taking all of the groundfish available for trawl harvest. The Strategic Plan noted that while a reduction of at least 50 percent in the number of trawl vessels was required, rationalization of the West Coast groundfish trawl fishery would not be complete until the capacity level was in balance with the economic value of the resource.

The Strategic Plan recommended a trawl vessel buyback program as a near-term objective, and a trawl IFQ or mandatory permit stacking program¹ as a longer-term objective. An IFQ program for trawlers has been on the Council's official workload list since soon after the adoption of the Strategic Plan. In June 2001, the Council created an Ad Hoc Trawl Permit Stacking Work Group. However, this group met only once on February 26, 2002 before being suspended while the Council addressed other workload priorities and began to develop a vessel buyback program before continuing work on permit stacking.

1.1.3.5.2 Limited Entry Trawl Capacity Rationalization and the Trawl Vessel Buyback

Under the Amendment 6 license limitation program, the ability to combine permits has resulted in a substantial reduction in the number of trawl vessels. Limited entry permits were issued with capacity endorsements that matched the length of the vessel that originally qualified for the permit. At the recommendation of the Council, NMFS issued a final rule in 1994 allowing permit owners to combine two or more permits to create a permit with a longer length endorsement than any of the original permits. Because a vessel's harvesting capacity increases geometrically (i.e., volumetrically) with an increase in vessel length, NMFS implemented a conversion formula for permit combinations that assigned a certain number of capacity rating points per foot of vessel length. Under this point system, a vessel owner wishing to permit a longer vessel must purchase enough existing permits to create a combined permit with capacity points sufficient for the length of the vessel (See 59 CFR17726, April 14, 1994). By 2003, this permit combination requirement had resulted in the effective removal of 114 trawl permits from the fishery. Of the 388 trawl permits originally issued, there were 274 permits remaining until the 2003 buyback program.

A line item in a 2003 budget bill (PL 108-7) instructed NMFS to implement a fishing capacity reduction program for the non-tribal West Coast groundfish trawl fleet (excluding Pacific whiting catcher-processors). This bill funded the buyback with a \$10 million appropriation and a \$36 million loan approved by an industry referendum. The loan will be repaid by members of the participating fleets (limited entry groundfish trawl, Dungeness crab pot, and pink shrimp trawl fleets) through landings fees collected over the course of the next 30 years. On August 8, 2005, NMFS published a notice (70FR 45695) announcing that collection for repayment of the loan would commence on September 8, 2005.

Under the buyback program, NMFS retired 91 trawl vessels, their associated state fishing permits, and federal limited entry trawl permits, effective December 4, 2003. The program reduced the available pool of limited entry permits for vessels delivering to shore plants and motherships to 172 permits (an additional 10 permits are associated with the whiting catcher-processor fleet). Since December 2003, 2 additional permits were retired through permit combination, leaving 180 limited entry trawl permits remaining in the fishery. The 91 vessels retired under the buyback program accounted for 40 percent

¹ Mandatory permit stacking reduces capacity in the fishery by requiring permit holders to acquire an additional permit to continue fishing.

of the \$32 million in ex-vessel revenues delivered by all limited entry groundfish trawlers in 2002 (including deliveries to non-tribal motherships).

Following the completion of the buyback program, NMFS analyzed permit latency in the limited entry trawl fleet to determine whether a significant number of unused or infrequently used permits remained in the fishery. The agency's concern over latent capacity stemmed from public comments observing that permit/vessel owners who had been bought out under the buyback program could rejoin the fishery by simply purchasing a latent permit and vessel. The Council found no need to take remedial action given evidence for relatively low occurrence of highly latent permits and the apparent lack of concern among industry members who bear responsibility for repaying the \$36 million loan that funded the buyback.

An IFQ program would obviate the need to address latent permit issues, and may be the most efficient way to match capacity with available catch. Consequently, in response to a June 2003 request from members of the groundfish trawl industry, the Council decided to investigate moving forward with a trawl IFQ program as a solution to any remaining permit latency and overcapacity issues in the trawl fishery. The Council authorized appointment of the TIQC, which included representatives from the whiting and non-whiting trawl sectors, shoreside and at-sea processors, environmental organizations and communities. The Council also tasked Council staff with drafting a plan for IFQ program development, identifying budget needs, and pursuing funding options. November 6, 2003 was recommended by TIQC and endorsed by the Council as a control date for the trawl individual quota program. A *Federal Register Notice* of this control date was published on January 9, 2004 (69FR 1563).

1.1.3.6 Current Groundfish Management System

The groundfish fishery is a multi-species fishery including many species of rockfish, flatfish, sharks and skates, and roundfish. A variety of targeting strategies are pursued using different types of gear, resulting in wide variation in the mix of species caught. Currently the groundfish fishery is divided into sectors: limited entry trawl (further subdivided into the shoreside sector and at-sea whiting sectors); limited entry fixed gear (line gear and pot or trap gear); directed open access using line, pot gear, or other non-groundfish trawl gears; "incidental" open access (vessels targeting non-groundfish species, like crab, salmon, or California halibut, but which occasionally catch groundfish); and a tribal groundfish sector, which includes whiting mothership, trawl and fixed-gear vessels.

Allocating harvest opportunity among different fishery sectors is an integral part of the management process. Some stocks, such as sablefish and Pacific whiting, have fixed or "hard" allocations. Management measures for these species are structured as much as possible to allow particular sectors have the opportunity to catch a fixed percentage of the OY. However, allocations for the majority of groundfish species are determined as part of the process of developing management measures. In these cases, rather than establishing a hard allocation, the Council proposes management measures, evaluates the likely allocations resulting from those measures, and modifies the proposed measures. The proposed modification takes place on the basis of the expected catches, and either establishes an ad hoc allocation (harvest guideline) for the purpose of the period covered by the management measures or implicit/de facto allocation. In this way allocation among sectors is achieved, particularly in deciding harvest allocations between commercial and recreational sectors. The harvest of the four Indian tribes in Washington State is also taken into account when OYs are established. For a few species (sablefish and whiting, for example) a share of the OYs for groundfish species taken in their fisheries is explicitly allocated. For most species, expected tribal harvest levels are taken into account in setting regulations for other sectors but there is not an allocation to the tribes. For the species for which they receive an allocation and for other species for which expected harvest levels are identified, the tribes then oversee the prosecution of their fisheries separate from the management of other groundfish fishery sectors.

Since the adoption of FMP Amendment 17 in 2003, groundfish harvest specifications and management measures have been set on a biennial basis. Every even-numbered year the Council adopts OYs and management specifications covering groundfish fisheries for the following two years. The two-year management cycles began with the 2005-2006 fishery. ABCs and OYs are set based on the most recent stock assessments and recommendations from Council advisory bodies and comments from the public. Separate ABCs and OYs are identified for each year in the two-year cycle. Management measures are then crafted to optimize opportunities for commercial and recreational fishers while keeping harvest within the adopted OYs. Recently this process has become a delicate balancing act between the competing demands for groundfish target species from the different sectors, and the additional constraint to minimize mortality of several constraining overfished species, including bycatch (discard) mortality.

Management of commercial fisheries is currently based on four elements: seasons, bimonthly cumulative landings limits, management areas, and exclusion zones or groundfish conservation areas. Landed species can be caught outside of designated exclusion zones that, for commercial fisheries, generally encompass bottom areas on the continental shelf between about 75 fm and 150 fm in depth (varying somewhat with season and year), and are referred to as Rockfish Conservation Areas (RCAs). Landings limits are set based on historical landings of target species from fish tickets, and discard rates for target and incidental catch species obtained from observer sampling of commercial fishing vessels.

1.1.3.6.1 Commercial Fishery Management Measures

1.1.3.6.1.1 Seasons

Most groundfish fisheries are managed to achieve a year-round season. In fact, this is one of the key objectives expressed in the Groundfish FMP because buyers and processors regard a continuous and consistent supply of fish as essential to maintaining markets. Recently, managing fisheries to prevent OYs from being exceeded before the end of the year has become increasingly difficult because of the low harvest limits for some overfished species. Consequently, some fisheries have been closed early. A few groundfish fisheries are managed according to shorter seasons. The Pacific whiting fishery is the most significant example in terms of the volume of landings. Its season usually begins on April 1 and runs until the OY has been caught, usually by late October. The Pacific whiting OY is allocated according to a formula between shoreside, at-sea mothership, at-sea catcher/processor, and tribal fleets. Within the catcher-processor fleet, participants coordinate fishing behavior to determine how quickly their allocation will be taken or, conversely, how long the season will last. The limited entry fixed gear sablefish fishery is also limited to a "primary season" from April 1 to October 31. There are separate allocations of sablefish for catch by other sectors. These are managed with cumulative limits.

1.1.3.6.1.2 Cumulative landings limits

Trip limits have been a feature of groundfish management since the inception of the Groundfish FMP. Over time the regime has become more complex, covering a wider range of species and sectors. The basic concept is to set a limit on how much of a given species (or multi-species complex²) an

² Many commercially less important or less frequently caught species are combined in stock complexes for the purposes of management. These species are not generally differentiated in reported landings, and most have not had stock assessments. Multi-species complexes currently in use include the "minor rockfish" (additionally separated into several sub-categories), "other flatfish", and "other fish" categories.

individual vessel may land in a fixed time period. Originally, these limits were on a per trip basis. Currently, in order to reduce the likelihood of regulatory discards, the limits are cumulative totals for a two-month period (Jan-Feb, March-Apr, May-June, etc.). Two-month cumulative landings limits are set separately for the limited entry trawl, limited entry fixed gear, and open access sectors. For each of these sectors there are separate limits for US waters north and south of 40°10' N latitude (approximately Cape Mendocino, California). The Pacific whiting fishery is a significant exception to trip limit management. As noted above, it occurs during a season whose length is determined by how quickly the OY is taken.

1.1.3.6.1.3 Management Areas

The West Coast EEZ is divided into several, sometimes overlapping, areas, as shown in Figure 1-2. The five named areas (Vancouver, Columbia, Eureka, Monterey, and Conception) were originally devised by the International North Pacific Fishery Commission (INPFC) as statistical areas for cataloguing fish catch. Although still occasionally referred to as "INPFC areas," this organization is defunct and "management area" is now the preferred term. Landings continue to be reported by these areas in the Groundfish Stock Assessment and Fishery Evaluation (SAFE) document, and these boundaries are sometimes used to demarcate the application of different management measures. The 40°10' N latitude line (near the Eureka-Monterey boundary) is significant in this respect, as noted above. Landings limits differ north and south of this boundary. Other boundaries in use for management include latitude lines near significant coastal landmarks, such as Point Reyes and Point Conception in California. The latter represents an important marine biogeographic boundary, and is used to bifurcate some stocks (such as sablefish), as well as to differentiate management measures.

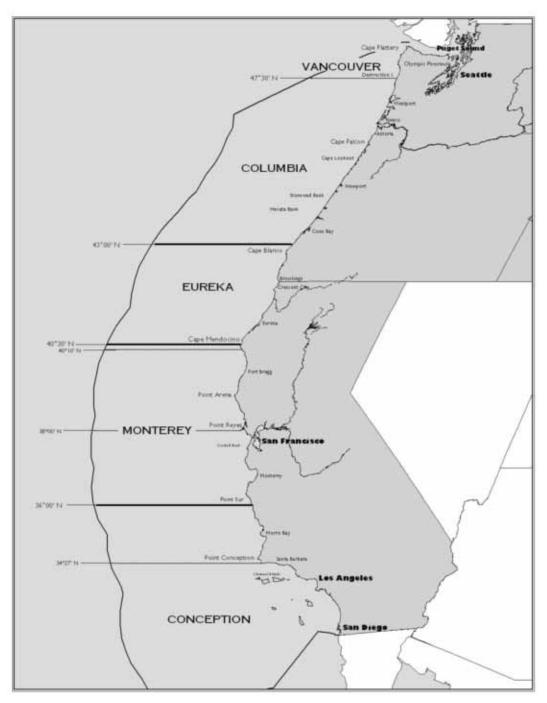
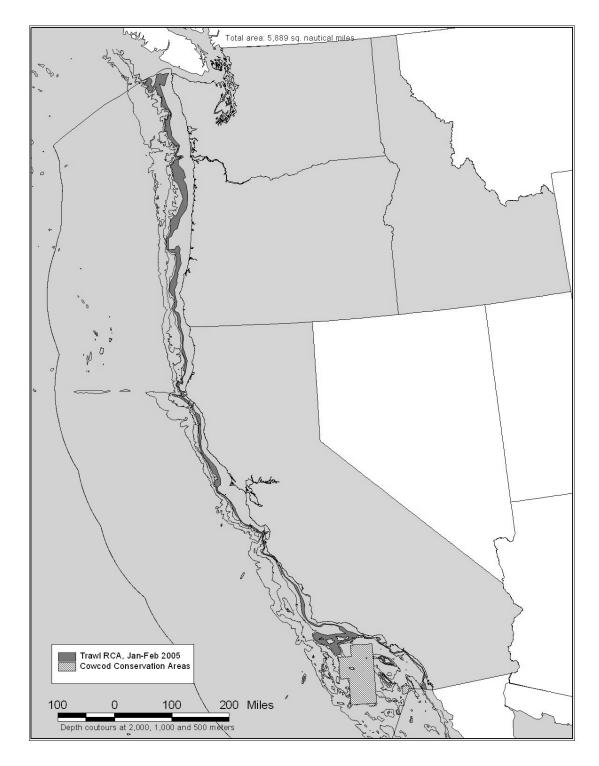


Figure 1-2. West Coast Groundfish Management Areas and Other Key Management Lines

1.1.3.6.1.4 Groundfish Conservation Areas

Three different types of closed areas have been implemented to limit bycatch of overfished species. A relatively small Yelloweye Rockfish Conservation Area (YRCA) closes a "hotspot" off the Washington coast. Recreational fishing is prohibited within the YRCA and the area is a designated as a voluntary closure for the limited entry fixed gear sablefish fleet and salmon trollers. The YRCA was first

implemented in 2003. There are two areas off the southern California coast designated Cowcod Conservation Areas (CCAs), intended to protect cowcod. Recreational and commercial fishing are prohibited within the CCAs, except that rockfish and lingcod fishing have been permitted shoreward of 20 fathoms. The CCAs were first implemented in 2001. Rockfish Conservation Areas (RCAs) are by far the most extensive and complex closed areas. First implemented in late 2002 as part of an inseason management action, RCAs extend from the Canadian border to the Mexican border of US waters. The RCAs were implemented to reduce bycatch of overfished species. These species are more frequently caught within certain depth ranges. Based on analysis of observer reports and vessel logbooks, the boundaries of the RCAs were set to prohibit groundfish fishing within a range of depths where encounters with overfished species were most likely. In order to make enforcement possible, in most cases the actual isobaths—lines of equal depth—are approximated by straight lines between published waypoints. The depths included in RCAs vary by season, latitude, and regulatory sector. Boundaries for limited entry trawl vessels are different than those for the limited entry fixed gear and open access sectors. Figure 1-3 and Figure 1-4 depict the general configuration of the trawl RCA during January and February, and March through October, respectively, of 2005. Note that in Figure 1-4, the width of the RCAs (particularly in the Northern areas) is significantly reduced.





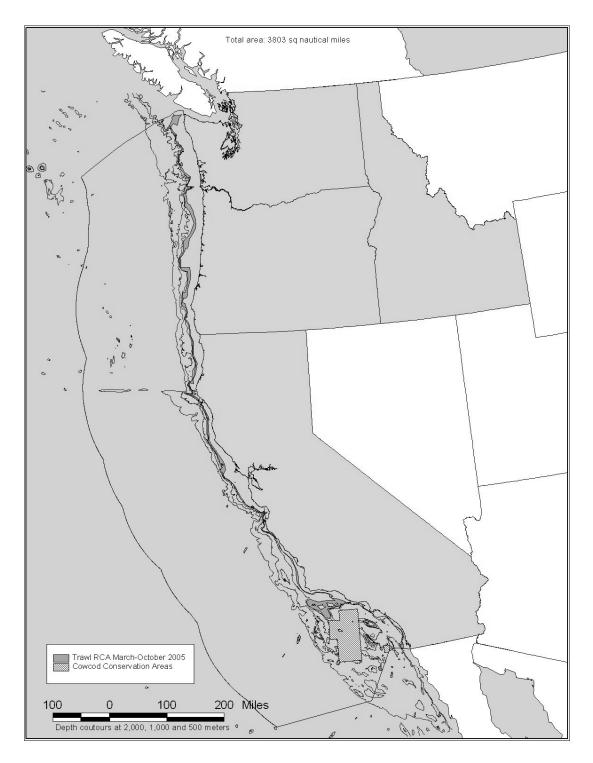


Figure 1-4. Configuration of the trawl RCA and Cowcod Conservation Area during March-October 2005

1.1.3.6.1.5 Gear Restrictions

Although various gear restrictions were a key feature of groundfish management even before the FMP was implemented, the most important current measures distinguish between large and small footrope gear. This refers to the size of the roller gear affixed to the bottom leading edge of a bottom trawl net. Large footrope gear can allow the net to be fished over rougher ground. Large footrope gear is also preferred when trawling for Dover sole, thornyheads, and sablefish (DTS species) on the soft bottom areas offshore, while small footropes are more commonly used to fish in areas shoreward of the RCAs. Since rocky habitat areas nearshore and on the continental shelf are important to a range of organisms, including several overfished rockfish species, the Council developed measures to discourage fishing on these sites. Beginning in 2003, vessels using small footrope trawl gear (and therefore more likely to be fishing shoreward of the RCA) at any time during a cumulative limit period are subject to lower DTS species landings limits. So if small footrope gear is used at all during that period, the amount of fish that can be landed during the period is significantly reduced. This restriction is meant to encourage vessels to fish exclusively seaward of the RCA (and using large footrope gear), thereby avoiding bycatch of overfished groundfish species (particularly canary rockfish) that are found on the continental shelf. An exception is selective flatfish trawl (SFT) gear, which can be used shoreward of the RCA in association with relatively higher cumulative trip limits to target flatfish. In order to gualify as SFT gear, the net must have a headrope at least 30 percent longer than the footrope, the rise of the net cannot exceed 3 ft, the headrope must not have any floats along the center 50 percent of its length, it must be a two-seam trawl net, and otherwise gualify as legal smallfootrope trawl gear as defined in federal regulations. Also, in some non-groundfish (incidental open access) fisheries, such the pink shrimp fishery, bycatch reduction devices (BRDs) are required. These devices are added to the trawl net and divert finfish (such as canary rockfish) out of the codend of the net, where the shrimp catch is accumulated.

1.1.3.6.1.6 Observer Coverage

Vessels participating in the at-sea Pacific whiting fisheries have been voluntarily carrying observers since 1991. NMFS made observer coverage mandatory for at-sea processors in July 2004 (65 FR 31751). The Shoreside Whiting Observation Program (SWOP) was established in 1992 to examine bycatch in the directed Pacific whiting fishery. Participating vessels must carry an exempted fishing permit (EFP) issued by NMFS, and are required to retain all catch and to land unsorted catch at designated shoreside processing plants. In return, permitted vessels are not penalized for landing prohibited species (e.g., Pacific salmon, Pacific halibut, Dungeness crab), nor are they held liable for exceeding groundfish trip limits.

Beginning in 2001, the West Coast Groundfish Observer Program (WCGOP) has placed observers on selected non-whiting groundfish vessels. NMFS first implemented the WCGOP in August 2001 to directly observe groundfish discards in the commercial fishery. Observers initially covered about 10 percent of the West Coast limited entry trawl fleet effort, selected via a stratified random sample. Trawl fleet coverage has since increased to about 25 percent and has also been expanded to include the limited entry fixed-gear and open access vessels. This WCGOP generates the incidental catch and discard rates currently used to set cumulative trip limits in the non-whiting fisheries.

1.1.3.6.2 Recreational Fishery Management Measures

Recreational fisheries typically occur closer inshore than most commercial fisheries and are actively managed by the states. Thus, recreational management measures, although developed through the Council process, tend to differ between states. The main recreational management measures used are season limitations, bag limits, which restrict the number of groundfish an angler may land, and size (length) restrictions. Since some overfished species are frequently caught in recreational fisheries,

species-specific sub-limits are applied within the overall groundfish bag limit. Closed seasons have also been imposed in response to overfishing. The newest management measures responding to recreational take of overfished species are depth-based area restrictions. Although similar in concept and intent to the RCAs, recreational area restrictions generally limit recreational groundfish fishing to depths less than a specified value (e.g., 30 fm). Boundaries defined by waypoints for these areas generally have not been used.

1.2 Scoping Summary

1.2.1 Background to Scoping

Although a formally announced public scoping on a potential trawl individual quota program EIS under NEPA did not begin until May 24, 2004, the Council began preliminary scoping of alternatives for reducing harvest capacity and bycatch in the trawl fisheries in September 2003.³ Following the September 2003 meeting, the Council Chair appointed the TIQC from a broad range of constituencies. The TIQC has served as the Council's initial scoping vehicle, conducting public meetings to examine what elements a trawl individual quota program might contain if such a program were implemented. In this role, the TIQC met to discuss and develop alternatives five times: October 28-29, 2003; March 17-18, 2004; October 26-27, 2004; February 23-24, 2005; and May 10-11, 2005.

1.2.2 Council and Agency NEPA Scoping

In addition to the TIQC, a number of other Council committees were formed to support the process of considering individual quotas, including a TIQ Enforcement Group, the TIQ Analytical Team, and TIQ Independent Experts Panel. The Enforcement Group developed enforcement program alternatives during meetings on May 25-26, 2004, and September 28, 2004. Analytical Team members from NMFS and California Department of Fish and Game, supported by Council staff and private contractors, worked to meet the analytical needs of the TIQC throughout the scoping period. The Analytical Team met four times: June 8-9, 2004; July 1-2, 2004; September 7-8, 2004; and November 16-17, 2004.

Trawl IFQ program issues were also discussed by the Council's Allocation Committee at several of its public meetings between September 2003 and November 2005. The Allocation Committee is particularly interested in this issue because implementing an IFQ program for the trawl fleet would, at a minimum, require the Council to allocate catch of groundfish species and species complexes between limited entry trawl and the other fleets. The Allocation Committee is also currently engaged in developing sector allocations for groundfish species in response to the framework adopted under the draft FMP Amendment 18 process.

NMFS published a notice of intent to develop a trawl individual quota program EIS and formally initiate scoping on May 24, 2004 (69 FR 29482). The Council's formally announced NEPA public scoping period ran from May 24, 2004 through August 2, 2004. Three NEPA scoping hearings were held: June 13, 2004 in Foster City, California; July 20, 2004 in Seattle, Washington; and July 27, 2004 in Newport, Oregon.

northern@conomics inc.

³ Note that IFQs were an alternative under the 1991 Amendment 6 groundfish license limitation program, and have been raised in Council discussions about management alternatives before and since that time.

Having received the results from public scoping and input from Council advisory bodies, the Council voted in June 2005 to forward for analysis in a draft analysis, the following draft TIQ alternatives covering trawl harvest of West Coast groundfish, including Pacific whiting:

- Alternative 1: Status quo
- Alternative 2: IFQs for trawl target species and species for which allocations exist
- Alternative 3: IFQs for all groundfish except the "other fish" category of groundfish with adjustments at low harvest levels
- Alternative 4: IFQs for all groundfish except the "other fish" category of groundfish without adjustments at low harvest levels
- Alternative 5: IFQs for all groundfish
- Alternative 6: IFQs for overfished species only (this alternative was later dropped)
- Alternative 7: Permit stacking (one cumulative limit for each permit associated with a vessel)

In November 2005, the Council recommended some changes to the analysis commissioned in June, including: (1) eliminating a provision requiring processor participation⁴ in collaboratives of quota share holders competing for quota set aside to benefit communities; (2) creating a community advisory panel as part of the Council process; and (3) dropping Alternative 6, which would have created a trawl individual quota program only for overfished species.

The timeline for progressing on the draft analysis will depend on available funding. In September 2005, the Council selected a contractor to work on Stage 1 of the analysis process, drafting an outline and methods for the analysis and associated documents to be used in phase two of the process, drafting the analysis itself.

1.2.3 Summary of Comments Received

Comments received during the May 24, 2004 through August 2, 2004 NEPA public scoping period are summarized in a separate document, *Staff Summary of Public Comment on Trawl Individual Quotas*, PFMC, September 2004.

1.3 Relationship to Other NEPA Documents

The EIS is a stand alone NEPA document that does not tier off any previous EISs. A NEPA environmental review was prepared for the Groundfish FMP, which was implemented in 1982. NEPA environmental reviews have been prepared for each of the subsequent amendments to the FMP. These documents will be incorporated into the EIS as necessary to fully explain the status quo and to analyze the cumulative effects of the alternatives on the human environment.

This EIS incorporates by reference information from other EISs produced by NOAA Fisheries and the Council, where applicable. The *Proposed Acceptable Biological Catch and Optimum Yield*

⁴ The Council's November 2005 recommendation eliminated the provision requiring applicants for community stability holdback QPs to submit joint venture proposals that include both harvesters and processors, instead opening the competition for community stability holdback QPs to any IFQ holder (who may or may not chose to collaborate with another entity). Under those alternatives and options providing for direct allocations of IFQ to processors (or that would otherwise allow processors to become direct IFQ holders), processors holding IFQ could apply for community stability holdback QPs without taking on a harvester sector partner just as harvesters holding IFQ could apply for community stability holdback QPs without taking on a processing sector partner.

Specifications and Management Measures: 2005-2006 Pacific Coast Groundfish Fishery Final Environmental Impact Statement (Groundfish Fishery Specification EIS) prepared by the PFMC (2004) provides a detailed discussion of the Federal, state and tribal roles and responsibilities in groundfish management; fishery ecosystem and marine biodiversity in relation to groundfish management; groundfish habitat, including adverse impacts of fishing and non-fishing related activities; life history characteristics, distribution, and stock status of groundfish species and non-groundfish species; life history, population biology, and foraging ecology of protected species, including ESA-listed salmon, marine mammals, seabirds and sea turtles; and socioeconomic environment, which includes commercial, tribal and recreational fisheries, coastal communities, and non-consumptive and non-market benefits.⁵ The Pacific Coast Groundfish Fishery Management Plan Essential Fish Habitat Designation and Minimization of Adverse Impacts Final Environmental Impact Statement (EFH EIS) prepared by NMFS (2005) provides habitat information and analysis of the effects of the groundfish fishery on habitat. Additionally, The Pacific Coast Groundfish Fishery Management Plan Bycatch Mitigation Program Final Environmental Impact Statement (Bycatch EIS) prepared by NMFS (2004) provides a guide for developing issues for a "rights-based" program of individual fishing quotas.

1.4 Organization of This Document

This document currently consists of 11 chapters and 3 appendices. Following this introductory chapter, the remaining chapters of this document cover the following material:

- Chapter 2: Provides a description of the proposed alternatives, including a detailed component-by-component breakout, and a discussion of alternatives considered but excluded from detailed analysis.
- Chapter 3: Provides summary profiles of potentially affected resources and stakeholder groups, including descriptions of historical and baseline conditions, mechanisms for change, and indicators used to measure change.
- Chapter 4: Evaluates the direct, indirect and cumulative effects of the alternatives on the resources and stakeholder groups of concern. The analysis uses a "resource-based" approach whereby a single section of the document examines and describes the direct, indirect and cumulative effects of each alternative on a particular resource or stakeholder group.
- Chapter 5: Contains a review of other issues typically found in NEPA documents including short-term uses versus long-term productivity, irreversible resource commitments, and energy requirements and conservation potential of the alternatives.
- Chapter 6: Examines the consistency of the proposed action with the TIQ program goals, objectives, and constraints and guiding principles (listed in Section 1.1.2); the Groundfish FMP goals and objectives; and the national standards and other provisions of the MSA.
- Chapter 7: Examines consistency with other federal laws and Executive Orders.
- Chapter 8: Lists the individual preparers of this document.
- Chapter 9: Presents a glossary of technical terms and a list of acronyms used in this document.
- Chapter 10: Provides a list of the literature cited in this document.

⁵ Updated information may be provided by the EIS to assess the impacts of the 2007-2008 Pacific Coast groundfish fishery specifications and management measures on the human, biological, and physical environment.

- Chapter 11: Provides a general keyword index to the document.
- Appendix A: Contains the Regulatory Impact Review (RIR) and Initial Regulatory Flexibility Analysis (IRFA).
- Appendix B: Contains the Social Impact Assessment Technical Appendix.
- Appendix C: Contains a detailed analysis of the components, elements and options underlying the Action Alternatives.

2 Description of Proposed Alternatives

The Council forwarded a number of alternatives for analysis. An overview of the alternatives is provided in Section 2.1 and the alternatives are fully described in Section 2.3. Alternatives considered but rejected at this time are provided in Section 2.2. A comparison of the relative impacts of the alternatives is provided in Section 1.1. Additionally, there were a number of design options for the IFQ programs that are not included as part of one of the program alternatives, which the Council would still like to consider for possible inclusion at a later point. These are included as part of Section 2.3.

2.1 Overview of the Alternatives

There are five management regime alternatives⁶ and three IFQ program alternatives. The management regime alternatives include a "no-action" alternative, three alternatives involving IFQs, and an alternative allowing the stacking of permits (registering more than one permit for a single vessel in order to increase the cumulative limit for that vessel).

	Management Regime Alternatives						
	Alternative 1	Alternative 2	Alternative 3	Alternative 4	Alternative 5		
General description	Status Quo (No Action) Cumulative limit management for most species, season management for whiting.	IFQs for Trawl Target and Allocated Species and Four Trawl Sectors	IFQs for All Species Except the "Other Fish" Category of Groundfish and Three Trawl Sectors	IFQs for All Species and a Single Trawl Sector	Permit Stacking and Three Trawl Sectors. Option for a Nonwhiting Endorsement.		

Alternatives 1, 3 and 5 would maintain the traditional three trawl sectors: groundfish delivered shoreside, whiting deliveries to motherships, and whiting caught by catcher processors. The alternative creating a fourth trawl sector would split the shoreside fishery into a whiting-targeted shoreside fishery and a nonwhiting shoreside fishery.

⁶ The Council initially forwarded six alternatives for analysis. After discussions between the Consulting Team and the Council Staff, it was determined that the differences between two of the alternatives were relatively minor and did not require a full analysis—differences could be discussed as sub-option to a single alternative. The two similar alternatives—Original Alternative 3 and Original Alternative 4—both allocated QS/QP for all but "other species", but differed in way they treated species with Low OYs, and in the basic allocation of QS/QP. However, Original Alternative 5, which allocates QS/QP for all species, used the same Low OY treatment and the same basic QS/QP allocation as Original Alternative 4. Therefore it was determined that dropping Original Alternative 4 would not leave any significant programmatic options unanalyzed. The Alternatives as originally forwarded can be viewed at http://www.pcouncil.org/groundfish/gfifq.html. Acting on advice from the TIQC, the Council concurred with this adjustment at its June 2006 meeting.

The three IFQ program alternatives vary in terms of the relative amounts of initial allocation that would go to permit holders and processors, accumulation limits, the provision of community stability holdback quota and a number of other design features.

		IFQ Program Alternatives					
	IFQ Program A	IFQ Program B	IFQ Program C				
General description	Initial allocation, 50% to permit holders and 50% to processors, liberal accumulation limits.	Initial allocation, 100% to permit holders and 0% to processors, range or accumulation limits to be determined after preliminary analysis.	Initial allocation, 75% to permit holders and 25% to processors, conservative to moderate accumulation limits (to be determined after preliminary analysis) and community stability holdback quota				

For analytical purposes the management regime alternatives and IFQ program alternatives have been arrayed into the following combinations.

Analytical Alternatives	Alt 1	Alt 2	Alt 3A	Alt 3B	Alt 3C	Alt 4	Alt 5
Management Regime Alternative	Alt 1	Alt 2	Alt 3	Alt 3	Alt 3	Alt 4	Alt 5
IFQ Program Alternatives	None	Alt C	Alt A	Alt B	Alt C	Alt C	None

Using this array, decision makers and the public will be able to distinguish between the relative performance of the management regime alternatives while holding the IFQ program alternative constant (by comparing Alt 2, Alt 3C and Alt 4). The relative performance of the IFQ program alternatives can be assessed by keeping the management regime alternative constant and varying the IFQ program alternatives (by comparing Alt 3A, Alt 3B, and Alt 3C).

Mixing and Matching: When the Council takes final action, it may mix and match between management regime and IFQ program alternatives and select different combinations of provisions within an alternative, to the degree that the final action remains internally consistent and impacts can be projected based on the analysis provided. For example, some Council members have indicated an interest in possibly combining IFQ Program Alternative A and B by specifying an option that would split the initial allocation of whiting shares 50/50 between permit holders and processors but provide all of the shares (100%) for all other groundfish species to permit holder. Other Council members have expressed an interest in a midpoint allocation such as a 90/10 permit holder processor split. To the degree that the effects of this kind of mixing and matching can be projected based on the analysis provided, the Council may select such options at the time of its final action.

Management Regime Alternatives

These five alternatives are summarized below in terms of the basic management regimes that would be employed:

Alternative 1: The No-Action Alternative. The status quo management regime for groundfish species would be continued. Only limited entry trawl permit holders would fish for groundfish with trawl gear. Whiting would be managed with special seasons and allocations to sectors defined by the nature of the processor to which the whiting is delivered; non-whiting groundfish, with the exception of the "Other Species" category of groundfish, would be managed with cumulative landings limits applied to all limited entry trawl vessels every two months. Catches of "Other Species" of groundfish—sharks (except spiny dogfish), skates, rays, ratfish, morids, grenadiers, etc. (Note: spiny dogfish, cabezon, and kelp greenling would likely be managed separate from "Other Species" in the near future)—would be monitored but Optimum Yields (OYs) would not be constraining. At-sea discards would be estimated based on data from the observer program but reporting of at-sea discards of groundfish by individual vessels would not be required.

Alternative 2: IFQs for whiting and Trawl Target Species. Whiting sectors would be maintained, and the shoreside sector would be subdivided into whiting and non-whiting sectors. IFQs would be issued only for species for trawl target and other species for which a trawl allocation is established under the intersector allocation process or as part of the biennial specifications. Species not managed with IFQs would be managed with transferable, bi-monthly cumulative catch limits. Vessel-specific reporting of all groundfish catch would be required (including discards). At-sea monitoring would be required on all vessels. Catches of "Other Species" of groundfish would be monitored.

Alternative 3: IFQs for all groundfish species except "Other Species." The existing whiting sectors would be maintained. Vessel-specific reporting of all groundfish catch would be required. At-sea monitoring would be required on all vessels. Catches of "Other Species" would be monitored while the trawl harvest of all other groundfish would be controlled with IFQs.

Alternative 4: IFQs for all groundfish species. The distinction between whiting sectors would be eliminated. Vessel specific reporting of all groundfish catch would be required. At-sea monitoring would be required on all vessels. IFQs would be used to manage all groundfish including the "Other Species" category.

Alternative 5: Permit stacking. Groundfish would be managed as under the No-Action Alternative, but cumulative landing limits would become cumulative catch limits and limited entry trawl vessels would be allowed to "stack" additional permits. Vessels would receive either a full complement of cumulative trip limit pounds for each permit registered for the vessel or, under a sub-option, would receive partial cumulative limits for each additional permit stacked. Whiting sectors would be maintained but a sub-option would provide that a non-whiting endorsement be established such that permits not previously used only in the whiting fishery could not be use in the nonwhiting fishery. Vessel specific reporting of all groundfish catch would be required. At-sea monitoring would be required on all vessels.

The following figure provides an overview of the sections that will be found in the management regime summary table (Table 2-1) and the management regime components table (Table 2-3).

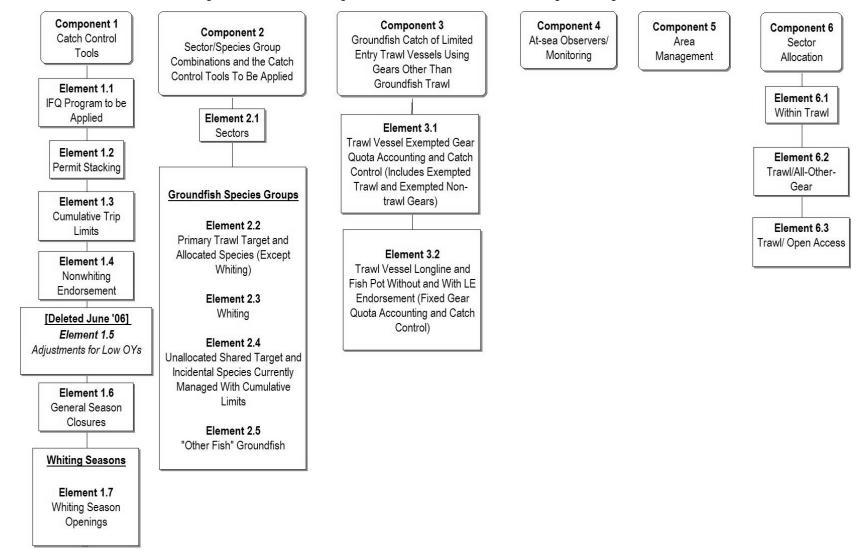


Figure 2-1 Overview of organization of Tables 2-1 and 2-3 management regime alternatives

IFQ Program Alternatives

In addition to the various management regimes described above, the three IFQ alternatives (Alternatives 2 through 4) differ with respect to the way in which quota shares are allocated and other features of the IFQ programs. The Council developed three basic allocations and incorporated them into three IFQ programs (currently labeled Program A, Program B, and Program C). The allocations differ primarily in terms of which groups would receive quota and how much each group would receive. These are summarized below:

Program A: Permit owners and processors are initially allocated equal amounts of quota shares (QS) that give them rights to harvest groundfish. Processors are defined as those facilities that take ownership of and process unprocessed groundfish. Program A is applied to Alternative 3 in this analysis.

Program B: Permit owners are allocated QS that give them rights to harvest groundfish. Program B is applied to Alternative 3 in this analysis.

Program C: Permit owners and processors are allocated QS that give them rights to harvest groundfish. Permit owners would initially receive 75 percent of the QS and processors would receive the remaining 25 percent. Processors are defined as those facilities that take ownership of and process unprocessed groundfish. Program C is applied to Alternative 2, 3, and 4 in this analysis. Additionally, up to 20 percent of the quota pounds issued each year may be allocated to support proposals presented to benefit community stability (community stability holdback quota).

The following figure provides an overview of the sections that will be found in the IFQ program summary table (Table 2-2) and the IFQ program components table (Table 2-4).

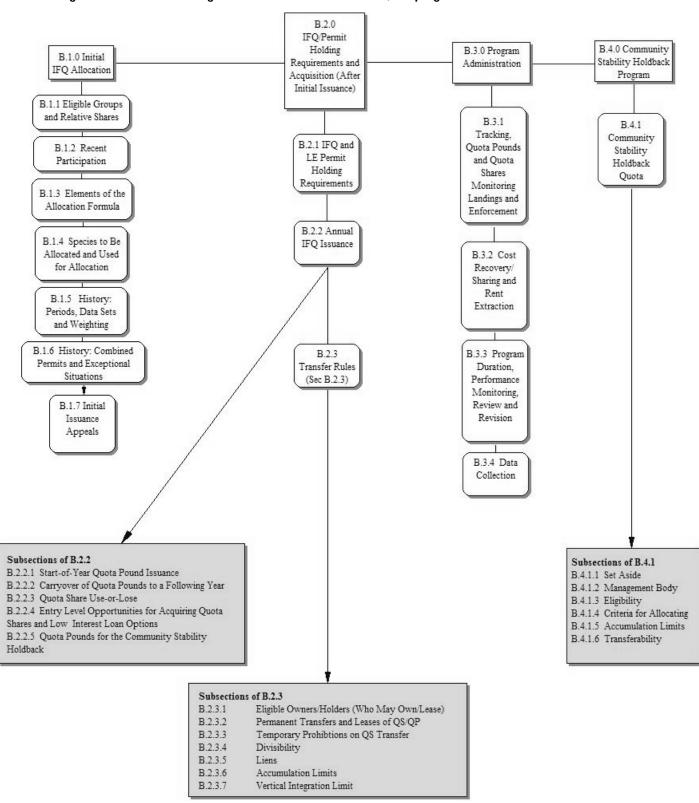


Figure 2-2. Overview of organization of Tables 2-2 and 2-4, IFQ program alternatives.

Summary Tables for the Alternatives

Table 2-1 summarizes the components and elements of the management regime alternatives and Table 2-2 summarizes the components and elements of the IFQ program alternatives. The tables contain references to the IFQ Scoping Results Document⁷ and various options described within that document. The numbering of the components and elements of the complete description of the alternatives, provided in Tables 2-3 and 2-4 corresponds to the numbering provided in Tables 2-1 and 2-2.

Key to highlighting in the summary tables.					
Area needing attention (clarification, confirmation, or development)	Shaded text.				
Eliminated or added June 2006	Taken out, <u>added</u>				

northern@conomics inc.

⁷ National Environmental Policy Act Scoping Results Document: Individual Fishing Quotas (A Kind of Dedicated Access Privilege) and Other Catch Control Tools for the Pacific Coast Limited Entry Trawl Groundfish Fishery. Pacific Fishery Management Council, July 2005.

Table 2-1. Management Regime Alternatives for Analysis

Note: Option numbers listed below refer to the scoping summary document, not the components table.							
Alternatives (Sec 2.1.1.1 Scoping Results ^{a/})	Alternative 1 No-Action Alternative	Alternative 2 IFQs for Trawl Target I Groundfish	Alternative 3 FQs for All Groundfish Except Other Fish	Alternative 4 IFQs for All Groundfish	Alternative 5 Cumulative Catch Limits and Permit Stacking		
		COMPONENT 1: CATCH	I CONTROL TOOLS				
	IFQ Program to Co	ntrol Catch for <u>Non-Whiting</u> and <u>N</u>	<u>Whiting</u> Trips (See Table	e 2-2 for Program S	ummary)		
Element 1.1 IFQ Program to Be Applied	No IFQ Program.	Alte	ernative 3A - Program A ernative 3B - Program B	Program C	No IFQ Program.		
			ernative 3C - Program C	-			
	Addition	al Control Tools (Sections 2.1.1.2	of the Scoping Result	s Document).ª/			
Element 1.2 Permit Stacking		One set of trip limits for each of a maximum of 3 permits attached to vessel. (Option: <u>The first permit would entitle</u> <u>the vessel to 100% of each</u> <u>trip limit. Subsequent permits</u> <u>may entitle a vessel only to a</u> <u>portion of each limit.</u>) Only one of the permits attached to the vessel would need to be of the appropriate length.					
Element 1.3 Cumulative Trip Limits	Cumulative landing limits.	Transferable cumulative catch limits. ^b / Cumulative limits would be transferable on a temporary basis between vessels within the period (Full or partial limit transfers would be	(One set of limits for	None	Cumulative catch limits.		
Linits	each vessel to which a permit is assigned.)	allowed, depending on length of limit period, see Section 2.4. Consider need for accumulation limit.)	permit is assigned.)				
<u>Element 1.4 Non-</u> <u>whiting</u> Endorsement	<u>None</u>	<u>None</u>	<u>None</u>	<u>None</u>	<u>Option: Establish a non-</u> <u>whiting endorsement. Only</u> <u>vessels with permits meeting</u> <u>endorsement qualification</u> <u>requirements could participate</u> <u>in the non-whiting fishery.</u>		

Stage 1 Document

Note: Option number	s listed below refer to the	scoping summary document, not th	ne components table.		
Alternatives (Sec 2.1.1.1 Scoping Results ^{a/})	Alternative 1 No-Action Alternative	Alternative 2 IFQs for Trawl Target Groundfish	Alternative 3 IFQs for All Groundfish Except Other Fish	Alternative 4 IFQs for All Groundfish	Alternative 5 Cumulative Catch Limits and Permit Stacking
Element 1.5 Adjustr	ments for Low OYs				
Allocation		The Council may suspend	d intersector allocations when a sp		
Catch Control		Adjust rules for low OY conditions (as specified in Component 2).	Option 1: Adjust rules for low ON conditions (as specified in Component 2).	4	
Rules		IFQ species – No change.	For low OY species, except	4	
	N/A	Non-IFQ species — For species meeting the low OY threshold switch from transferable to non transferable cumulative catch limits. ^{et}	whiting, switch from IFQs for that species and instead manage the sector allocation as a pool using nontransferable cumulative catel limits to control catch. ⁴ / Option 2: No low OY adjustment	N/A	N/A
Threshold	N/A	Low OY Threshold: Establish a threshold at which point a species would switch to "Low OY management." (B _{25%})	Low OY Threshold: Decide on application of "Low OY management" as part of the biennial specifications process.	N/A	N/A
Element 1.6 General Season Closures	When	all sectors in aggregate reach the	e overall OY for a species, seasor	is close for the affec	ted species
Element 1.7 Whiting Season Openings	Staggered season openings for each whiting sector.	Possible continuation of spring opening for the season to control impacts on ESA listed salmon.	Same as Alt 2	Same as Alt 2	Same as no action.
Element 1.8 Whiting Season Closings	Whiting season closes for a sector on attainment of whiting allocation. Whiting season closes for all whiting sectors on attainment of bycatch caps for species with bycatch caps.	Whiting season closes for all whiting sectors on attainment of bycatch caps for species with bycatch caps, otherwise the season continues until the end of the year. ^{<i>v</i>}		Dpen until end of /ear.	Same as no action

Note: Option numbers listed below refer to the scoping summary document, not the components table.							
Alternatives (Sec 2.1.1.1 Scoping Results ^{a/})	Alternative 1 No-Action Alternative	Alternative 2 IFQs for Trawl Target Groundfish	Alternative 3 IFQs for All Groundfish Except Other Fish	Alternative 4 IFQs for All Groundfish	Alternative 5 Cumulative Catch Limits and Permit Stacking		
		COMF	PONENT 2				
Sector/Specie	es Group Combinations	and the Catch Control Tools To		=			
Element 2.1 Sectors Define Whiting Trip:	Three sectors: shoreside (SS) deliveries mothership (MS)	Four sectors: SS whiting deliveries SS non-whiting deliveries MS deliveries	Three sectors (same as status quo) (FROM Scoping Results Doc:	One sector (FROM Scoping	Three sectors (same as status quo) •		
Opt 1 >50% whiting Opt 2 >50% or >10,000 lbs whiting	 deliveries catcher-processor (CP) deliveries 	 CP deliveries (FROM Scoping Results Doc: 2.1.1.4 Option 3) 	2.1.1.4 Option 2)	Results Doc: 2.1.1.4 Option 1)			
Element 2.2 Primary Trawl Target and	All sectors: cumulative landing limits. Trawl sectors close on	SS non-whiting deliveries: IFQs SS, MS, & CP whiting deliveries: catch caps for these species. A	Sector specific IFQs-(Low OY Conditions: Option 1: switch to nontransferable cumulative catch limits and close on attainment of sector limits (except for whiting); Option 2:	IFQ	Cumulative catch limits with permit stacking rules applied for non-whiting trips.		
Allocated Species ^{e/} (Except Whiting)	attainment of cap, guideline or OY.	sector's whiting seasons close on attainment of that sector's			Whiting season closes on attainment of whiting fishery		
	Whiting season closes on attainment of whiting fishery bycatch cap for non-whiting species.	whiting fishery catch cap for non-whiting species. No cumulative catch limits. Midseason rollovers for unused portion of bycatch caps and augmentation of caps thru acquisition of SS non-whiting IFQ.	continuc use of IFQs.)		bycatch cap for non-whiting species. On whiting trips, a vessel may fish against only one set of cumulative limits, regardless of the number of permits that are stacked.		
Element 2.3 Whiting	All sectors: Whiting season (no vessel landing limits). Outside the whiting season shoreside deliveries allowed under cumulative whiting landing limits. Midseason rollover of excess allocation to another sector.	SS non-whiting deliveries: Whiting catch must be covered with IFQ and is also constrained year-round by nontransferable cumulative whiting catch limits. SS, MS, & CP whiting deliveries: sector specific IFQs during whiting season, no at sea or shoreside whiting deliveries outside of whiting season. Midseason whiting rollover to another sector: Opt 1: not allowed; Opt 2: allowed following specified procedures.	Sector specific IFQs during the whiting season. If SS whiting is closed SS whiting IFQs may continue to be used, subject to cumulative whiting catch limits.	IFQs during the whiting season. Outside of whiting season: use of IFQs for shoreside deliveries constrained by cumulative whiting catch; and at-sea deliveries prohibited.	All sectors: Whiting season (no vessel landing limits). Outside the whiting season shoreside deliveries allowed under cumulative whiting catch limits (no at-sea deliveries). Permit stacking rules do <u>not</u> apply for cumulative whiting limits. Midseason rollover of excess whiting allocation to another sector.		

Note: Option numbers listed below refer to the scoping summary document, not the components table.								
Alternatives (Sec 2.1.1.1 Scoping Results ^{a/})	Alternative 1 No-Action Alternative	Alternative 2 IFQs for Trawl Target Groundfish	Alternative 3 IFQs for All Groundfish Except Other Fish	Alternative 4 IFQs for All Groundfish	Alternative 5 Cumulative Catch Limits and Permit Stacking			
Element 2.4 Unallocated Shared Target and Incidental Species Currently Managed With Cumulative Limits	All sectors: cumulative landing limits Trawl fishery closes on attainment of cap, guideline or OY. Whiting season closes on attainment of whiting fishery bycatch cap for non-whiting species.	SS whiting deliveries Transferable cumulative catch limits. Option for >2 <u>4</u> mo cumulative periods and mid- period transfers(Low OY conditions: switch to nontransferable cumulative catch limits) SS, MS, & CP whiting deliveries For species without caps delivery of non-whiting species catch is limited to a single cumulative catch limit regardless of the number of transferable limits held by a vessel. For non- whiting species with caps, same as Element 2.2 (including the midseason rollover).	Sector specific IFQs. (Low OY Conditions: Same low OY condition options as for "Primary Trawl Target and Allocated Species" (Element 2.2))	IFQ	Cumulative catch limits with permit stacking rules applied for non-whiting trips. Whiting season closes on attainment of whiting fishery bycatch cap for non-whiting species. On whiting trips, a vessel may fish against only one set of cumulative limits, regardless of the number of permits that are stacked.			
Element 2.5 "Other Fish" Groundfish ^{f/g/}	Status Quo. Currently: monitoring only. May change to cumul limits.	Same as status quo. ^{ŀ/}	Same as status quo. ^{h/}	IFQ	Same as status quo. ^{h/}			

Note: Option numbers listed below refer to the scoping summary document, not the components table.

Component 3: Groundfish Catch of Limited Entry Trawl Vessels Using Gears Other Than Groundfish Trawl

(Section 2.1.1.5 of the Scoping Results Document)

Element 3.1 Trawl Vessel Exempted Gear Quota Accounting and Catch Control (Includes Exempted Trawl and Exempted Non-trawl Gears)	Exempted gea r catch by LE trawl vessels counts against LE allocation (trawl and fixed gear) ^{J/} but is subject to open access (OA) trip limits.	Exempted gear – IFQ is not required. Catch counts against the OA allocation and is managed as part of the OA fishery. Some catch will be allocated from the LE trawl to OA fishery.	Exempted gear – IFQ required. Catch counts against LE Trawl. Open access trip limits apply.	Exempted gear – IFQ required. Catch counts against LE Trawl. Open access trip limits do not apply.	Exempted gea r catch by LE trawl vessels counts against LE allocation (trawl and fixed gear) ^{h/} but is subject to open access (OA) trip limits OR is subject to the trawl cumulative limits, including those limits associated with stacked permits, and vessels must comply with trawl enforcement and monitoring provisions.
		(FROM Scoping Results Document Section 2.1.1.5 Opt 2C)	(FROM 2.1.1.5 Scoping Results Document Section Option 1A)	(FRM 2.1.1.5 Scoping Results Doc Option 1B)	

Note: Option numbers	s listed below refer to the s	coping summary document, not t	he components table.		
Alternatives (Sec 2.1.1.1 Scoping Results ^{a/})	Alternative 1 No-Action Alternative	Alternative 2 IFQs for Trawl Target Groundfish	Alternative 3 IFQs for All Groundfish Except Other Fish	Alternative 4 IFQs for All Groundfish	Alternative 5 Cumulative Catch Limits and Permit Stacking
Element 3.2	Unendorsed longline	Unendorsed longline &	Unendorsed longline and	Unendorsed	Unendorsed longline &
Trawl Vessel Longline and Fish	<u>& fishpot</u> catch by LE trawl vessels counts against LE allocation	<u>fishpot </u> – IFQ required.	<u>fishpot</u> – IFQ required.	longline & fishpot – Same as Alternative	fishpot catch by LE trawl vessels counts against LE allocation ⁷ (trawl and fixed gear) ¹⁷ but (Opt 1) is subject to open access trip limits. OR (Opt 2) is subject to the trawl cumulative limits, including those limits associated with stacked permits, and vessels must comply with trawl enforcement and monitoring provisions.
Pot Without and With LE Endorsement	(trawl and fixed gear) ^{<i>i</i>} but is subject to open	Catch counts against LE Trawl.	Catch counts against LE Trawl.	3.	
(Fixed Gear Quota Accounting and Catch Control)	access trip limits.	LE fixed gear trip limits apply.	LE fixed gear trip limits do not apply.		
	LE endorsed fixed gear – Rules for the LE fixed gear fishery apply when the vessel is using fixed gear. Vessels fish against the limited entry allocation ^{i/} and are constrained by fixed gear trip limits while using fixed gear.	LE endorsed fixed gear –	<u>LE endorsed fixed gear</u> – While using fixed gear, IFQ is	<u>LE endorsed fixed</u> <u>gear</u> – Same as Alternative 3.	
		While using fixed gear, IFQ is not required, catch is constrained by LE fixed gear limits and counts toward the LE fixed gear allocation.	not required for catch taken toward LE fixed gear cumulative or daily limits and such catch counts toward the LE fixed gear allocation. Catch in excess of LE fixed gear trip limits may be taken if covered by trawl IFQ and in	Alternative 5.	LE endorsed fixed gear When the vessel is using fixed gear: (Opt 1) catch counts against the LE allocation ^{i/} and is constrained by fixed gear trip limits. OR (Opt 2) the vessel is constrained by
			compliance with the trawl monitoring program.		single or stacked trawl cumulative limits and must comply with trawl enforcement and monitoring provisions (except when fishing fixed gear sablefish tier limits, in which case fixed gear tier fishing rules apply).
		(FROM 2.1.1.5 Scoping Results Doc, Option 1A)	(FROM 2.1.1.5 Scoping Results Doc, Opt 1B)	(FRM 2.1.1.5 Scoping Results Doc, Opt 1B)	

Note: Option number	s listed below refer to the s	scoping summary document, not the	he components table.				
Alternatives (Sec 2.1.1.1 Scoping Results ^{a/})	Alternative 1 No-Action Alternative	Alternative 2 IFQs for Trawl Target Groundfish	Alternative 3 IFQs for All Groundfish Except Other Fish		Alternative 5 umulative Catch Limits and Permit Stacking		
Component 4. At-se	ea Observers/ Monitorin	g					
	Biological observers on some SS catcher vessel trips, 100% observers for at-sea deliveries (MS and CP)	100% at-sea observers. Detailed monitoring and enforcement provisions under each IFQ program (Tables 2-2 and 2-4).	100% at-sea observers. Detailed monitoring and enforcement provisions under each IFQ program (Tables 2-2 and 2-4)	100% at-sea observers or cameras (feasibility to be determined). Detailed monitoring and enforcement provisions under each IFQ program (Tables 2-2 and 2-4	equivalent.		
Component 5. Area	Management (Decision	Table B from Scoping Results Docu	iment)				
	Species divided by areas based on stock	Program Option for All Action A later time. Provisions are includ			ent areas as needed at a		
	assessment information. New area divisions created as stock assessment information indicates	Process Option: Task a group to begin considering the need for additional regional management areas (biological or socio-economic) and potential boundaries along with a process for identifying and responding to regional management area issues that may develop or become more apparent in the future. Decision deferred until additional information is available, e.g. preliminary DEIS is ready.					
0	need.						
Component 6. Sector	or Allocation						
Element 6.1 Within Trawl (Decision Table E from Scoping Results Document)	Whiting allocation rules. No other within trawl allocations.	 Establish sector specific allocation within trawl allocation based on each sector's relative shares during the time period used for initial quota share allocation. If time periods are different for different sectors Option: use only those years in common to all sectors OR Option: calculate a percentage based on each sectors period then adjust all sectors proportionally so that the result sums to 100%. Consider applying the IFQ allocation recency requirement (if any) to eliminate from the sector calculation the catch history of any vessel that has not been active in recent years. Differences between the quality and completeness of data for whiting and shoreside non-whiting fisheries will need to be addressed. 					
Element 6.2 Trawl/All-Other- Gear		Establish needed intersector all related analytical package, inclu		tor allocation process and			

Note: Option numbers listed below refer to the scoping summary document, not the components table.					
Alternatives (Sec 2.1.1.1 Scoping Results ^{a/})	Alternative 1 No-Action Alternative	Alternative 2 IFQs for Trawl Target Groundfish	Alternative 3 IFQs for All Groundfish Except Other Fish	Alternative 4 IFQs for All Groundfish	Alternative 5 Cumulative Catch Limits and Permit Stacking
N Element 6.3 Trawl/ Open Access	N/A	Augment the open access allocation to account for trawl vessels fishing with open access gear on the open access allocation (See Element 3.1)	N/A	N/A	N/A

al National Environmental Policy Act Scoping Results Document: Individual Fishing Quotas (A Kind of Dedicated Access Privilege) and Other Catch Control Tools for the Pacific Coast Limited Entry Trawl Groundfish Fishery. Pacific Fishery Management Council, July 2005.

b/ For species managed with cumulative limits, the cumulative limit levels for the trawl fishery would be determined as part of the Council decision on biennial management measures, as under status quo. Cumulative catch limits would be transferable on a temporary basis between vessels within the period, depending on length of limit period, except for whiting and species under low OY conditions. An option is provided for four-month cumulative limit periods rather than the current two month periods. If the period length were extended to four months, an option to allow the transfer of partially used limits would be considered.

c/ For species under Low OY Management, transferability of cumulative catch limits would be eliminated and season closures for the affected species on reaching the fleet limit for that species would be implemented. Retention allowances within the catch limits may vary based on annual management measure decisions. Other measures to keep bycatch rates low may stay in place (e.g., Rockfish Conservation Areas).

d/ For species under Low OY Management implement season closures for the affected species on reaching the fleet limit for that species. Other measures to keep bycatch rates low may stay in place (e.g., Rockfish Conservation Areas).

e/ **"Trawl target species**" are defined as any species for which other sectors have only incidental harvest or, for species sometimes targeted by other sectors, species for which a trawl allocation has been established at the time of implementation. This category may also include incidentally caught species for which a trawl allocation has been established. Section X.X identifies those species which will be assumed to be trawl species for purposes of the analysis.

f/ "Other Fish" is a groundfish category that includes sharks, skates, rays, ratfish, morids, genadiers, cabezon (north) and kelp greenling. This category is likely to change over time

g/ Groundfish in the "Other Fish" category are not managed with cumulative trip limits—catch is monitored only. This may change over time, and in 2005 some cumulative trip limits for Other Fish were imposed over part of the year.

h/ If managed by cumulative limits at the time of implementation, manage the same as "Unallocated Shared Target and Incidental Species."

i/ With the exception of sablefish for which there is a separate LE trawl allocation against which such catch is counted.

Table 2-2.	IFQ Program	Design	Alternatives	for Analysis

Note: Option number ref to scoping summary, not the components table.	IFQ Program A	IFQ Program B	IFQ Program C
B.1.0 Initial IFQ Allocation		-	
B.1.1 Eligible Groups and Relative Shares	Allocate 50% of quota shares to current permit owners and 50% to processors (Option 3b). ⁸ Sub-options address whether the catch history should accrue to the processor currently owning the facility, the lessee of the facility (owner if there is no lessee), or the owner at the time of processing.	Sub-option: Allocate 100% of quota shares to current permit owners (Option 1 from Appendix B). Sub-option: Non-whiting 100% to current permit owners. Whiting 50% to current permit owners; 50% to processors. Sub-option: 90% to current permit owners; 10% to processors.	Allocate 75% of quota shares to current permit owners and 25% to processors (Option 3a). Same sub- options on processor history as Program A. (NOTE: For the non-whiting shoreside fishery only, up to 20% of the quota pounds_will be held back from the allocation (off the top) to support the community stability holdback. <u>Each</u> year, the Council will have the flexibility to determine whether 20% or some lesser amount will be held back. <u>See Section B.2.2.5 and B.4 of Table</u> <u>2-2.</u>)
Processor Definition:	Use special IFQ Program definition for quota share allocation <u>(Shoreside</u> <u>processors: receive and process</u> <u>unprocessed fish; or catch and</u> <u>process. Motherships and catcher</u> <u>processors in the at-sea whiting</u> <u>fishery.)</u> Modified by Council 06/2006 see Table 2-4 Sub-element B.1.1.2 for previous language.	<u>No processor allocation.</u> Use existing FMP definition.	Same as Program A

⁸ References to Options refer to options at they were described in the Scoping Results Document, i.e. *National Environmental Policy Act Scoping Results Document: Individual Fishing Quotas (A Kind of Dedicated Access Privilege) and Other Catch Control Tools for the Pacific Coast Limited Entry Trawl Groundfish Fishery.* Pacific Fishery Management Council, July 2005.

Note: Option number ref to scoping summary, not the components table.	IFQ Program A	IFQ Program B	IFQ Program C
B.1.2 Qualifying Criteria: Recent Participation	 Harvesters (including catcher- processors): 1998-2003 participation required (number of trips or years to be specified) in order to qualify for an initial allocation of quota shares (Option 2). For shoreside processors and motherships: 1999-2004 recent participation requirement (the number of trips or years is yet to be specified). (Option 4). 	All Members of Eligible Groups: No recent participation required in order to qualify for an initial allocation of quota shares (Option 1). OR All Members of Eligible Groups: 1998- 2003 participation required (one trawl groundfish landing/delivery of any groundfish species) in order to qualify for an initial allocation of quota shares (Option 2).	Same as Program A.
B.1.3 Elements of the Allocati	on "Formula"		
Vessel/Permit Related Allocation	Catcher vessel permit owners will receive quota shares based on their permit history plus an equal division of the quota that could be attributed to permit history of bought-back permits (catcher-processors permit owners will not receive a portion of the quota shares distributed on an equal sharing basis) (Option 2). [Rule needed to classify catcher vessel and catcher processor permits.] Sub-options for incidentally caught overfished species, either: (a) same as	Same as Program A, except no special catcher-processor schedule. Allocate to holders of catch processor permits based on relative permit history.	Same as Program A.
	for any other groundfish species OR (b) equally divide quota for incidentally caught overfished species. For catcher-processors permit owners,		
	use an allocation schedule developed by unanimous consent of that sector (to be provided).		
Processor Allocation	Processors are allocated quota shares based entirely on the processing of groundfish trawl landings received unprocessed (Option 1).	No processor allocation.	Processors are allocated quota shares based entirely on the processing of groundfish trawl landings received unprocessed (Option 1).

Note: Option number ref to scoping summary, not the components table.	IFQ Program A	IFQ Program B	IFQ Program C		
B.1.4 Species/Species Groups to Be Allocated and Used for Allocation, Including	Allocate Quota Shares Based on Individual Species/Species Groups: Allocate quota shares for each species/species group in the OY table (including area subdivisions). For the potion of the allocation based on history, use an entity's history for each species/species group to allocate quota share for that species/species group. (Option 2).				
Post Implementation Subdivision	OptionInitially no area subdivisions beyond those in the OY table. Option—Initially there may be area subdivisions beyond those listed in the OY table.				
	QS will/will-not be issued for species for which there is not a trawl allocation, regardless of the management regime selected.				
	If not all species are initially allocated, QS for future IFQ species: Option—will be issued based on criteria determined at a future time. Option—will be issued based on a person's ownership of related QS species.				
	If at some future time a management unit is subdivided, quota shares for that unit will be subdivided by issuing quota share owners amount of shares for the subdivisions equivalent to their holdings of the shares being subdivided (this provision on future subdivision was listed as Element B.1.8 in drafts prior to July 2006))				
B.1.5 History: Allocation Perio	ds, Data Sets, and Weighting				
Periods/Years to Drop:	Options are identical under all programs.				
	Vessels: 1994-2003. Use fish tickets. Drop 2 years for whiting sector fishing (applies to incidental harvest and whiting). Drop 3 years for non-whiting sector fishing. (Option 1, Sub-option B).				
	Shore Processors: Use observer data. 1999-2004. Drop 2 years. (Option 5, Sub-option B)				
	Motherships: Use observer data. 1998-2003. No opportunity to drop worst year. (Option 4, Sub-option A)				
Weighting Among Years:	Absolute pounds – no weighting between years (Sub-option (i)).	Relative pounds (calculate history based on the entity's percent share of each year's total) (Sub-option (ii)).	Same as Program B		
B.1.6 History: Combined Perm	its and Other Exceptional Situations				
Combined permits:	All permits count. History of the permits c	ombined into a single permit goes to the re	sulting permit (Option 1).		
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 catch history equally among both permits. B. Assign all catch history to the first permit registered for use with the vessel.				
Illegal landings/catch:	Don't count Illegal landings/catch under any program.				
Landings in excess of trip limits, as authorized under an EFP:	Don't count landings in excess of the cumulative limit in place for the non-EFP fishery under any program				
Compensation fish:	Don't count compensation fish under any program.				
B.1.7 Initial Issuance Appeals Process	Only one provision has been identified: Appeals would occur through processes developed by NMFS. NMFS will develop a proposal for an internal appeals process and bring it to the Council for consideration. Any proposed revisions to fish-tickets would undergo review by state enforcement personnel prior to finalization of the revisions.				

Note: Option number ref to scoping summary, not the components table.	IFQ Program A	IFQ Program B	IFQ Program C
B.2.0 IFQ/Permit Holding Requ	irements and IFQ Acquisition (After Init	ial Allocation)	
B.2.1 IFQ and LE Permit Holding Requirements	to participate in the IFQ fishery. For any fishing by the vessel until the overage is	ared. A possible sub-option would require s	Only LE trawl vessels would be allowed red by quota) there would be no more overage, the limited entry permit cannot be some amount of quota pounds be held prior
B.2.2 Annual IFQ Issuance			
B.2.2.1 Start-of-Year Quota Pound Issuance		ified: Quota pounds are issued annually to re issued at the time of initial IFQ allocatio	
B.2.2.2 Carryover of Quota Pour	nds to a Following Year (Previously calle	d "rollover." The term rollover is now being	g used for intersector transfers.)
Non-overfished Species	10% carryover for non-overfished species (Option 3)	30% carryover for non-overfished species (Option 5)	5% carryover for non-overfished species (Option 2)
Overfished Species	5% carryover for overfished species (Option 3)	Full (30%) carryover allowance for overfished species (Option 5)	No carryover allowance for overfished species (Option 2)
B.2.2.3 Quota Share Use-or- Lose Provisions	Do not include a use-or-lose provision b	ut evaluate need as part of future program	reviews (Option 3).
B.2.2.4 Entry Level Opportunities for Acquiring Quota Shares and Low Interest Loan Options	No special provisions.	No special provisions.	Provide new entrants an opportunity to qualify for revoked shares and shares lost due to non-use (if such non-use provisions are created) (Element 2). Qualification and distribution criteria to be determined as part of a trailing amendment.(?)
B.2.2.5 Quota Pounds for the Community Stability Hold Back	No special provisions.	No special provisions.	Set aside up to 20% of the non-whiting shoreside trawl sector allocation each year and allocate to quota share/pound holders who have submitted proposals, ranked on the basis of objective criteria that evaluate benefits to local communities. See Section B.4.
B.2.3 Transfer Rules	•		
B.2.3.1 Eligible Owners/Holders (Who May Own or Lease QS/QP)		S documented fishing vessel is eligible to e eserve opportunity for existing participants	

Note: Option number ref to scoping summary, not the components table.	IFQ Program A	IFQ Program B	IFQ Program C		
B.2.3.2 Permanent Transfers and Leases of QS/QP Consider eliminating provision regarding leasing of QP, too confusing.	Permanent transfers and leasing of quota shares and quota pounds allowed. (Option 2)	Permanent quota share transfers only– leasing prohibited. Permanent transfers and leasing of quota pounds allowed. (Option 1)	Same as Program A		
B.2.3.3 Temporary Prohibitions on QS Transfer	Allow transfers of quota shares any time during year (Option 1).	Prohibit or limit transfer of quota shares during the last two months of the year.	Same as Program A		
B.2.3.4 Divisibility	Only one practical option has been identi	fied:			
	Quota Shares: nearly unrestricted divisibi	ricted divisibility – "many decimal points."			
	Quota Pounds: divisible to the single pou	nd			
B.2.3.5 Liens		w liens to be placed on QS/QP. Liens can al lien registry are covered in Section B.3.1			
<i>B.2.3.6</i> Accumulation Limits on QS/QP (ownership, control and vessel use)	50% or No Limits (Option 5).	Consider all limits as sub-options	Most restrictive limits (1% or 5%) OR		
			Intermediate level limits (10% or 25%)		
	Definition of control needs to be develope	ed.			
B.2.3.7 Vertical Integration Limit	Only one option has been identified: No a accumulation limits.	dditional limits on vertical integration beyon	nd those already provided through		
B.3.0 Program Administration					
B.3.1 Limit Tracking Quota Poun	ds and Quota Shares, Monitoring Landir	ngs, and Enforcement			
Many of the following provisions	are interlinked. The interlinkages are no	oted in Table 2-4			
At-Sea Monitoring	100% at-sea compliance observers (possible small vessel exception)	100% at-sea compliance observers	100% at-sea compliance observers or cameras		
Shoreside Monitoring	Shoreside monitoring opportunity would be provided	100% shoreside monitoring	Shoreside monitoring opportunity would be provided		
Retention and Discards	Discards allowed	Full retention required	Discards allowed if at-sea monitor is present (otherwise full retention)		
Discard Monitoring and Reporting System	Upgraded discard (bycatch) monitoring and reporting system needed	An upgraded discard monitoring and reporting system is un-needed	Upgraded discard (bycatch) monitoring and reporting system needed		
Electronic Reporting	Electronic landings tracking.	Electronic landings tracking.	Parallel federal electronic landings tracking		
Landing Notification	Advance notice of landing required.	Advance notice of landing required	Advance notice of landing required		

Note: Option number ref to scoping summary, not the components table.	IFQ Program A	IFQ Program B	IFQ Program C
Potential Landing Times	Unlimited landing hours	Limited landing hours (specify)	Unlimited landing hours
Potential Landing Sites	Licenses required for delivery sites	Unlimited landings sites	Licenses required for delivery sites
Vessel Monitoring System (VMS)	VMS Required under all programs	VMS Required under all programs	VMS Required under all programs
Quota Share Tracking	QS transactions tracked electronically. Create a central lien registry but exclude all but essential ownership information. (Option 2).	Create a central lien registry but exclude all but essential ownership all related ownership information	
B.3.2 Cost Recovery/Sharing and Rent Extraction	Cost recovery for management (not enforcement or science).	Same as Program A	Full cost recovery: Landings fee plus privatization of elements of the
The exact means by which the fees would be extracted needs to be specified (e.g. fees on initial issuance, fees on transfers, annual fees, etc.)	Up to 3% of ex-vessel value, the limit specified in the Magnuson-Stevens Act.		management system. In particular, privatization for monitoring of IFQ landings (e.g., industry pays for their own compliance monitors). Stock assessments should not be privatized and the electronic fish ticket system should not be privatized.
B.3.3 Program Duration and Procedures for Program Performance Monitoring, Review, and Revision (Magnuson-Stevens Act (d)(5)(A))	Among other factors, the review would in whether or not quota shares are being uti	ong with review criteria (possible review as clude evaluation of whether or not there are lized. Standard fishery management plan a mmunity advisory committee would also ad	e localized depletion problems and ind regulatory amendment procedures
B.3.4 Data Collection	Expanded voluntary submission of economic data (Option 2). Information on QS transaction prices to be included in a central registry.	Expanded mandatory submission of economic data (Option 1). Information on QS transaction prices, including leases, to be included in a central registry.	Same as Program B

	Option number ref to scoping ary, not the components table.	IFQ Program A	IFQ Program B	IFQ Program C
B.4.0	Community Stability Holdback Program	None	None	A portion of annual quota pounds would be held back and allocated for proposals submitted by quota share/pound holders. The proposals would be evaluated by a Council body, with support of Council or Council and NMFS staff, based on quantitative criteria which place priority on community benefits. The quota pounds held back for this purpose will continue to be "trawl quota pounds" and must be used in a manner consistent with the scope of the trawl individual quota program. Quota pounds issued under the community stability holdback program would count toward accumulation limits. The Council may determine that the allocation for some or all proposals should be for periods of longer than one or two years.

2.2 Alternatives Considered but Excluded from Detailed Analysis

This section discusses an alternative that was considered but rejected and briefly explains the reasons for its elimination. In addition, this section lists options and sub-options that were considered by the Council and TIQC but were not included in any of the alternatives forwarded for analysis.

An alternative that was initially considered for analysis would issue IFQs for overfished species, maintain cumulative trip limits for all other species, and implement total catch reporting and 100 percent at-sea monitoring. Upon further consideration it was determined that this alternative would not have the potential to create enough benefits to the groundfish fishery to offset the costs of the monitoring and reporting requirements, and questions were raised as to how the program would continue once overfished species recovered. Therefore, the alternative was dropped from further consideration.

In addition to the dropped alternative, a number of options and sub-options were discussed by the Council and TIQC but not included in the alternatives forwarded for analysis. The list below provides an initial summary of these excluded elements and options.

- Species groups that could be managed under an IFQ program but were not explicitly included
 - o Overfished Species
 - o Prohibited Species
 - Stakeholder groups that were not included as recipients of QS
 - o Vessel crew members and skippers
 - o Vessel owners
 - o Communities
 - Methods for issuing QS that were not included
 - o Auctions
 - o Lotteries
 - Equal shares
 - QS based strictly on years of participation
 - Types of shares from an IFQ program that might have been forwarded but were not
 - Shares for Processing (as opposed to IFQs for harvesting issued to processors)

While the elements and options listed above were not specifically included in the suite of alternatives that were forwarded for full analysis, all are included in the description of components, elements and options (Section 2.3).

2.3 Management Regime and IFQ Program Component Tables

The alternatives, including

- all design features included in the alternatives,
- design features not included in an alternative but still being considered, and
- design features eliminated from consideration, are described in the component tables provided in this section.

Final Draft

Before the effects of the alternatives on resources and stakeholders of concern can be fully evaluated a number of issues need to be addressed and decisions may need to be made by the Council. The components tables below (Tables 2-3 and 2-4) highlights these issues by augmenting the basic alternatives forwarded by the Council for detailed analysis. Table 2-3 covers the components of the management regime alternative (of which the IFQ programs are a part) and Table 2-4 covers the components of the IFQ program alternatives. The IFQ programs are a part of management regime alternatives, 2, 3 and 4 (management regime Alternative 1 is status quo and management regime Alternative 5 is permit stacking. The major goal of the components table sand the components analysis (see Appendix C) is to ensure that the details of each alternative are adequately considered by clearly specifying how the different elements fit together within an alternative, and identifying unknown or unintended potential effects on resources and stakeholders groups. The components table and components analysis also identify options that were discussed but not brought forward for detailed analysis.

Several key terms used within the components tables are defined below:

Components: Components focus on major programmatic issues within the alternatives.

Elements, Subelements, and Provisions: These are terms for single decision-points within a component. In order for an alternative to be completely defined, a decision must be made for each decision point. The hierarchy for these terms is described below.

Options: Options define the basic choices within each element. Generally options are mutually exclusive of other options, but it is noted when more than one option can be selected.

Sub-options: Sub-options provide further refinement of the options. Decisions with respect to sub-options need only be made if the particular option is chosen.

The basic hierarchical structure for Table 2-3 and Table 2-4 is the same except a designator (B) has been added as a prefix at each level in Table 2-4. This designator keys the numbers to Appendix B of the scoping document, which contained all the original design elements for the trawl IFQ program. The following is an example illustrating the structure.

Component B.1

Element B.1.1

Sub-element B.1.1.1

Option A (B.1.1.1) (In some cases there may be no sub-element but due to software limitations the option will be designated with the phantom subelement number (in this example B.1.1.1) even though there is no subelement B.1.1.1.)

Sub-option A.1 (B.1.1.1)

Where further subdivisions are needed, the term "provision" is employed. Provisions are one division lower than sub-elements. In general, provisions and options within them are labeled as follows.

Sub-element B.1.1.1

Provision 1 (B.1.1.1)

Provision 1 (Option i)

The subelement identifier is omitted from the provision level option in order to prevent the numbering system from becoming too cumbersome. The location of the provision option within the program will rely on the context of its usage.

The table on the following page highlights conventions found in both Tables 2-3 and 2-4.

Key to highlighting in the component table.					
Eliminated or added June 2006	Taken out, added				
Area needing attention (clarification, confirmation, or development)	Shaded text.				
Alt 1 Column: Option applies and does not					
apply to a particular alternative (far left, unshaded boxes)	Alt 1 Alt 2 Alt 3				
Alt 2 Column: Options not applicable to a particular element (center, N/A)	Element A				
Alt 3 Column: Options between which the	Option 1 🗹 N/A 🗹				
Council must choose before selecting the alternative (far right, shaded check boxes)	Option 2 N/A				
Option not included in an IFQ program.	Option to be analyzed				
Option will still be analyzed in detail in the components analysis.	(not in an IFQ program alternative).				
Option not included in an IFQ program and will not be analyzed in detail in the components analysis (explanation will be provided for why it has been omitted).	Option will not be analyzed.				

Management Regime Components Table

The following table (Table 2-3) provides the complete specification for the management regime alternatives summarized in Section 2.1.

Table 2-3. Alternative management regimes: components and options by alternative

Alternative Management Regime Components, Elements, Subelements, Provisions and Options	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5
Component 1 Catch Control Tools					
In this component the primary catch control rules are specified but not generally the species to which they apply.					
Element 1.1 IFQ Program. The specific design elements of each of these IFQ program are provided in Tak be analyzed with each IFQ program (Alternative 3A, 3B, and 3C) in order to compare and con- other aspects of the management regime constant.					
Option 1.1.1 No IFQ Program	\checkmark				\checkmark
Option 1.1.2 IFQ Program A This program would initially allocate quota shares 50% to permit holders and 50% to processors. Recent participation would be required, shares would be allocated mainly on the basis of history but shares that would have been distributed to bought-back permits will be equally distributed among catcher vessel permits (special catch-processor allocation formula). There would be a year-to-year carry-over allowance of 10% (5% for overfished species). Leasing would be allowed. Accumulation caps would be the most liberal (50% or none). Observers (100%) would be required, discarding allowed and the bycatch reporting system upgraded. Submission of economic information would be voluntary and a central lien registry would require only essential information. (See Tables 2-2 and 2-4 for details and additional provisions)	N/A		V		N/A
Option 1.1.3 IFQ Program B This program would initially allocate quota shares 100% to permit holders and 0% to processors. Recent participation would <u>not</u> be required and shares would be allocated mainly on the basis of history. There would be a year-to-year carry-over allowance of 30% for all species. Leasing would <u>not</u> be allowed. A full range of accumulation caps are being considered (range to be narrowed). Observers (100%)would be required, discarding not allowed and the bycatch reporting system would <u>not</u> need to be upgraded. Submission of economic information would be mandatory and a central lien registry would require all information of public interest (e.g. transaction prices). (See Tables 2-2 and 2-4 for details and additional provisions)	N/A				N/A
 Key to Alternatives Alt. 1: No Action; – Alt. 2: Trawl Target IFQs, – Alt. 3: IFQs for all but – Alt. 4: IFQs for all spec Cumulative trip limits; Whiting Whiting season; Total catch Other Species, No whiting No whiting seasons; Total seasons; Total catch reporting catch reporting 	lim		iting se	it stackir eason; T	

- Key to Column Indicators

- \square = this option is included in alternative; \square = option could be included but is not; N/A = option is not applicable to alternative

Alternative Management Regime Components, Elements, Subelements, Provisions and Options	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5
Option 1.1.4 IFQ Program C This program would be similar to program A except: The initial allocation of quota shares would be 75% to permit holders and 25% to processors and up to 20% of the pounds each year would be held back and reallocated to quota share holders in a manner that supports community stability. There would be a year-to-year carry-over allowance of 5% (0% for overfished species). Accumulation caps would be 1% to 5% or 10% to 25%(range to be narrowed). Observers (100%) or cameras would be required, discarding allowed if an observer is present, and the bycatch reporting system would need to be upgraded. (See Tables 2-2 and 2-4 for details and additional provisions)		V		V	N/A
Element 1.2 Permit Stacking.		1	1		
Option 1.2.1 No Permit Stacking	$\mathbf{\nabla}$	$\mathbf{\nabla}$	$\mathbf{\overline{\mathbf{A}}}$	\checkmark	N/A
Option 1.2.2 Permit Stacking A vessel receives one set of trip limits issued for each of a maximum of 3 permits attached to the vessel. Only one of the permits attached to the vessel would need to be of the appropriate length. The cumulative limits would continue to be for 2 months periods. (See Sub-Option 1.2.2.1and Sub-Option 1.2.2.2 regarding	N/A				V
Sub-Option 1.2.2.1 Full credit for each permit. The cumulative catch limits for the initial permit and each stacked permits would be the same.	N/A				\checkmark
Sub-Option 1.2.2.2 Less than full credit for stacking. The first permit registered to a vessel would entitle that vessel to 100% of each cumulative catch limit. Subsequent (stacked) permits may entitle a vessel to only a portion of each limit.	N/A				\checkmark
Element 1.3 Cumulative Trip Limits					
Option 1.3.1 Cumulative Landing Limits. A vessels that reaches its cumulative landing limit may continue to fish but must discard fish in excess of the landing limit. A season closures is implemented for an affected species when the fleet reaches its mortality cap for that species.	V				

 Alt. 1: No Action; Cumulative trip limits; Whiting season; Only report landings 	 Alt. 2: Trawl Target IFQs, Whiting season; Total catch reporting 	 Alt. 3: IFQs for all but Other Species, No whiting seasons; Total catch reporting 	 Alt. 4: IFQs for all species, No whiting seasons; Total catch reporting 	 Alt. 5: Permit stacking; trip limits; Whiting season; Total catch reporting
 Key to Column Indicators 	- $\mathbf{\Sigma}$ = this option is included in	alternative; \Box = option could be ir	ncluded but is not; N/A = option is	not applicable to alternative

48

Alternative Management Regime Components, Elements, Subelements, Provisions and Options	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5
 Option 1.3.2 Cumulative Catch Limits: A vessel that reaches its cumulative catch limit for a species would have to stop trawling in strategies that may encounter that species. There may be retention limits within the cumulative catch limits. A season closure would be implemented for the affected species when the fleet reaches its cap for that species. Note: this option requires 100% catch monitoring. Under the alternatives that use cumulative catch limits, the limits are not applied to species managed with IFQ (except that whiting taken in non-whiting fisheries may be subject to both the cumulative limit and the IFQ requirement, and under Alternative 3 an IFQ species may be managed with nontransferable cumulative limits instead of IFQ under low OY conditions, see Component 2). 	N/A	Ø	Ŋ		V
 Sub-Option 1.3.2.1 Transferable separate from the permit, but nontransferable: (1)-for whiting; and (2) for low OY species managed with cumulative limits A vessels which reaches its initial cumulative limit would be allowed to continue fishing if it acquired additional cumulative limits. All cumulative limit transfers are temporary (i.e. a cumulative limit reverts to the original permit at the end of the year). Transfers of partially used limits may be allowed if the cumulative limit period is longer than 2 months. Consider the need for a limit on stacking. (Whiting cumulative limits apply at all times to the non-whiting shoreside sector and to the shoreside whiting sector when the whiting season is closed See Component 2). 	N/A	V			
Sub-Option 1.3.2.2 Not transferable except with the transfer of the permit.	\checkmark		V		Ŋ
Element 1.4 Non-whiting Endorsement					
Option 1.4.1 Do not establish a non-whiting endorsement.	N/A	N/A	N/A	N/A	\checkmark
Option 1.4.2 <u>Establish a non-whiting endorsement.</u> <u>Qualification requirements would be established for</u> <u>non-whiting endorsements. Permits not meeting these requirements would not entitle a</u> vessel to participate in the non-whiting fishery.	N/A	N/A	N/A	N/A	\checkmark

– Key to Alternatives				
 Alt. 1: No Action; 	 Alt. 2: Trawl Target IFQs, 	 Alt. 3: IFQs for all but 	- Alt. 4: IFQs for all species,	 Alt. 5: Permit stacking; trip
Cumulative trip limits; Whiting	Whiting season; Total catch	Other Species, No whiting	No whiting seasons; Total	limits; Whiting season; Total
season; Only report landings	reporting	seasons; Total catch reporting	catch reporting	catch reporting
 Key to Column 				
Indicators -	- \mathbf{i} = this option is included in	alternative; \Box = option could be in	included but is not; $N/A = option$ is	not applicable to alternative

Iternative Management Regime Components, Elements, Subelements, Provisions and Options	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5
 Element 1.5 Adjustments for Low OY Management Under status quo and all alternatives, the Council may suspend intersector allocations when a species is overfished. The option choices are whether or not to adjust the catch control rules under low OY conditions and, if so, the threshold or procedure for determining when to apply low OY adjustments. The adjustments that would be made under low OY conditions are specified in Flement 2.2 through Flement 2.4. In general the 	A	V	V	V	V
would be made under low OY conditions are specified in Element 2.2 through Element 2.4. In general the adjustments for low OY conditions are as follows: under Alternative 2, switch from transferable cumulative limits to nontransferable cumulative limits; and, under Alternative 3, switch from IFQ management to management with nontransferable cumulative limits, except for whiting.					
Option 1.5.1 Low OY management. When the OY is unusually low catch control rules may be changed. [NOTE: Either of the following sub-options can be matched with an alternative that includes low OY management adjustments.]	N/A	Ð	Ø	₽	N/A
Sub-Option 1.5.1.1 Establish a threshold at which point a species would switch from incidental catch management to "low OY management." (B _{25%}).	N/A	V	₽	₽	N/A
Sub-Option 1.5.1.2 Decide on application of "low OY management" as part of the biennial specifications process.	N/A	₽	Ø	₽	N/A
Option 1.5.2 No low OY management provisions, (other than the existing Council discretion to suspend allocations for overfished species).	N/A	₽	A	Ø	N/A
Element 1.6 General season closure: When all sectors reach the overall OY for a species, the fisheries that catch that species close.	\mathbf{N}	Ň	\checkmark	$\mathbf{\nabla}$	$\mathbf{\nabla}$
Element 1.7 Whiting season openings.					
Option 1.7.1 Staggered season openings for each whiting sector set during the biennial specifications process.	$\mathbf{\nabla}$				\checkmark
Option 1.7.2 Continuation of spring opening for the season (possibly use a single opening date for all trawl sectors), to control impacts on ESA-listed salmon.	N/A		\checkmark	\checkmark	
Option 1.7.3 Opens January 1.	N/A	$\mathbf{\overline{\mathbf{A}}}$	\checkmark	\checkmark	

 Key to Alternatives 				
 Alt. 1: No Action; 	 Alt. 2: Trawl Target IFQs, 	 Alt. 3: IFQs for all but 	- Alt. 4: IFQs for all species,	 Alt. 5: Permit stacking; trip
Cumulative trip limits; Whiting	Whiting season; Total catch	Other Species, No whiting	No whiting seasons; Total	limits; Whiting season; Total
season; Only report landings	reporting	seasons; Total catch reporting	catch reporting	catch reporting
 Key to Column Indicators 	- $\mathbf{\square}$ = this option is included in	alternative; \Box = option could be ir	ncluded but is not; N/A = option is	not applicable to alternative

Alternative Management Regime Components, Elements, Subelements, Provisions and Options	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5
Element 1.8 Whiting season closings. During closed periods there is generally a whiting cumulative limit					
of 20,000 pounds per week for shoreside whiting deliveries (no at-sea deliveries are allowed).					
(Note: Under Alternative 2 whiting is controlled by IFQs. Under Alternative 3 and 4 catch of all groundfish					
species is controlled through IFQs, except "Other Fish" under Alternative 3.)					
Option 1.8.1 Whiting season closes for a sector on attainment of whiting allocation or on attainment of whiting fishery catch caps for incidental species with such caps.	$\mathbf{\nabla}$				\checkmark
Option 1.8.2 Whiting season closure for each whiting sector on attainment of catch caps for species with such incidental catch cap	N/A	\checkmark			N/A
Component 2 Sector Species Combinations Trips are assigned to a sector based on delivery location and spectra the shoreside fishery are those OPTION A: with more than 50% whiting, OR OPTION B more than 10,000 pound of whiting. For the remainder of the document it is assumed that Option A applies.					
Element 2.1 Trawl Sectors.					
Option 2.1.1 Specify three sectors:					
Shoreside deliveries all limited-entry trawl deliveries to shoreside processors					
Mothership deliveries all limited-entry trawl deliveries to motherships	\checkmark				$\mathbf{\nabla}$
Catcher-processor deliveries - all harvests by catcher processors					
Catcher - processor deriveries - an harvests by catcher processors					

 Key to Alternatives 				
 Alt. 1: No Action; 	 Alt. 2: Trawl Target IFQs, 	 Alt. 3: IFQs for all but 	- Alt. 4: IFQs for all species,	5 , 1
Cumulative trip limits; Whiting	Whiting season; Total catch	Other Species, No whiting	No whiting seasons; Total	limits; Whiting season; Total
season; Only report landings	reporting	seasons; Total catch reporting	catch reporting	catch reporting
 Key to Column Indicators 	- $\mathbf{i} = \mathbf{i}$ this option is included in	alternative; $\Box = option could be ir$	ncluded but is not; $N/A = option$ is	not applicable to alternative

Alternative Ma	nagement Regime Components, Ele	ements, Subele	ements, Pr	rovisions and (Options		Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5
Option	2.1.2 Specify four sectors:										
	Shoreside whiting deliver	ies all	limited-	entry traw	I deliveries of w	hiting to					
	shoreside processors.	shoreside processors.									
Shoreside non-whiting deliveries all limited-entry trawl deliveries to shoreside processors for trips on which whiting comprises less than 50% of the catch.											
	Mothership deliveries a	II limited-er	ntry trav	vl deliveries	to motherships						
	Catcher-processor deliver	ies all ha	rvests b	y catcher p	rocessors						
Othe	er elements under this comp Alternative 2 shoreside wh		5	e			N/A	\checkmark			
Sector	Trip Classification & Whiting Ca		011-00111		s (summarized me	<i>:i e).</i>					
Shoreside	>50% of the catch is whiting		whiting		closure on reaching	limit					
Whiting	sector IFQ is required to cover		wiiting	Sector cap	ciosare on reaching						
Shoreside	<50% of the catch is white		e non-	IFQ required	for trawl target and	d allocated					
Non-	whiting sector IFQ is required	0		-	nulative limits for u						
whiting	catch AND catch in excess of th		-	and incide	ntal catch (transf	erable or					
	limits constitutes a violation.		-	nontransfera	able depending	on OY					
				conditions).							
Option	2.1.3 Specify one trawl secto trawl vessels.	r: This sector	includes	all deliveries	s and harvests of lir	nited-entry	N/A			\checkmark	
	2.2 Catch Control for Trawl Ta	-	-	-	-						
0	pecies are defined as those specie						,				
Sablefish		Dover Sole Petrale Sole		outh Rockfish	Sharpchin Rockfish Pacific Cod	Arrowtooth I Pacific Ocea			or Flat	fish Con	nlov
	rnyhead Dark-blotched Rockfish	r ettale Sole		bole							ipiex
	may be targeted by trawl and o	ther sectors o	r taken ir	ncidentally in	the trawl fishery. Th	nese species	are als	o inclu	ided ii	n the El	ement
2.2 managem in Section 2.x.	ent category, if a trawl allocation	is established	d. <i>For the</i>	e purpose of a	analysis the species a	assumed to f	fall into	this ca	ategory	ı are sp	ecified

 Alt. 1: No Action; 	 Alt. 2: Trawl Target IFQs, 	 Alt. 3: IFQs for all but 	– Alt. 4: IFQs for all species,	 Alt. 5: Permit stacking; trip
Cumulative trip limits; Whiting	Whiting season; Total catch	Other Species, No whiting	No whiting seasons; Total	limits; Whiting season; Total
season; Only report landings	reporting	seasons; Total catch reporting	catch reporting	catch reporting
Kow to Column				

 Key to Column Indicators

Iternative Managemer	nt Regime Components, Elements, Subelements, Provisions and Options	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5
Option 2.2.1	All sectors: cumulative landing limits On attainment of a cap, guideline or OY for a particular species, the segments of the trawl fishery that might catch that species are closed. Cumulative limits are adjusted to meet season duration objectives (usually a year-round fishery, except for whiting). Whiting Fishery: Cumulative landings limits for non-whiting species. For non-whiting species for which whiting fishery caps have been established, the whiting season closes on attainment of the non-whiting catch cap. For species without whiting fishery caps, the cumulative limits that apply to all trawl vessels are set taking into account catch projections for the whiting fishery. Greater than expected catch in the whiting fishery may result in the downward adjustment of those limits.	V				
Option 2.2.2	Shoreside non-whiting sector IFQs to cover catch: No-special management under low OY conditions. Whiting fishery: shoreside, mothership, & catcher-processor whiting sectors. Each whiting sector will have a cap for each trawl target and allocated species/species group. A whiting sector will close if its cap is reached for a non-whiting species. For whiting deliveries, there will be no cumulative catch limits for non-whiting species. A procedure will be established under which all or a portion of an unused cap species may be rolled-over/transferred to another sector. More specificity needed (timing and criteria similar to that used for the current whiting rollover, rollover to a non-whiting sector)? Any person may acquire non-whiting IFQ from the shoreside non-whiting sector and designate that it be used to increase the cap for a particular sector of the whiting fishery, for the common benefit of all members of that sector. <i>NOTE: In the extreme IFQ transfers could lead to whiting sector targeting on a non-whiting species</i> .	N/A	Ø			N/A
Option 2.2.3	All Sectors: sector specific IFQs to cover catch (i.e. not transferable from one sector to another See Element 1.4)	N/A		$\mathbf{\nabla}$		N/A
Sub Opti	on 2.2.3.1 Under low OY conditions, switch to nontransferable cumulative catch limits. All poundage that would otherwise have been issued to holders of quota shares will be used to create a catch cap. Nontransferable cumulative limits will be used to achieve Council season duration goals. (See Element 1.5)	N/A	₽	V	₽	N/A

 Key to Alternatives 				
 Alt. 1: No Action; 	 Alt. 2: Trawl Target IFQs, 	 Alt. 3: IFQs for all but 	– Alt. 4: IFQs for all species,	 Alt. 5: Permit stacking; trip
Cumulative trip limits; Whiting	Whiting season; Total catch	Other Species, No whiting	No whiting seasons; Total	limits; Whiting season; Total
season; Only report landings	reporting	seasons; Total catch reporting	catch reporting	catch reporting
 Key to Column 				
Indicators -	- $\mathbf{\Box}$ = this option is included in	alternative; \Box = option could be in	included but is not; $N/A = option$ is	not applicable to alternative

ernative Management Regime Components, Elements, Subelements, Provisions and Options	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5
Sub-Option 2.2.3.2-No-special measures for low OY conditions (i.e. continue using IFQs) (See Element 1.5)	N/A	₽	A	₽	N/A
Option 2.2.4 IFQs required to cover catch	N/A			$\mathbf{\nabla}$	N/A
Option 2.2.5 Cumulative catch limits with permit stacking rules applied for non-whiting trips. For the whiting fishery, same as Option 2.2.1 except that cumulative limits are catch limits rather than landing limits. Permit stacking rules do not apply to non-whiting species taken on whiting trips, i.e. on whiting trips a vessel receives no credit for permit stacking.	N/A				V
Element 2.3 Whiting. There would be an annual allocation of whiting for each sector specified under the 2.3.4. A vessel is considered to be participating in a shoreside whiting trip if its landing (Alter through 5) for a trip is composed of more than 50% whiting.			•		•
 Option 2.3.1 All sectors: whiting season (no vessel landing limits). Outside the whiting season, cumulative whiting landing limits for shoreside deliveries and no at-sea delivery allowed. Whiting season start dates for each sector are set during the biennial specifications process. Each sector's season closes when that sector's allocation has been caught. If it appears that a sector's whiting allocation will not be caught during the sector's whiting season, then on or after September 15, the portion of the sector's whiting allocation that is projected to go unused may be rolled over for use by other sectors. 	V				

 Alt. 1: No Action; 	 Alt. 2: Trawl Target IFQs, 	 Alt. 3: IFQs for all but 	- Alt. 4: IFQs for all species,	 Alt. 5: Permit stacking; trip
Cumulative trip limits; Whiting	Whiting season; Total catch	Other Species, No whiting	No whiting seasons; Total	limits; Whiting season; Total
season; Only report landings	reporting	seasons; Total catch reporting	catch reporting	catch reporting

 Key to Column Indicators

Alternative Management Regime Components, Elements, Subelements, Provisions and Options	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5
Option 2.3.2 Shoreside nonwhiting sector: Incidentally catch of whiting in the nonwhiting shoreside fishery would be constrained year round by cumulative catch limits. Whiting IFQ issued for incidental whiting catch would be required for whiting caught in the shoreside nonwhiting fishery. Shoreside, mothership, & catcher-processor whiting sectors: IFQs required to cover catch during whiting season (season may be year-round, see Element 1.7 and Element 1.8). If needed for salmon ESA or other purposes, whiting season start dates for each sector would be set during the harvest specifications process. When the whiting season is closed, whiting catch for at-sea delivery would not be allowed and whiting catch for shoreside delivery would have to comply with the rules for nonwhiting sector trips (i.e. whiting would have to comprise less than 50% of the catch for the trip, not exceed the cumulative catch limit, and be covered using incidental whiting IFQ issued for the non-whiting shoreside sector). Any other groundfish species caught with the whiting must be caught and landed consistent with all other rules that apply to the shoreside non-whiting sector (Option 2.2.2, Option 2.4.2, and Option 2.5.4).	N/A	N			N/A
Sub-Option 2.3.2.1 Whiting IFQ may not be transferred from one sector to another.	N/A	V			N/A
 Sub-Option 2.3.2.2 Whiting IFQ may not be transferred from persons in one sector to those in another. However, there may be midseason rollovers, adjustments that would modify the restriction on transfer between trawl sectors or directly reallocate quota pounds from one sector to another. Specification is needed on the criteria and mechanism for whiting rollover provisions. Example 1a. Fleet performance, bycatch based, forfeiture and redistribution to quota share accounts in other sectors: Whiting sector quota pound rollover based on exhaustion of a whiting sector's bycatch species pool. Rollover implemented through forfeiture. Redistribution to quota share holders. Trigger: The pool for a needed bycatch species for a whiting sector is exhausted. 1 month has passed since the pool was exhausted and there has been no substantial replenishment of the pool. Substantial replenishment would be defined as: (a) the transfer of IFQ for the bycatch species from the nonwhiting shoreside fishery to the exhausted whiting sector bycatch pool, AND (b) the completion of at least one additional whiting delivery without re-exhausting the pool. [The intent of the condition (b) is to ensure that triggering of a rollover is not 	N/A				N/A
 Key to Alternatives Alt. 1: No Action; Alt. 2: Trawl Target IFQs, Alt. 3: IFQs for all but Alt. 4: IFQs for all species, No whiting No whiting season; Total catch 	lim	its; Wh	iting se	t stackir ason; T	
season; Only report landings reporting seasons; Total catch reporting catch reporting	cat	tch rep	orting		

Key to Column
 Indicators

Alternative Management Regime Components, Elements, Subelements, Provisions and Options	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt.
prevented by the token transfer of one quota pound to the pool.]					
Forfeiture: All whiting quota pounds for the sector with the exhausted pool would be revoked. Redesignation: The quota pounds revoked and redistributed would be redesignated for the sector to which they are redistributed. Redistribution: Divide the rollover between the remaining whiting sectors in proportion to the allocation of whiting between those sectors. Within each sector, proportionally distribute the rollover to whiting quota share holders within the sector (i.e. distribute the rollover based on the amount of quota shares each person holds relative to the total quota shares for the whiting sector). Note: redistribution is to the quota share holders, not the quota pound holders.					
Example 1b. Fleet performance, bycatch based, no forfeiture and redesignation: Whiting sector quota pound rollover based on exhaustion of a whiting sector's bycatch species pool. Rollover implemented through redesignation of whiting quota pounds to allow their use by any sector. Redistribution through private transfer (registered with NMFS). Trigger: Same as 1a. Forfeiture: None.					
Redesignation: All of the sector's unused quota pounds would be redesignated for use by any sector. Such redesignated quota pounds may be used by the same owner/vessel operating in a different mode (e.g. making at-sea instead of shoreside deliveries) or transferred to a different owner/vessel for use in a different sector. The quota pounds may also be used in the same sector for which they were originally designated., if the bycatch pool is replenished. Redistribution: None. (Redistribution occurs through the private transfer of quota pounds redesignated for use in any whiting fishery).					
Example 2. Fleet performance, whiting based, no forfeiture, and redesignation: Whiting IFQ rollover based on a sector's unused whiting quota pounds. Rollover implemented through redesignation of whiting quota pounds to allow their use by any sector. Redistribution through private transfer (registered with NMFS). Trigger: More than 25% of the whiting quota pounds for a <u>whiting</u> sector remains unused (less than 75% used) after a certain date					
(initially September 15, but modifiable as part of the annual specifications process). The trigger would be evaluated sector wide, not on the basis of each individuals account. Forfeiture: None.					
Redesignation: OPTION A, 50% of the <u>unused</u> quota pounds associated with each account redesignated for use in any sector. OPTION, B 50% of the <u>quota pounds for the year</u> (used and unused) redesignated for use in any whiting sector. BOTH OPTIONS: Such redesignated quota pounds may be used by the same owner/vessel operating in a different mode (e.g. making at-sea instead of shoreside deliveries) or transferred to a different owner/vessel for use in a different sector.					
Redistribution: None. (Redistribution occurs through the private transfer of quota pounds redesignated for use in any whiting fishery).					

 Alt. 1: No Action; 	 Alt. 2: Trawl Target IFQs, 	 Alt. 3: IFQs for all but 	– Alt. 4: IFQs for all species,	 Alt. 5: Permit stacking; trip
Cumulative trip limits; Whiting	Whiting season; Total catch	Other Species, No whiting	No whiting seasons; Total	limits; Whiting season; Total
season; Only report landings	reporting	seasons; Total catch reporting	catch reporting	catch reporting

 Key to Column Indicators

Iternative Management Regime Components, Elements, Subelements, Provisions and Options	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt.
Jote A1: Under Option A, under no circumstances could all of the quota pounds be transferred to another sector. The maximum					
ransfer for the sector as a whole would be 50% of the quota pounds (if no quota pounds were used) and the minimum transfer					
vould be about 12.55% (if 74.9% of the quota pounds were used). Therefore, if this provision is triggered, between about 12.45%					
nd 50% of the quota pounds would still <u>not</u> be subject to transfer.					
Note A2: Under Option A, an individual who had used 50% of his/her total quota pounds for the year, as of the trigger date,					
could only transfer up to half of what remained in his or her account to another sector (25%). A person who had used 10% could transfer up to 50% of his/her total					
ransfer up to 45% of his/her total quota pounds for the year and one who had used 90% could transfer up to 5% of his/her total juota pounds for the year.					
Note B1: Under Option B, all of the remaining quota pounds could be transferred to another sector if every person had used at					
east half of their quota pounds for the year. The maximum transfer for the sector as a whole would be 50% (if no quota pounds					
vere used). The minimum transfer would depend on the distribution of the unused pounds among accounts. It would be 25.1%,					
74.9% of the quota pounds were used and usage was distributed relatively evenly among accounts (at least 50% of the quota					
bounds in all accounts were used); or about 12.55%, if 74.9% of the quota pounds were used and the unused pounds were held in					
ccounts that were totally unused.					
Note B2: Under Option B, for example, an individual who had used 50% or more of his/her quota pounds by the trigger date					
ould transfer all of what remained in his or her account to another sector. A person who used 10%, up to the trigger, could					
ransfer up to 50% of his/her total quota pounds for the year; and a person who had used 90% prior to the transfer could transfer up to all of his/her remaining quota pounds (10%).					
p to all of his/her remaining quota pounds (10%).					
xample 3. Individual performance, whiting based, forfeiture and redistribution to vessel accounts (within sector priority):					
Whiting sector quota pound rollover based on unused whiting quota pounds in individual accounts. Rollover implemented through					
edesignation of whiting quota pounds to allow their use by any sector. Redistribution to vessel quota pound accounts.					
rigger: More than 25% of the whiting quota pounds associated with an individual quota pound account for the year remain					
inused (less than 75% used) after a certain date (initially September 15, but modifiable as part of the annual specifications					
process). The trigger would be evaluated on the basis of each individual account. If there were whiting quota pounds for more han one sector in a single account, the evaluation would be conducted based on the whiting quota pounds for each sector (not on					
he aggregate of all whiting quota pounds held in the account). Note: There would be no way to track usage of quota pounds not					
issociated with a vessel, therefore, any quota pounds not designated for use with a particular vessel (not in a vessel account) would					
be subject to the trigger.					
orfeiture: All remaining whiting sector quota pounds in an account that activates the trigger would be forfeited.					
Redesignation: Forfeited quota pounds would be redesignated for use in a different sector only if they are redistributed to a					
lifferent sector as per the following redistribution guidance.					
Redistribution:					
VPTION As If other vessel accounts holding queta pounds for the same sector apply, distribute among accounts applying for					
DPTION A: If other vessel accounts holding quota pounds for the same sector apply, distribute among accounts applying for Key to Alternatives					
Key to Alternatives	ies –	Alt 5	- Perm	it stacki	na: tri
				it stacki eason; T	

- Indicators
- \square = this option is included in alternative; \square = option could be included but is not; N/A = option is not applicable to alternative

Alternative Management Regime Components, Elements, Subelements, Provisions and Options	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5
redistribution (vessels accounts forfeiting quota pounds may not apply). Accounts applying would designate a maximum					
redistribution that they would want to receive. Quota pounds would be redistributed					
Suboptions					
(i) equally (subject to the maximum for each recipient).					
(ii) proportionally based on whiting quota pounds held for the year, among other whiting quota pound accounts for vessels.					
If there is not sufficient interest in using whiting quota pounds for the sector for which they were originally issued, the quota pounds					
may be redesignated for use by other whiting sectors. Redesignated quota pounds would be distributed to those sectors					
proportionally to the sector's initial whiting allocation for the year and distributed among vessel accounts proportionally to the total pounds for the year held by each account.					
Quota pounds redistributed in this manner may not be transferred from the vessel account to which they are assigned (but may be					
voluntarily relinquished to NMFS for further redistribution). The transfer prohibition is intended to discourage vessels from					
applying for redistribution only for the purpose of acquiring and selling quota pounds for profit. This example probably has the					
highest administrative costs and complexity due to the nontransferability provision and need to redistribute unused remainders.					
OPTION B: Via auction (if auctions are allowed and the proceeds can be dedicated directly to defrayal of TIQ program costs) or, if					
this cannot be done, in 100,000 pound blocks via a lottery among vessel quota pound accounts registered for the lottery (one block					
of less than 100,000 pounds may be distributed in each lottery). Quota pounds redistributed in this manner will be redesignated					
for use by any sector, however, quota pounds redistributed via lottery may not be transferred from the vessel account to which they					
are assigned (but may be voluntarily relinquished for redistribution).					
Note: Under this alternative, 100% of the quota pounds for a sector may be redistributed from one sector to another but no					
compensation is made to those forfeiting the quota pounds and all members of the receiving sector benefit. This would inhibit					
contracts that would compensate someone for not using their quota pounds until after the trigger date.					
Note: To avoid forfeiture, accounts not associated with vessels would have to transfer all of their quota pounds to a vessel account					
because quota pounds can only be used in association with a vessel account. Only vessels capable of catching have vessel accounts					
(i.e. catcher vessels and catcher processors, not motherships).					

 Alt. 1: No Action; Cumulative trip limits; Whiting season; Only report landings 	 Alt. 2: Trawl Target IFQs, Whiting season; Total catch reporting 	 Alt. 3: IFQs for all but Other Species, No whiting seasons; Total catch reporting 	 Alt. 4: IFQs for all species, No whiting seasons; Total catch reporting 	 Alt. 5: Permit stacking; trip limits; Whiting season; Total catch reporting
- Key to Column	Teporting		catch reporting	caton reporting

Indicators

Alternative Manageme	ent Regime Components, Elements, Subelements, Provisions and Options	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5
Option 2.3.3	Sector specific IFQs required (i.e. not transferable from one sector to another) to cover catch during the whiting season. Outside the whiting season, cumulative whiting catch limits for shoreside deliveries. Shoreside IFQ must be held to cover whiting delivered under the cumulative limits. No whiting could be caught for at-sea delivery allowed. If needed for salmon ESA or other purposes, whiting season start dates for each sector would be set during the biennial specifications process.	N/A		V		N/A
Option 2.3.4	IFQ required to cover catch (no division of the trawl sectors, see Option 2.1.3). During the whiting season. Outside the whiting season, whiting may still be caught using IFQs, but catch is also constrained by whiting cumulative catch limits and at-sea delivery is not allowed. If needed for salmon ESA or other purposes, whiting season start dates for each sector would be set during the harvest specifications process.	N/A			V	N/A
Option 2.3.5	Same as Option 2.3.1 except that whiting cumulative limits are catch limits rather than landing limits. Permit stacking rules do not apply to whiting cumulative catch limits.	N/A				\checkmark
For purposes here, Shortspine thornyhea species are grouped	Unallocated Shared Target and Incidental Species Currently Managed With Cumulative Lir "Shared target species" are those for which trawlers take less than 90% of the catch but adds is an example of a currently unallocated shared target species. Because unallocated shared together for management, a specific definition of incidental species is not provided here. In ge process which do not provide a significant economic incentive for the particular targeting strategy of All sectors: cumulative landing limits (including whiting deliveries)	at grea target a neral in	and un ncident	alloca al spec	ted inci cies wo	dental
	On attainment of a cap, guideline or OY for a particular species, the segments of the trawl fishery that might catch that species are closed. Whiting fishery: Cumulative landing limits apply to non-whiting species. It is unlikely that a whiting fishery cap would be established for an unallocated non-whiting species; however, if that situation were to occur, the whiting season would close on attainment of the non-whiting cap. For species without whiting fishery caps, the cumulative limits that apply to all trawl vessels are set taking into account catch projections for the whiting fishery. Greater than expected catch in the whiting fishery may result in the downward adjustment of those limits.					
 Key to Alternative Alt. 1: No Action; Cumulative trip limits; V season; Only report land 	 Alt. 2: Trawl Target IFQs, – Alt. 3: IFQs for all but – Alt. 4: IFQs for all speci Whiting Whiting season; Total catch Other Species, No whiting No whiting seasons; Total 	lim		iting se	t stackir ason; T	

Alternative Management Regime Components, Elements, Subelements, Provisions and Options	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5
Option 2.4.2Shoreside non-whiting deliveries: Cumulative catch limits, transferable separate from the permit. Under low OY conditions, the cumulative catch limits will be nontransferable. Whiting fishery: shoreside, mothership, & catcher-processor whiting sectors. If a cap were to be established for an unallocated species, there would be no cumulative catch limits for the species under that cap. A procedure will be established under which all or a portion of an unused cap species may be rolled-over/transferred to another sector. More specificity needed (timing and criteria similar to that used for the current whiting rollover, rollover to a non-whiting sector)? For species without a cap, shoreside cumulative catch limits that apply except that even if cumulative limits are stacked non- whiting catch on whiting trips will be constrained to a single cumulative limit. The cumulative limits that apply to all trawl vessels take into account catch projections for the whiting fishery. Greater than expected catch in the whiting fishery may result in the downward adjustment of those limits. No special management under low OY conditions.	N/A				
Sub-Option 2.4.2.1 The duration of the cumulative limit periods will remain at two months and mid-period transfers will not be allowed.	N/A	\checkmark			
Sub-Option 2.4.2.2 The duration of the cumulative limits may be set to four months and mid- period transfers allowed.	N/A	\checkmark			
Option 2.4.3 Sector specific IFQs required to cover catch (i.e. not transferable from one sector to another.	N/A		Ŋ		N/A
Sub-Option 2.4.3.1 Under low OY conditions, switch to nontransferable cumulative catch limits. All poundage that would otherwise have been issued to holders of quota shares will be used to create a catch cap. Nontransferable cumulative limits will be used to achieve Council season duration goals. (See Element 1.5)	N/A	₽	¥	₽	N/A
Sub-Option 2.4.3.2 No special measures for low OY conditions (i.e. continue using IFQs) (See Element 1.5)	N/A	₽	A	⊟	N/A
Option 2.4.4 IFQs required to cover catch	N/A			\mathbf{N}	N/A

 Alt. 1: No Action; 	 Alt. 2: Trawl Target IFQs, 	 Alt. 3: IFQs for all but 	- Alt. 4: IFQs for all species,	 Alt. 5: Permit stacking; trip
Cumulative trip limits; Whiting	Whiting season; Total catch	Other Species, No whiting	No whiting seasons; Total	limits; Whiting season; Total
season; Only report landings	reporting	seasons; Total catch reporting	catch reporting	catch reporting

 Key to Column Indicators

Alternative Management Regime Components, Elements, Subelements, Provisions and Options	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5
Option 2.4.5 Cumulative catch limits with permit stacking rules applied for non-whiting trips. On attainment of a cap, guideline or OY for a particular species, the segments of the trawl fishery that might catch that species are closed. For the whiting fishery, cumulative catch apply to non-whiting species. It is unlikely that a whiting fishery cap would be established for an unallocated non-whiting species; however, if that situation were to occur, the whiting season would close on attainment of the non whiting trips, i.e. on whiting trips a vessel receives no credit for permit stacking.	N/A				$\mathbf{\Sigma}$
Element 2.5 "Other Fish" Groundfish: sharks (except spiny dogfish), skates, rays, ratfish, morids, and grena					
Under the current management regime these Other Species have an OY but do not have separate OYs and are		0			
limits. However, on occasion some of these species are considered for separate management (e.g. Pacific cod, S		0			
greenling). As with other species groups, composition of the group will change over time. The group will be ana	5				
2005 fishery. If action Alternative 2, 3 or 5 is implemented the management measures used for groundfish categ					
those in place just prior to the time of implementation, unless than Council follows other procedures to take ac					
biennial specifications process). If at the time the program is implemented cumulative limits are used to manage					
managed the same as "Unallocated Shared Target and Incidental Species" (Element 2.4). If there is an allocatio					
sector, they would be managed as IFQ species as per Element 2.2. In order to accommodate the possible chan	0				
this group and the possible need for allocation of IFQ an allocation analysis will be provided for the species mos	st likely	to be r	nanag	ed sepa	rately
at the time of program implementation.					
Option 2.5.3 Status Quo: monitoring only (occasional use of cumulative limits)	$\mathbf{\nabla}$				
Option 2.5.4 Monitoring only or management measures in place just prior to implementation.	N/A	\checkmark	\checkmark		$\mathbf{\nabla}$
Option 2.5.5 IFQs required to cover catch	N/A			\checkmark	N/A

 Key to Alternatives 				
 Alt. 1: No Action; 	 Alt. 2: Trawl Target IFQs, 	 Alt. 3: IFQs for all but 	– Alt. 4: IFQs for all species,	 Alt. 5: Permit stacking; trip
Cumulative trip limits; Whiting	Whiting season; Total catch	Other Species, No whiting	No whiting seasons; Total	limits; Whiting season; Total
season; Only report landings	reporting	seasons; Total catch reporting	catch reporting	catch reporting
 Key to Column Indicators 	- $\mathbf{\square}$ = this option is included in	alternative; \Box = option could be ir	ncluded but is not; $N/A = option$ is	not applicable to alternative

Alternative Manageme	nt Regime Components, Elements, Subelements, Provisions and Options	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5
Component 3 Grou	ndfish Catch of Limited Entry (LE) Trawl Vessels Using Gears Other Than Groundfish					
	I This component addresses the application of the management measures specified in					
	ponent 1, Component 2, and Error! Reference source not found. to groundfish catch by					
	trawl and exempted trawl gear used by vessels with a limited entry trawl permit. Exempted					
trawl	gears are California halibut, Pacific shrimp, sea cucumber trawl and ridgeback prawn trawl.					
	primary issue is whether the scope of the IFQ program is all catch taken by limited entry					
	vessels or just that catch taken by limited entry trawl vessels while using trawl gear.					
Element 3.4 Ex	rempted Gear (Including Exempted Trawl Gear)					
Option 3.4.3	Exempted gear landings by LE trawl vessels counts against the LE allocation (trawl and					
	fixed gear), with the exception of sablefish for which there is a separate LE trawl allocation	\checkmark				
	against which such landings count. Landings are subject to open access (OA) cumulative					
	limits and also count against limited entry trawl cumulative limits.					
Option 3.4.4	IFQ is not required for use of exempted gears. Catch counts against the OA allocation and					
	is managed as part of the OA fishery. Some catch will be allocated from the LE trawl to	N/A	$\mathbf{\nabla}$			N/A
	OA fishery.					
Option 3.4.5	IFQ is required when exempted gears are used. All catch counts against the LE allocation.					
	For species for which IFQ is not required, a vessel's catch counts against the trawl					
	cumulative catch limits. Catch by LE trawl vessels using exempted gear must be taken in	N/A		$\mathbf{\nabla}$	\mathbf{N}	N/A
	compliance with the IFQ enforcement and monitoring system and all other relevant rules	N/A				IN/A
	applying to the IFQ, including the sector to which deliveries must be made (e.g. shoreside,					
	mothership and catcher-processor designations).					
Sub-Opti	on 3.4.5.1 Open access catch control regulations (trip limits) also apply, in addition to the	N/A		\checkmark		
	IFQ requirement.	14//				
Sub-Opti	on 3.4.5.2 Open access catch control regulations (trip limits) do not apply.	N/A			\checkmark	
Option 3.4.6	Exempted gear catch by LE trawl vessels counts against LE allocation (trawl and fixed gear),	N 1/A				
	with the exception of sablefish for which there is a separate LE trawl allocation against	N/A		Ш		\checkmark
	which such catch counts.					

 Alt. 1: No Action; Cumulative trip limits; Whiting season; Only report landings 	 Alt. 2: Trawl Target IFQs, Whiting season; Total catch reporting 	 Alt. 3: IFQs for all but Other Species, No whiting seasons; Total catch reporting 	 Alt. 4: IFQs for all species, No whiting seasons; Total catch reporting 	 Alt. 5: Permit stacking; trip limits; Whiting season; Total catch reporting
 Key to Column 				

Indicators

Alternative Manageme	ent Regime Components, Elements, Subelements, Provisions and Options	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5
Sub-Opt	tion 3.4.6.1 Landings are subject to open access (OA) cumulative limits and also count against limited entry trawl cumulative limits.	N/A				
Sub-Opt	tion 3.4.6.2 Landings are not subject open access limits. Vessels may use exempt gear to fish against the limits associated with stacked permits. Enforcement and monitoring regulations for trawl gear also apply to LE trawl vessels using exempted gear.	N/A				$\mathbf{\Sigma}$
Element 3.5 L	ongline and Fishpot Gear (Fixed Gear)					
Option 3.5.3	Longline or fishpot catch by LE trawl vessels <u>without</u> a longline or pot endorsement counts against LE allocation (trawl and fixed gear), however, for sablefish there is a separate LE <u>trawl</u> allocation against which the sablefish landings count. The catch is subject to open access trip limits. Longline or fishpot catch by LE trawl vessels <u>with</u> a longline or pot endorsement counts against LE allocation (trawl and fixed gear), however, for sablefish there is a separate LE <u>fixed gear</u> allocation against which the sablefish landings count. The catch is subject to fixed gear trip limits.	$\mathbf{\nabla}$				
Option 3.5.4	IFQ is required for LE trawl vessels using longline or fishpot gear to catch species for which IFQ management is used in the trawl fishery. For species for which IFQ is not required in the trawl fishery, longline or fishpot catch counts against the trawl cumulative limits. All groundfish catch counts against the LE trawl allocation (except as noted). Catch by LE trawl vessels using longline or fishpot gear must be taken in compliance with the IFQ enforcement and monitoring system and all other relevant rules applying to the IFQ, including the sector to which deliveries must be made (e.g. shoreside, mothership and catch processor designations). An exception to this rule is provided for vessels that also have a LE fixed gear permit. In such case the rules are modified as specified Sub-Option 3.5.4.1 or Sub-Option 3.5.4.2.	N/A		Ŋ	V	N/A

– Alt. 1: No Action;	 Alt. 2: Trawl Target IFQs, 	 Alt. 3: IFQs for all but 	- Alt. 4: IFQs for all species,	 Alt. 5: Permit stacking; trip
Cumulative trip limits; Whiting	Whiting season; Total catch	Other Species, No whiting	No whiting seasons; Total	limits; Whiting season; Total
season; Only report landings	reporting	seasons; Total catch reporting	catch reporting	catch reporting
K (A)				

 Key to Column Indicators

Alternative Management Regime Components, Elements, Subelements, Provisions and Options	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5
Sub-Option 3.5.4.1 For LE trawl vessels without a LE fixed gear permit, LE fixed gear catch control regulations (trip limits) apply and all longline and fishpot gear catch must be covered by IFQ or trawl cumulative limits. For LE trawl vessels that also hold a LE fixed gear permit, IFQ is not required to cover catch taken toward fixed gear cumulative or daily limits, catch taken toward the limits need not comply with the trawl IFQ monitoring and enforcement system, and such catch or landings count against the LE fixed gear allocation (i.e. for vessels with both LE trawl and fixed gear permits there is no opportunity to use trawl IFQ to increase harvest using longline or fishpot gear).	N/A	V			N/A
gear). Sub-Option 3.5.4.2 For LE trawl vessels without LE fixed gear permits, LE fixed gear catch control regulations (trip limits) do not apply and IFQ is required for all longline and fishpot gear catch. For LE trawl vessels with an LE fixed gear permit, IFQ is not required to cover catch taken toward the fixed gear trip limits; catch taken toward the limits need not comply with the trawl IFQ monitoring and enforcement system, and catch taken toward the limits counts against the LE fixed gear allocation. Longline or fishpot catch taken after fixed gear limits have been reached must be covered by IFQ or trawl cumulative limits, and be taken in compliance with the trawl IFQ monitoring and enforcement system and other relevant rules.			V	V	N/A
Option 3.5.5 Longline or fishpot catch by LE trawl vessels without a longline or pot endorsement counts against LE allocation (trawl and fixed gear), however, for sablefish there is a separate LE trawl allocation against which the sablefish landings count. Longline or fishpot catch by LE trawl vessels with a longline or pot endorsement counts against LE allocation (trawl and fixed gear), however, for sablefish there is a separate LE fixed gear allocation against which the sablefish landings count. The catch is subject to fixed gear trip limits.	N/A				
Sub-Option 3.5.5.1 The catch is subject to open access trip limits or fixed gear limits, depending on whether or not an LE fixed gear permit is held.	N/A				\checkmark

 Key to Alternatives 				
 Alt. 1: No Action; 	 Alt. 2: Trawl Target IFQs, 	 Alt. 3: IFQs for all but 	- Alt. 4: IFQs for all species,	 Alt. 5: Permit stacking; trip
Cumulative trip limits; Whiting	Whiting season; Total catch	Other Species, No whiting	No whiting seasons; Total	limits; Whiting season; Total
season; Only report landings	reporting	seasons; Total catch reporting	catch reporting	catch reporting
 Key to Column Indicators 	- $\mathbf{\square}$ = this option is included in	alternative; \Box = option could be ir	ncluded but is not; N/A = option is	not applicable to alternative

Alternative Manageme	ent Regime Components, Elements, Subelements, Provisions and Options	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5
	tion 3.5.5.2 The catch is subject to stacked trawl permit limits, and enforcement and monitoring requirements for the trawl fishery apply, except that vessels with sablefish endorsed fixed gear permits may take their tier sablefish limits and associated incidental catch under the rules which apply to the LE fixed gear fishery. The tiered sablefish limits will not count toward the trawl limits.	N/A				V
Component 4 At-S	Sea Observers/Monitoring					
Option 4.4.3	No action (status quo) monitoring includes 100 percent observers on catcher-processors and motherships in the whiting fishery. Biological observers from the WCGOP are present for other segments of the LE trawl fishery. All LE trawl vessels carry VMS.					
Option 4.4.4	Detailed monitoring and enforcement programs are specified in the IFQ Program Alternatives (Programs A, B and C). These monitoring and enforcement programs include 100 percent at-sea monitoring, upgraded bycatch reporting, electronic landings reporting, shoreside monitoring of deliveries, advance notice of landing, limited delivery locations/ports, electronic IFQ tracking and continues use of VMS. LE trawl vessels would be required to be in compliance with such programs any time they are harvesting against LE trawl catch limits, including IFQ.	N/A	V	V	V	
Option 4.4.5	In addition to the no action (status quo) monitoring and enforcement, 100 percent observers (or equivalent means of monitoring) would be required for vessels fishing on trawl cumulative limits, due to the conversion from status quo cumulative landing limits to cumulative catch limits.	N/A				V
•	Management. Decision deferred until additional information is available, e.g. preliminary S is ready.					
Option 5.4.3	Species divided by areas based on stock assessment information. New area divisions	V				
Option 5.4.4	created as stock assessment information indicates need. Plan to establish additional regional management areas as needed at a later time.	N/A				
Option 5.4.5	Process Option: Task a group to begin considering the need for additional regional management areas (biological or socio-economic) and potential boundaries along with a process for identifying and responding to regional management area issues that may develop or become more apparent in the future.	N/A	V		V	V
 Key to Alternative 	es					
 Alt. 1: No Action; Cumulative trip limits; V season; Only report lan 	 Alt. 2: Trawl Target IFQs, – Alt. 3: IFQs for all but – Alt. 4: IFQs for all species Whiting whiting season; Total catch Other Species, No whiting No whiting seasons; Total 	lim		iting se	it stackii eason; T	
 Key to Column Indicators 	- \square = this option is included in alternative; \square = option could be included but is not; N/A = option				lternativ	e

Alternative Management Regime Components, Elements, Subelements, Provisions and Options	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5
Component 6 Sector Allocation					
Element 6.4 Within Trawl Allocation. Allocation among LE trawl sectors.					
Option 6.4.3 Whiting allocation rules. No other within trawl allocations. Note: The following formulas all require resolution of differences in the completeness of the reporting of bycatch species between each of the trawl sectors over the entire time period used for the allocation.					Ø
Option 6.4.4 Establish the allocation among trawl sectors based on each sector's relative shares during the time period used for initial IFQ allocation. If different periods are used for different trawl sectors calculate the share for each sector based on its IFQ allocation period, then adjust all percentages proportionately such that they sum to 100%.		V	A	V	
Sub-Option 6.4.4.1 Apply a recency requirement such that the catch history of any vessel which does not meet the recent participation requirement (if any) for the initial allocation is not included in the calculation of sector shares.		\checkmark	\checkmark	\checkmark	
Sub-Option 6.4.4.2Do not apply a recency requirement.	N/A	\checkmark	\checkmark	\checkmark	
Option 6.4.5 Establish the allocation among trawl sectors based on each sector's relative shares during the time period used for initial IFQ allocation. If different periods are used for different trawl sectors use the shortest period common to the allocation formula for all sectors.		V	V	\checkmark	
Sub-Option 6.4.5.1 Apply a recency requirement such that the catch history of any vessel which does not meet the recent participation requirement (if any) for the initial allocation is not included in the calculation of sector shares.		V	\checkmark	\checkmark	
Sub-Option 6.4.5.2Do not apply a recency requirement.	N/A	\checkmark	\checkmark	\checkmark	
Element 6.5 Trawl/Non-trawl Allocation. Allocation between LE trawl and all other sectors, (recreational and commercial)					
Option 6.5.3 Rely on biennial specifications process to establish the needed intersector allocations.	N/A	\checkmark	\checkmark	\checkmark	\checkmark
Option 6.5.4 Establish needed intersector allocations through the intersector allocation process. (NOTE: Intersector allocations are needed for implementation of Amendment 18).	N/A	\checkmark	\checkmark	\checkmark	\checkmark

 Alt. 1: No Action; 	 Alt. 2: Trawl Target IFQs, 	 Alt. 3: IFQs for all but 	- Alt. 4: IFQs for all species,	 Alt. 5: Permit stacking; trip
Cumulative trip limits; Whiting	Whiting season; Total catch	Other Species, No whiting	No whiting seasons; Total	limits; Whiting season; Total
season; Only report landings	reporting	seasons; Total catch reporting	catch reporting	catch reporting

 Key to Column Indicators

Alternative Managemen	t Regime Components, Elements, Subelements, Provisions and Options	Alt. 1	Alt. 2	Alt. 3	Alt. 4	Alt. 5
Element 6.6 Tra	awl/Open Access Allocation. Adjustment of allocation between LE trawl and open access				1	
gea	ars to account for change in catch accounting rules.				ł	
-	No change to the open access allocation needed as a result of provisions of the management regime alternatives.	N/A		\mathbf{N}	$\mathbf{\nabla}$	V
	Augment the open access allocation to account for trawl vessels fishing with open access gear on the open access allocation (Option 3.4.4)	N/A	\checkmark			

 Key to Alternatives 				
 Alt. 1: No Action; 	 Alt. 2: Trawl Target IFQs, 	 Alt. 3: IFQs for all but 	– Alt. 4: IFQs for all species,	 Alt. 5: Permit stacking; trip
Cumulative trip limits; Whiting	Whiting season; Total catch	Other Species, No whiting	No whiting seasons; Total	limits; Whiting season; Total
season; Only report landings	reporting	seasons; Total catch reporting	catch reporting	catch reporting
 Key to Column Indicators 	- $\mathbf{\square}$ = this option is included in	alternative; $\Box = option could be in$	ncluded but is not; N/A = option is	not applicable to alternative

IFQ Program Components Table

This section of the Components Table deals with the initial allocation QS and the annual allocation of QP. QS differ from QP in that QP represent an annual catch amount allocated to a person, whereas a person's QS represent portions of the total pool of quota shares (QSP).

The allocation of QS is typically based on historical participation. For example, under one option, a harvester's QS would be based on the total of all pounds landed under the permit from 1994 – 2003 after dropping the two worst years. For a given year, QP for a species are an individual's QS as a percent of all quota shares issued for that species, multiplied by the sector allocation for that species for that year. It should be noted that QS need not be based on catch history. For example each participant could be issued 1,000 QS for every year they fished, or each participant might be issued 10 QS of species Y for every 100 pounds of species X. The former method might be used if documentation of historical participation is suspect, while the latter might be used to issue quota shares for incidental species that fishers were trying to avoid.

The trawl IFQ program has several complicating features. One such feature is that multiple groups could be issued QS, and the proportion of QS going to each group may be predetermined. There are also options that would use different catch history periods for the different groups. While this type of allocation is complicated, it should not be considered a stumbling block if decision makers have predetermined the proportion that would go to each group. Assume for example that Group X's QS are allocated based on landings from one set of years—say 1994 – 2003, and Groups Y's QS are based on a different set of years 2000 – 2004. Furthermore, assume that both groups are to be allocated 50 percent of the QS; the total amount of history for a particular species over all members Group A was 10 million pounds, and the total amount for Group B was 4 million pounds. If Group A's history is divided by 10 and Group B's history is divided by 4, and quota shares are issued based on the result, then each group would receive 1 million QS, thus assuring that each group gets 50 percent of the allocation.

Another complicating feature of the trawl IFQ program is the fact that the reporting system for shoreside deliveries shows the total amount landed rather than total amount caught. For target species, or for species that are not constraining to the fishery, it is likely that landings are approximately equal to total catch. But for many incidental catch species (e.g., those with low value) or overfished species that constrain the fishery, landings may be a very poor indicator of historical catch. Furthermore, even if all catch of incidental species were reported, it may not be reasonable to award QS of incidental species based on historical catches. Assume for example there are two fishers A and B. Fisher A is very methodical and works hard to avoid incidental catches and lands 100 pounds of incidental catch for every 1,000 pounds of target catch. Fisher B is a less careful fisher and lands 600 pounds of incidental catch for every 1,000 pounds of target. If landing history were used for incidental catch, then Fisher B would get significantly more QS than Fisher A, and in a sense would be rewarded for not fishing cleanly. From this perspective it may be more equitable to consider methods other than historical landings to issue quota shares for incidental or overfished species.

The remainder of this section is structured as a table similar to the previous section. It should be noted that QS are only applicable to Alternatives 2 – 4. It should also be noted that the Council developed three basic programs for issuance of QS—Program A, Program B and Program C. In the main suite of alternatives, Program C was matched with Alternatives 2, 3 or 4 for analysis, while Programs A and B were matched with Alternative 3. The application of each of the programs to Alternative 3 creates three full sub-alternatives for Alternative 3. The intent of was to allow the alternatives to be compared with one another using the same IFQ program, and to allow the various programs to be compared

using the same main alternative. With this approach, the Council hopes the information necessary to choose between any combination of management alternatives and IFQ programs will be generated.

Table 2-4. IFQ program alternatives components, elements, a	and options
---	-------------

IFQ Program Alternat	tives, Components, Elements, Subelements, Provisions and Options	Alt. 2C	Alt. 3A	Alt. 3B	Alt. 3C	Alt. 4C
Component B.1	Initial Allocation of Quota Shares and Post Implementation Modification of Quota Share Categories					
Element B.1.1 Elig	gible Groups and Relative Shares					
Under this element, th SubElement B.1.1.1 SubElement B.1.1.2 SubElement B.1.1.3	e following sub-elements must be addressed Eligible Groups (including the vehicle which accumulates processing/processor history) Definition of Processor and Processing Portion of the Quota Shares to be Allocated to Each Group					
SubElement B.1.1	.1Eligible Groups					
	(B.1.1.1) Permit owners at the time of the allocation including permits used for catcher- processors. e owner of a permit at the time of landing may be linked to a fish ticket based on the fish ticket	V	V	V	V	V
Option B	(B.1.1.1) Permit owners at the time of the landing including permit held for catcher processors—this option was not specifically included as part of one of TIQ programs.		X	X	X	
Option C	(B.1.1.1) Processors (including motherships and catcher-processors): The current owner of a processing facility. Processing history accrues to the processing facility. (Options under SubElement B.1.1.2 must be selected to define processor and processing for purpose of this option.)			N/A		V
Option D	 (B.1.1.1) Processors (including motherships and catcher-processors): The current owner of a processing facility unless leased, in which case the allocation would go to the lessee. Processing history accrues tot he processing facility. (Options under SubElement B.1.1.2 must be selected to define processor and processing for purpose of this option.) 	V		N/A		

IFQ Program Alternatives, Components, Elements, Subelements, Provisions and Options	Alt. 2C	Alt. 3A	Alt. 3B	Alt. 3C	Alt. 4C
Option E (B.1.1.1) Processors (including motherships): The person processing (individual, partnership, corporation or other entity). Processing history accrues to the entity doing the processing and is not conveyed to subsequent owners of the processing facility. (Options under SubElement B.1.1.2 must be selected to define processor and processing for purpose of this option.) Note: Catch processors develop a consensus allocation formula under this options.	V		N/A	V	
Option F (B.1.1.1) Vessel Owners—This option was not specifically included as part of one of TIQ programs.		X			X
Option G (B.1.1.1) Skippers—This option was not specifically included as part of one of TIQ programs. Currently, there is no official centralized data set regarding skippers sufficient to document participation on a landing by landing basis. A list of licensed operators for each vessel is available for Washington but not for other states.					
Option H (B.1.1.1) Crew Members— This option was not specifically included as part of one of TIQ programs. Currently, there is no official centralized data set regarding crew members sufficient to consistently document participation on a landing-by-landing. Partial lists of licensed crew members are available for Oregon and California. These lists do not include the names of those individuals working under "John Doe" licenses.					
Option I (B.1.1.1) Communities— The Council evaluated direct allocation to communities at its November 2005 meeting and determined that (1) communities could purchase QS if they so desired and (2) allowing communities to purchase QS and other measures would mitigate impacts to communities.					
Option J (B.1.1.1) The Public—Lottery Entrants (possibly in combination with an auction)		X	X		X
Option K (B.1.1.1) The Public—Auction Winners (possibly in combination with a lottery)				X	X

Program Alternatives, Components, Elements, Subelements, Provisions and Options	Alt. 2C	Alt. 3A	Alt. 3B	Alt. 3C	Alt. 4C
SubElement B.1.1.2 Processor Definition					
Sublement B.1.1.2Processor Definition Option A (B.1.1.2) (Adopted by the Council June 2006 and replacing other potential sub-options.) 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. 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 at-sea" and that has not been "processing." Entities that received fish that have not undergone "at-sea processing" is defined in this paragraph) and sell that fish directly to consumers shall not be considered a "processor" for purposes of QS/QP allocations. a. The recipient of the groundfish listed on the fishticket is presumed to be the first processor auless evidence is presented to NMFS that some other entity was the processor as defined in this section. "Shoreside Processing" is defined as either of the following: 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 of live groundfish from a harvesting vessel. For the at-sea fishery, observer data and weekly processing reports will be used to document landings. Item d. may potentially result in conflicting claims to the history for a particular landing (e.g. claims by letential) result in conflicting claims to the history for a particular landing (e.g. claims by letential) result in conflicting claims to the history for a particular landing (e.g. claims by letential) result in c			N/A		

ram Alternatives, Components, Elements, Subelements, Provisions and Options	Alt. 2C	Alt. 3A	Alt. 3B	Alt. 3C	
for adjudication. Further criteria will need to be developed for use in adjudication.					-
Option B (B.1.1.2) Definition 2. (Adopted by the Council for analysis June 2005)					
The "processor" is the entity which - 1. after processing, sells his or her own LE trawl vessel-caught groundfish directly to a wholesale or retail market; OR 2. buys unprocessed trawl-caught groundfish, processes it, and sells it to the wholesale or retail market.					
"Processing" means the preparation or packaging of groundfish to render it suitable for huma consumption, retail sale, industrial uses, or long term storage, including, but not limited to, cookin canning, smoking, salting, drying, filleting, freezing, or rendering into meal or oil, but does not mea heading or gutting unless additional preparation is done. <i>[This is the current FMP definition-</i> <i>"processing."]</i>	g, in	Ð	N/A	H	
Option C (B.1.1.2) Definition 3. (Adopted by the Council for analysis June 2005)					
The "processor" is a- "person, vessel, or facility that engages in processing; or receives live groundfist directly from a fishing vessel for retail sale without further processing." <i>[This is the current FN</i> <i>definition]</i>		₽	N/A	₽	
Processing is as defined in Option B (B.1.1.2).					
lement B.1.1.3 Portion of the Quota Shares to be Allocated to Each Group					
Initial Division of QS to Eligible Groups. The Council should choose one of the following options. The extent that impacts can be interpolated based on results from the analysis, at the time of final action the Council may select midpoints or mixed-and-match among the options. For example, the Counch has expressed interest in (1) a 90/10 permit holder/processor split (a midpoint); and (2) an option providing a 50/50 permit owner/processor split for whiting and a 100/0 permit owner/processor split for non-whiting (a mix-and-match). It may be possible for the Council to construct and select one these midpoint or mix-and-match options when it takes final action.	on cil on lit				
Option A (B.1.1.3) 50 percent of quota shares to permit owners and 50 percent to processors.		\checkmark			
		<u> </u>			-

IFQ Program Alternatives, Components, Elements, Subelements, Provisions and Options	Alt. 2C	Alt. 3A	Alt. 3B	Alt. 3C	Alt. 4C
Option C (B.1.1.3) 75 percent of quota shares to permit owners and 25 percent to processors.					
Note, under SubElement B.2.2.5 and Component B.4, an option is specified under which each year the Council could allocate up to 20% of the available pounds to quota share holders presenting proposals designed to benefit communities. This would not change the amount of quota shares initially issued to permit owners and processors but would change the amount of quota pounds issued each year for those shares. This option for a community stability holdback could also be combined with either Option A (B.1.1.3) or Option B (B.1.1.3).	V				V
Option D (B.1.1.3) Non-whiting: 100 percent of quota shares to current permit owners. Whiting 50 percent of quota shares to current permit owners and 50 percent to processors.		X	X	X	X
Option E (B.1.1.3) 90 percent of quota shares to current permit owners; 10 percent to processors.		X	X	X	X
Element B.1.2 Qualifying Criteria: Recent Participation <i>This element deals with the issue of whether applicants for QS (both permit owners and processors) must meet the recent participation criteria in order to receive QS.</i>					
Note that the options developed thus far do not include specific criteria regarding the number of landings or years that would be needed to meet the recent participation standard. Recent participation requirements can have significant impacts on the number of individuals eligible to receive QS. Also note that the options forwarded by the Council contained one alternative with two sub-options for recent participation.					
SubElement B.1.2.1 Permits (Catcher and Catcher-Processors)					
<i>Option A (B.1.2.1)</i> No permit recent participation required for permit owner to receive an initial allocation of QS.			$\mathbf{\overline{\mathbf{N}}}$		
<i>Option B (B.1.2.1)</i> In order to receive an initial allocation of QS a trawl permit must meet the recent participation standard between 1998 – 2003	\checkmark	\mathbf{N}	V	\mathbf{N}	\mathbf{N}
The Council would choose one of the following sub-options to complete an alternative.					
Sub-Opt B.1 (B.1.2.1) The standard for recent participation is at least one groundfish trawl landing/delivery of any groundfish species landing during the period.	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark
Sub-Opt B.2 (B.1.2.1) The standard for recent participation is at least one groundfish trawl	\checkmark		\checkmark	\checkmark	\checkmark

Q Program Alternatives, Components, Elements, Subelements, Provisions and Options	Alt. 2C	Alt. 3A	Alt. 3B	Alt. 3C	Alt. 4C
landing/delivery of any groundfish species in each of XX years during the period.					
Sub-Opt B.3 (B.1.2.1) The standard for recent participation is at least XX groundfish trawl landings/deliveries of any groundfish species during the period.	$\mathbf{\nabla}$	\checkmark	\checkmark	\checkmark	\checkmark
Option C (B.1.2.1) In order to receive an initial allocation of QS a trawl permit must meet the recent participation standard between 2000 – 2003		X	X	X	X
SubElement B.1.2.2 Processors (Shoreside and Motherships).					
<i>Option A (B.1.2.2)</i> No processor recent participation required of processors to receive an initial allocation of QS.			N/A		
Does the Council want at least one option with no recent participation requirement for processors?					
<i>Option B (B.1.2.2)</i> In order to receive an initial allocation of QS a processor must meet the recent participation standard between 1998 – 2003			N/A		
The Council would choose one of the following sub-options to complete an alternative.					
Sub-Opt B.1 (B.1.2.2) The standard for recent participation is at least one groundfish trawl landing/delivery of any groundfish species landing during the period.			N/A		
Sub-Opt B.2 (B.1.2.2) The standard for recent participation is at least one groundfish trawl landing/delivery of any groundfish species in each of XX years during the period.			N/A		
Sub-Opt B.3 (B.1.2.2) The standard for recent participation is at least XX groundfish trawl landings/deliveries of any groundfish species during the period.			N/A		
Option C (B.1.2.2) In order to receive an initial allocation of QS a processor must meet the recent participation standard between 2000 – 2003		X	NKA	X	
<i>Option D (B.1.2.2)</i> In order to receive an initial allocation of QS a processor must meet the recent participation standard between 1999 – 2004	$\mathbf{\overline{\mathbf{A}}}$	J	N/A	V	$\overline{\mathbf{V}}$
The Council would choose one of the following sub-options to complete an alternative.					

IFO Descrete Alternatives, Commenceda, Flowerska, Cubelementa, Descriptions and Ontions		Alt.	Alt.	Alt.	Alt.
IFQ Program Alternatives, Components, Elements, Subelements, Provisions and Options	Alt. 2C	3A	3B	3C	4C
Sub-Opt D.1 (B.1.2.2) The standard for recent participation is at least one groundfish trawl landing/delivery of any groundfish species landing during the period.		\checkmark	N/A	\checkmark	
Sub-Opt D.2 (B.1.2.2) The standard for recent participation is at least one groundfish trawl landing/delivery of any groundfish species in each of XX years during the period.		\checkmark	N/A	\mathbf{V}	\checkmark
Sub-Opt D.3 (B.1.2.2) The standard for recent participation is at least XX groundfish trawl landings/deliveries of any groundfish species during the period.		\checkmark	N/A	\checkmark	\checkmark
Element B.1.3 Elements of the Allocation Formula					
SubElement B.1.3.1 Catcher Vessel Permit Owners (Rule needed to distinguish from catcher- processor permits: permits endorsed for less than XXX feet)					
Option A (B.1.3.1) Permit history relative to other permits remaining after the buy-back, plus an equally split proportion of the quota shares that would have been attributed to bought back permits had they not been bought back (based on the catch history of the bought back permits).	Ŋ	V	V	V	\checkmark
Sub-Opt A.1 (B.1.3.1) Allocate quota shares for overfished species in the same manner as for all other groundfish species.	\checkmark	\checkmark	\checkmark	V	\checkmark
Sub-Opt A.2 (B.1.3.1) Allocate quota shares for overfished species equally among all permits.		\checkmark	\checkmark	\checkmark	\checkmark
Option B (B.1.3.1) Relative permit history (history for a permit relative to other permits)					
Option C (B.1.3.1) Auction					
Option D (B.1.3.1) Equal allocation. Divide quota shares evenly among all qualified applicants.		X	X	X	X
SubElement B.1.3.2 Catcher-Processors Permits (permits endorsed for more than XXX feet)	~~~~~				
Option A (B.1.3.2) Consensus allocation formula developed by the sector (to be provided)	Ń	\checkmark		\checkmark	\checkmark
Option B (B.1.3.2) Relative Permit history (history for a permit relative to other permits)			\checkmark		
Option C (B.1.3.2) Auction					

IFQ Program Alternatives, Components, Elements, Subelements, Provisions and Options	Alt. 2C	Alt. 3A	Alt. 3B	Alt. 3C	Alt. 4C
Option D (B.1.3.2) Equal allocation. Divide quota shares evenly among all qualified applicants.		X	X	X	X
SubElement B.1.3.3 Processors (Shoreside and Motherships)					
Option A (B.1.3.3) Relative processing history as defined in the processor options of SubElement B.1.1.2 and the processor/processing definitions of SubElement B.1.1.1.	\checkmark	\mathbf{V}	N/A	Ŋ	$\overline{\mathbf{A}}$
Option B (B.1.3.3) Auction					
Option C (B.1.3.3) Equal allocation. Divide quota shares evenly among all qualified applicants.			X	X	
Element B.1.4 Species/Species Groups to Be Allocated and Used for Allocation, Including Post Implementation Subdivision			· · · · · · · · · · · · · · · · · · ·		
SubElement B.1.4.1Species and Species Groups to be Allocated					
Option A (B.1.4.1) Allocate QS only for those species and species groups which are identified in the OY table and are to be managed using IFQ at the start of the program.					
The species and species groups for which QS will be allocated are those:					
 Which, at the time of implementation are listed in the most recently approved OY table, or the OY table developed to be implemented at the same time as the TIQ program; AND 					
ii. Are identified for management with IFQs under the scope of the management regime (Section 1 of the component tables, Table 2-3), AND					
iii. For which a trawl allocation has been or will be established either as part of an explicit intersector allocation action or as part of the biennial management process.		\square			\square
Separate quota shares will be issued for species and species groups for each geographic subdivision for the species/species group that is listed in the OY table. If at some future time a management unit is subdivided, quota shares owners will be issued shares for the subunits that are equivalent to their holdings of the shares being subdivided. This provision for future subdivision was Element B.1.8 of the June 2006 draft.					
Subdivision:There will be no subdivisions of QS for species groups or geographic areas, beyond the subdivisions for which OYs are established in any particular management period.					

IFQ Program Alternatives, Components, Elem	ents, Subelements, Provisions and Options	Alt. 2C	Alt. 3A	Alt. 3B	Alt. 3C	Alt. 4C
	xistence at the time of initial allocation are subdivided at a later time, line here will be followed.					
<i>established<u>.</u> Does the TIQ program</i> <i>begin to operate except with respec</i> <i>Should there be a provision (esca</i> <i>determine, prior to the start of th</i>	the provided as to what happens if the needed allocations are not in go on hold until such allocations are established or does the program at to those species for which the an allocation has not been established. The clause) which allows the Council to recommend and NMFS to be program whether or not the failure to establish an allocation for a trant delay in the start of the program?					
included, or are added back in, the rebuilt to certain levels. Under th	isions have now been eliminated from consideration. If they had been in some overfished species might not be managed with IFQ until they are is provision, as currently specified, QS would not be issued for those point that they would be subject to IFQ management.					
Sub-Opt A.1 (B.1.4.1)	Future QS for non-IFQ species: Any species or species group for which quota share was not initially allocated may be allocated at a later time based on criteria determined by the Council at that time.					
Sub-Opt A.2 (B.1.4.1)	Future QS for non-IFQ species: Any species or species group for which quota share was not initially allocated may be allocated at a later time based on a persons holding of QS for other species or species group. The allocation approach suggested here for consideration is intended to eliminate incentive to fish for history for species not initially covered by the TIQ program.					
Option B (B.1.4.1) Allocate QS for	all species and species groups.					
The species and species groups for	which QS will be allocated are those:					
table, or the C program. QS but become ac those species.	time of implementation are listed in the most recently approved OY DY table developed to be implemented at the same time as the TIQ for species not managed under the IFQ program will remain dormant ctive only if ever the Council decides to extend the IFQ program to If at some future time a management unit is subdivided, quota shares ill be subdivided by issuing quota share owners amount of shares for					

IFQ Program Alternatives, Co	mponents, Elements, Subelements, Provisions and Options	Alt. 2C	Alt. 3A	Alt. 3B	Alt. 3C	Alt. 4C
	the subdivisions equivalent to their holdings of the shares being subdivided. Previously Element B.1.8.					
Subdivision:	There will be no subdivisions of QS for species groups or geographic areas, beyond the subdivisions for which OYs are established in any particular management period. If the OYs in existence at the time of initial allocation are subdivided at a later time, procedures outline above will be followed.					
Option C (B.1.4.1)	Same as Option A (B.1.4.1) OR Option B (B.1.4.1) except:					
	es groups or geographic areas for species and species groups may be further subdivided isions listed in the OY table) at the Council discretion to meet other objectives that may ose subdivisions.	_	_	_		_
point, the Cou management. subdivisions are	Iditional subdivision contemplated at this time would be for area management. At this ncil has left open the question of whether there would be further subdivisions for area The subdivisions or rules for the subdivision need to be further developed. If the e left for a later time, they may be implemented as per other provisions of Component ion 1 of the component table, Table 2-3)					
SubElement B.1.4.2Specie	s and Species Groups to be Used for Allocation					
Option A (B.1.4.2)	Species by Species Evaluation					
history, the landing/d permit/processor to re B.1.3.2 or SubElement	QS for each species or species groups that will be allocated based on landing/delivery lelivery history for that species or species group will be evaluated for each ceive an allocation, unless otherwise specified in SubElement B.1.3.1, SubElement E.1.3.3. (Under each of these sub-elements there is an option under which some ed based on catch history for one or more target species).				N	
aggregated with other s	h the landings/deliveries for particular species or species group to be allocated were pecies or species groups, catch composition data will be applied to estimate the annual ciated with each permit/processor.					
	catch species is allocated based on a co-occurring target species, rather than the actual al species, an assumed incidental catch rate will be established based on available data.					

IFQ Program Alternatives, Components, Elements, Subelements, Provisions and Options	Alt. 2C	Alt. 3A	Alt. 3B	Alt. 3C	Alt. 4C
Such rate will need to be developed and adopted as part of the program. There may be different incidental rates for different co-occurring target species. For example, for darkblotched rockfish in the shoreside non-whiting fishery there may be one incidental rate applied to thornyhead landed and another applied to widow landed. The rates will be multiplied by the history for each target species (in this case thornyhead and widow) and the results summed to develop a single estimate of history for a particular permit or processor. Each permit/processor in a sector would receive allocation based on their history relative to other permits/processors in the sector, as determined in this manner.					
Option B (B.1.4.2) Same as Option A (B.1.4.2) except allocate certain incidental catch species (e.g. overfished species) based on incidental catch rates applied to the catch history for target species. The following are the species/species groups and the proxies that would be used for each: (This list needs to be completed and a determination made of the "incidental catch rates" that will be applied. Aggregate observer data from 2002 – 2006 may be available to estimates incidental catch rates for each target. This data will be less applicable to catch in the 1990s than in more recent years. The rates will be rough approximations and their use would be based on the idea that this approach is more equitable for incidental catch species than relying on historic data for those species.)					
Species/Species Group Proxies Option C (B.1.4.2) Total Groundfish and Whiting Evaluation		\/	\	\/	\/
 Non-whiting Species: For the portion of the non-whiting QS that will be allocated based on landing/delivery history, the landing/delivery history for groundfish as a whole (except whiting) will be evaluated for each permit/processor to receive an allocation. Whiting: For the portion of the whiting QS that will be allocated based on landing/delivery history, the landing/delivery history for whiting will be evaluated for each permit/processor to receive an allocation. 					

Program Alternatives,	Components, Elements, Subelements, Provisions and Options	Alt. 2C	Alt. 3A	Alt. 3B	Alt. 3C	Al 4(
Element B.1.5 History:	Allocation Periods, Data Sets, and Weighting					
SubElement B.1.5.1	Periods and Data Sets for Permits: Shoreside Landings					
Option A (B.1.5	5. 1) Use fish-tickets associated with landings under the permit from 1994-2003. Apply best available species composition information as necessary to disaggregate recorded species groups into the needed species/species group categories.	V	\checkmark	\checkmark	\checkmark	[
Sub-Opt A.	1 (B.1.5.1)No option for a permit to drop its worst years.	\checkmark	\checkmark	\checkmark	\checkmark	
Sub-Opt A.2	2 (B.1.5.1) Each permit drops its 3 worst years for each non-whiting species and 2 worst years for whiting.	\checkmark	\checkmark	\checkmark	\checkmark	
Option B (B.1.5	5.1) Use fish-tickets associated with landings under the permit from 1994-1999 . Apply best available species composition information as necessary to disaggregate recorded species groups into the needed species/species group categories.					
Sub-Opt B.	1 (B.1.5.1)No option for a permit to drop its worst years.					
Sub-Opt B.2	2 (B.1.5.1) Each permit drops its worst year for each species.					
Option C (B.1.5	5.1) Use fish-tickets associated with landings under the permit from 1998-2003. Apply best available species composition information as necessary to disaggregate recorded species groups into the needed species/species group categories.					
Sub-Opt C.	1 (B.1.5.1)No option for a permit to drop its worst years.					
Sub-Opt C.2	2 (B.1.5.1) Each permit drops its worst year for each species.					
Option D (B.1.5	 5.1) Use fish-tickets associated with landings under the permit from 2000-2003. Apply best available species composition information as necessary to disaggregate recorded species groups into the needed species/species group categories. No option for a permit to drop its worst years. 					

IFQ Program Alternatives, Co	mponents, Elements, Subelements, Provisions and Options	Alt. 2C	Alt. 3A	Alt. 3B	Alt. 3C	Alt. 4C
SubElement B.1.5.2	Periods and Data Sets for Permits: At-Sea Catcher Vessel Deliveries (Include catcher-processors, if appropriate as per SubElement B.1.3.2).					
data are likely to indicate catch	and catch processors have had 100 percent observer coverage for most of the period, the es of incidental species. The following options specify use of observer data for allocating Data completeness for shorebased fisheries depends on full retention rule compliance.					
of at-sea delivery records and sl treatment of shoreside and at-s allocated to the at-sea sectors of trawl sectors arising from differe a single trawl sector (i.e. quota of developing a dataset with s among the sectors for purposes	ave the same quality and completeness as data for shoreside deliveries. The combination horeside fishticket records into a single calculation of catch history could result in uneven ea quota share recipients. As long as the delivery records are used to divide quota share only among participants in that sector, there should not be any equity issues among the ences in the data quality. Only under Management Regime Alternative 4 would there be shares would not be designated for use by a particular sector). Because of the difficulty imilar quality data for all trawl sectors, it is likely the quota shares would be divided s of initial allocation only. There would be no trawl sector specific designations for the itial issuance was completed the shares could be traded among the various trawl sectors.					
Option A (B.1.5.2)	Use observer data associated with deliveries under the permit from 1994-2003.	\checkmark	\checkmark	\mathbf{N}	\checkmark	\checkmark
Sub-Opt A.1(B.1.5.2)No option for a permit to drop its worst years.		\checkmark	\checkmark	\checkmark	\checkmark
Sub-Opt A.2 (B.1.5.2)Each permit drops its 2 worst years for each species.		\checkmark	V	\mathbf{N}	\checkmark
Option B (B.1.5.2)	Use observer data associated with deliveries under the permit from 1994-1999.					
Sub-Opt B.1 (B.1.5.2)No option for a permit to drop its worst years.					
Sub-Opt B.2 (B.1.5.2)Each permit drops its worst year for each species.					
Option C (B.1.5.2)	Use observer data associated with deliveries under the permit from 1998-2003 . Apply best available species composition information as necessary to disaggregate recorded species groups into the needed species/species group categories.					
Sub-Opt C.1 (B.1.5.2)No option for a permit to drop its worst years.					

IFQ Program Alternatives, Components, Elements, Sube	lements, Provisions and Options	Alt. 2C	Alt. 3A	Alt. 3B	Alt. 3C	Alt. 4C
Sub-Opt C.2 (B.1.5.2) Each permit drops it	s worst year for each species.					
best available species com	with landings under the permit from 2000-2003 . Apply position information as necessary to disaggregate recorded seeded species/species group categories. No option for a years.					
SubElement B.1.5.3 Periods and Data Sets for	Motherships					
Option A (B.1.5.3) Use observer data associate	ed with deliveries to the mothership from 1994-2003 .			N/A		
Sub-Opt A.1 (B.1.5.3) No option for a moti	hership to drop its worst years.			N/A		
Sub-Opt A.2 (B.1.5.3) Each mothership dro	ops its 2 worst years for each species.			N/A		
Option B (B.1.5.3) Use observer data associate	ed with deliveries to the mothership from 1994-1999 .			N/A		
Sub-Opt B.1 (B.1.5.3) No option for a mot	hership to drop its worst years.			N/A		
Sub-Opt B.2 (B.1.5.3) Each mothership dro	ops its worst year for each species.			N/A		
Apply best available spec	ated with deliveries to the mothership from 1998-2003 . ies composition information as necessary to disaggregate to the needed species/species group categories.	\checkmark	V	N/A	V	V
Sub-Opt C.1 (B.1.5.3) No option for a mot	hership to drop its worst years.			N/A		
Sub-Opt C.2 (B.1.5.3) Each mothership dro	ops its worst year for each species.	\checkmark	\checkmark	N/A	Ŋ	\checkmark
best available species com	with deliveries to the mothership from 2000-2003 . Apply position information as necessary to disaggregate recorded eeded species/species group categories. No option for a rs.			N/A		

IFQ Program Alternatives, Components, Elements	s, Subelements, Provisions and Options	Alt. 2C	Alt. 3A	Alt. 3B	Alt. 3C	Alt. 4C
SubElement B.1.5.4 Periods and Data S	Sets for Shoreside Processors					
available species of	ciated with landings to a processor from 1994-2003 . Apply best composition information as necessary to disaggregate recorded the needed species/species group categories.			N/A		
Sub-Opt A.1 (B.1.5.4) No option for	a processor to drop its worst years.			N/A		
Sub-Opt A.2 (B.1.5.4)Each processor years for wh	or drops its 3 worst years for each non-whiting species and 2 worst hiting.			N/A		
available species of	ciated with landings to a processor from 1994-1999 . Apply best composition information as necessary to disaggregate recorded the needed species/species group categories.			N/A		
Sub-Opt B.1 (B.1.5.4) No option for	a processor it to drop its worst years.			N/A		
Sub-Opt B.2 (B.1.5.4) Each processo	or drops its worst year for each species.			N/A		
available species of	ciated with landings to a processor from 1998-2003 . Apply best composition information as necessary to disaggregate recorded the needed species/species group categories.			N/A		
Sub-Opt C.1 (B.1.5.4) No option for	r a processor to drop its worst years.			N/A		
Sub-Opt C.2 (B.1.5.4) Each processo	or drops its worst year for each species.			N/A		
available species of	beciated with landings to a processor from 2000-2003 . Apply best composition information as necessary to disaggregate recorded the needed species/species group categories. No option for a its worst years.			N/A		
available species of	ciated with landings to a processor from 1999-2004 . Apply best composition information as necessary to disaggregate recorded the needed species/species group categories.	V	\mathbf{V}	N/A	V	\checkmark

IFQ Program Alternatives, Components, Elements, Subelements, Provisions and Options	Alt. 2C	Alt. 3A	Alt. 3B	Alt. 3C	Alt. 4C
Sub-Opt E.1 (B.1.5.4) No option for a processor to drop its worst years.			N/A		
Sub-Opt E.2 (B.1.5.4) Each processor drops its two worst years for each species.	\checkmark	\checkmark	N/A	\mathbf{N}	$\mathbf{\nabla}$
SubElement B.1.5.5Weighting Among Years					
This element addresses whether the allocation would be based on the absolute poundage amounts over the entire time period or whether the allocation would be based on the amount in a year relative to the total amount for all participants in that year (each weighted year within the time period would then be summed). The hypothesis is that for species where there has been significant variation in OY levels, the relative weighting schemes would more evenly weight participation in all years, while the absolute scheme would favor those that had high levels of participation in high OY years.					
Option A (B.1.5.5) Pounds: Each year's history for a species or species group will be measured in terms of pounds.					
With this option individuals are more easily able to estimate how they would fare under an allocation scenario.				V	
Option B (B.1.5.5) Weighting: Each year's history for a species or species group will be transformed into a proportion relative to the total history for all other members of that eligible group (i.e. each year's history will be expressed as a percent of the total catch history for the group).				V	
An individual's catch history for a given year and species is treated as a percent of the total catch of that species for the year. This type of weighting scheme may function better when OYs for target species have varied significantly over the years.					
Element B.1.6 History: Combined Permits and Other Exceptional Situations					
SubElement B.1.6.1 Combined Permits					
Option A (B.1.6.1) All permits count: For permits that have been combined, consider all landings history of the individual permits to be part of the landings history of the permit resulting from the combination.	V	V	\checkmark	\checkmark	V
Option B (B.1.6.1) Only the base permit counts: The combined permit would have only the landings					

Program Alternatives, Components, Elements, Subelements, Provisions and Options	Alt. 2C	Alt. 3A	Alt. 3B	Alt. 3C	Alt 4C
history associated with the permit number (landing history of other permits with which it has been combined would not accrue to the combined permit).					
SubElement B.1.6.2 History for Stacked Permits					
There are some instances in which two trawl permits have been registered for the same vessel at the same time, even there was not advantage to such registration in terms of opportunity to harvest of additional fish. A determination needs to be made as to how catch history of the vessel should be attributed with respect to the permits.					
Option A (B.1.6.2) During the time period for which more than one permit was associated with a single vessel, equally divide the catch history during that period among all such permits.					
Option B (B.1.6.2) Attribute all catch history to the first permit registered for use with the vessel.					
SubElement B.1.6.3 Treatment of illegal landings					
Option A (B.1.6.3) Do not count illegal landings					
Whether fish ticket data includes all or part of an illegal landing will be determined as part of the implementation process (except where such information is already recorded in PacFIN). For purposes of the analysis, it will be assumed that all landings are legal. Poundage for illegal landings is very small relative to total catch. It is not expected that this simplification for the analysis will substantially alter the results.	V	V	V	V	V
Option B (B.1.6.3) Count illegal landings.		X	X	X	
SubElement B.1.6.4 Treatment of landings in excess of cumulative trip limits, as authorized under EFPs.					/
Whether an EFP landing was in excess of a particular cumulative trip limits for the non-EFP fleet will be determined as part of the implementation process (except where such information is recorded in PacFIN). For purposes of the analysis, it will be assumed that all landings are within cumulative limits. The poundage for overages in excess of those applying to the non-EFP fleet is expected to be very small relative to total catch. It is not expected that this simplification for the analysis will substantially alter the results.					
<i>Option A (B.1.6.4)</i> Do not count landings in excess of cumulative limits in place for the non-EFP fisheries. An option could be considered to consider the EFPs on a case-by-case basis, depending on the exclusivity of the EFP.		V	V	V	V

IFQ Program Alternatives, Components, Elements, Subelements, Provisions and Options	Alt. 2C	Alt. 3A	Alt. 3B	Alt. 3C	Alt. 4C
Option B (B.1.6.4) Count all landings authorized under EFPs, including those in excess of the cumulative limits in place for the non-EFP fishery.		X	X	X	X
Option C (B.1.6.4) Count landings made under certain EFPs on a case by case basis.	\square	$\langle \rangle$	$\langle \rangle$	$\langle \rangle$	
This option would count landings made under certain EFPs and exclude landings made under other EFPs depending primarily on the exclusivity of the EFP.					
SubElement B.1.6.5 Treatment of landings made as compensation for government sponsored research trips.					
Option A (B.1.6.5) Do not count landings made as compensation for government sponsored research trips.				N	
Note: A recent court ruling in Alaska awarded Alaska sablefish QS to a fisherman based on landings made during research trips, even though the NPFMC's preferred alternative excluded research trip landings.				Ŀ	Ŀ
Option B (B.1.6.5) Count landings made as compensation during government sponsored research trips.		X	X	X	X
Element B.1.7 Initial Issuance Appeals					
Note: For the license limitation program there was an extensive process for appeals specified in the FMP amendment. For the sablefish endorsement and tiering program the Council provided no special guidance with respect to the handling of appeals. However, it should be noted that in the latter case, qualification criteria were specified such that no one was "close to the line" with respect to their catch history.					
Option A (B.1.7.1) Appeals would occur through processes develop by NMFS consistent with the Administrative Procedures Act, and any proposed revisions to fish tickets would under go review by state enforcement personnel prior to finalization of the revisions. This appeals process should cover more than initial issuance issues, as needed.	V	V	V	V	V
Option B (B.1.7.1) PLACE HOLDER: Council guidance on who can appeal, the grounds for appeal, and the process for adjudicating appeals.					
The desirability of more specific guidance may increase as part of the program are further developed, for example, the definition of processing and processor history.					

IFQ Program Alterna	atives, Compo	nents, Elements, Subelements, Provisions and Options	Alt. 2C	Alt. 3A	Alt. 3B	Alt. 3C	Alt. 4C
Component B.2	Quota Pour Initial Alloca	nd/Permit Holding Requirements and Quota Share/Quota Pound Acquisition (After ation)					
	•	ota shares (QS) (see Component B.1). Each year, each person holding QS would based on the amount of QS held (see Element B.2.2).					
Element B.2.1	P and LE Perm	it Holding Requirements					
cover landings b would be no mo cannot be sold o vessels with an o	y these vessels re fishing by th r transferred u iverage was cor	for each vessel participating in the LE trawl IFQ fishery. QPs would be required to For any vessel with an overage (landings/deliveries not covered by QP) there e vessel until the overage is covered. For vessels with an overage, the LE permit notif the deficit is cleared. (Note: An embargo on the transfer of quota shares for nsidered but was rejected because of difficulty relating quota pounds held by the may be held by entities other than the vessel owner).					
SubElement B.2.	1.1 QPs to cove	r a landing/deliver must be held					
Option /	A <i>(B.2.1.1)</i>	at time of landing/delivery: A vessels catch must be covered with quota pounds by the time the landing or delivery is made.					C
Option	B (B.2.1.1)	within 24 hours: A vessel's catch must be covered with quota pounds within 24 hours of the landing or delivery.					C
Option	С (В.2.1.1)	within 30 days: A vessel's catch must be covered with quota pounds within 30 days of the landing or delivery.	\checkmark	\checkmark	\checkmark	\checkmark	V
SubElement B.2.	1.2QPs require	d before departure a fishing trip:					
Option /	4 <i>(B.2.1.2)</i> Non	e.	\checkmark	\checkmark	\checkmark	\checkmark	Ī
Option I	B (B.2.1.2) Son	ne amount of quota pounds (to be analyzed and amount determined).		\checkmark	\checkmark	\checkmark	Ī
Element B.2.2 A	nnual Ouota P	ound Issuance and Quota Share Adjustments					

IFQ Program Alternatives, Components, Elements, Subelements, Provisions and Options	Alt. 2C	Alt. 3A	Alt. 3B	Alt. 3C	Alt. 4C
SubElement B.2.2.1Start of year quota pound issuance.					
Quota pounds are issued annually to QS holders based on the amount of QS they held. (QS are issued at the time of initial IFQ allocation—see Component B.1).	\checkmark	$\overline{\mathbf{A}}$		$\mathbf{\nabla}$	$\mathbf{\nabla}$
SubElement B.2.2.2Carryover: Non-overfished species carryover of quota pounds to a following year.					
Under this element, some portion of the quota pounds issued for one year could be rolled over and used in the following year.					
Any of the sub-options for overfished species may be matched with any of the Non-overfished species options.					
Option A (B.2.2.2) Non-overfished and overfished species – No Carryover					
Option B (B.2.2.2) Non-overfished species – 5% Carryover	\checkmark			\checkmark	\checkmark
Sub-Opt B.1 (B.2.2.2) Overfished species – No Carryover	\checkmark			$\mathbf{\nabla}$	$\mathbf{\nabla}$
Sub-Opt B.2 (B.2.2.2) Overfished species – Carryover the same as for Non-overfished species.					
Option C (B.2.2.2) Non-overfished species – 10% Carryover		V			
Sub-Opt C.1 (B.2.2.2) Overfished species – 5%		\mathbf{N}			
Sub-Opt C.2 (B.2.2.2) Overfished species – Carryover the same as for Non-overfished species.					
Option D (B.2.2.2) Non-overfished species – 20% Carryover					
Sub-Opt D.1 (B.2.2.2) Overfished species – 5%					
Sub-Opt D.2 (B.2.2.2) Overfished species – Carryover the same as for Non-overfished species.					
Option E (B.2.2.2) Non-overfished and overfished species – 30% Carryover			$\mathbf{\Lambda}$		

Program Alternatives, Comp	oonents, Elements, Subelements, Provisions and Options	Alt. 2C	Alt. 3A	Alt. 3B	Alt. 3C	Ali 40
SubElement B.2.2.3Quota Sh	are Use-or-Lose					
Option A (B.2.2.3)	Include a use-or-lose provision (require use at least once every three years).					Г
	e means has not been identified for tracking quota pound usage against quota share ose of evaluating use across multiple years.					
Option B (B.2.2.3)	Do not include a use-or-lose provision					Ľ
Option C (B.2.2.3)	Do not include use-or-lose provisions but evaluate program performance: Identify the potential nonuse of QS as an issue to be evaluated in the program review process. Indicate that, depending on the findings of the evaluation, the program may be modified in the future to create use-or-lose or other provisions to address any concerns.	V	V		V	٦
SubLiement B.2.2.4Entry Leve	el Opportunities for Acquiring Quota Shares and Low Interest Loan Options					
-	el Opportunities for Acquiring Quota Shares and Low Interest Loan Options rovide a low interest loan program					
Option A (B.2.2.4) Pr Option B (B.2.2.4) Pr vi						Ē
Option A (B.2.2.4) Pr Option B (B.2.2.4) Pr vi fa SubElement B.2.2.5Quota Po	rovide a low interest loan program rovide an opportunity for new entrants to qualify for shares revoked for program iolations or, if there is a use-or-lose provision, revoked for nonuse (qualification					
Option A (B.2.2.4) Pr Option B (B.2.2.4) Pr vi fa SubElement B.2.2.5Quota Po cc	rovide a low interest loan program rovide an opportunity for new entrants to qualify for shares revoked for program iolations or, if there is a use-or-lose provision, revoked for nonuse (qualification actors to be determined as part of a trailing amendment???).					

IFQ Program Alternatives, Components, Elements, Subelements, Provisions and Options	Alt. 2C	Alt. 3A	Alt. 3B	Alt. 3C	Alt. 4C
Element B.2.3 Transfer Rules					
This element deals with the transferability of QS/QP. It is important to reiterate the difference between QS and QP—QS are the long-term instrument from which QP are derived. In theory, it is possible to transfer QS without affecting current-year QP.					
SubElement B.2.3.1Eligible Owners/Holders (Who may own or lease QS/QP.)					
This element defines the individuals and entities that may purchase QS/QP.					
Option A (B.2.3.1) Those who own lease or otherwise control QS/QP must be an entity that is eligible to own a US documented fishing vessel.					
The TIQC noted that this option may preclude some entities that are eligible under AFA to operate US document fishing vessels.					
Option B (B.2.3.1) Those who own lease or otherwise control [shading is new language, previously "Purchaser of"] QS/QP must be an entity that is eligible to own or operate a US documented fishing vessel.	\checkmark	\checkmark	\checkmark	$\mathbf{\overline{\mathbf{A}}}$	\checkmark
The TIQC noted that this option would not preclude entities that are eligible under AFA to operate US document fishing vessels.					
Option C (B.2.3.1) Those who own lease or otherwise control QS/QP would be limited to persons or entities that meet criteria as stakeholders in the West Coast Trawl fishery. Stakeholders include owners and lessees of vessels or permits, skippers and crew members, processors and buyers, and communities.					
SubElement B.2.3.2 Permanent Transfers and Leases of QS and QP.					
Permanent transfers and leases of QS and QP must be registered with and acknowledged by NMFS before they are considered in effect.					
A lease of QS is the equivalent of a sale of QS with a contractual agreement that at the end of a fixed period the QS will be returned to the original owner. Any QP that are issued subsequent to the sale or lease agreement would be issued to the new owner or the lessee. QP transfers do not affect the ownership of the quota shares.					
QP are valid only for one year and expire at the end of the year (unless there is a carryover provision, see					

Q Program Alternatives, Components, E	lements, Subelements, Provisions and Options	Alt. 2C	Alt. 3A	Alt. 3B	Alt. 3C	Alt. 4C
SubElement B.2.2.2). Leasing of QP	might be rare but could be part of use-option agreements.					
Note: there is some concern that lea	sing of QS could lead to absentee ownership.					
Option A (B.2.3.2) Permanent	sales of QS would be allowed					
Lea	using QS would be prohibited.					
Per	manent sales and leases of QP would be allowed.			\checkmark		
	leasing QP. The effect of a QP lease can be achieved through private Concept of "QP leasing" seems to create confusion.					
Sub-Opt A.1 (B.2.3.2)	However, permanent sales and leases of QS would be prohibited at the start of the program for a period of one year.					
Option B (B.2.3.2) Permanent	sales and leases of QS and QP would be allowed.	\checkmark	$\mathbf{\nabla}$		V	\checkmark
Sub-Opt B.1 (B.2.3.2)	However, permanent sales and leases of QS would be prohibited at the start of the program for a period of one year.					
SubElement B.2.3.3Temporary Prohibi	itions on QS Transfers					
	ether transfers of QS can take place during the time of the year in which ming year. Transfers of QP would not be restricted.					
	sfers of QS during the last two months of the year while NMFS prepares to r the coming year.				Γ	
,	transfers of coming year QP immediately after issuance nor would it limit option would only be implemented if it helped reduce administrative costs.					
• • •	transfer of QS except during a period of time at the end of the year. QP ansferred any time of the year.					
(except que those acqui issued QP	ransfers to occur all times of the year, however establish an "ex-QP" ota pounds) date late in the year (e.g. December 1). All owners of QS, or iring QS that have filed for transfer, prior to the ex-QP date would be for the coming year. Purchasers that file for transfer after the ex-QP date receive an allocation of QP for the coming year. Persons that filed for	V	V	V	V	V

Q Program Alternatives, Components, Elements, Subelements, Provisions and Options	Alt. 2C	Alt. 3A	Alt. 3B	Alt. 3C	Alt. 4C
transfer after the "ex-QP" date would have to arrange for the separate transfer of the QP from the QS seller/lessee to the QS buyer/leaser.					
This option allows transfers to occur at all times of the year, but would provide NMFS a way to definitively determine who should be allocated QPs for the coming year. This option would in no way limit transfers of coming year QP immediately after issuance nor would it limit transfers of current year QP.					
SubElement B.2.3.4Divisibility					
Provision 1 (B.2 .3 .4) Quota shares would have nearly unrestricted divisibility ("many decimal points")	V	\checkmark	\checkmark	\checkmark	\checkmark
Provision 2 (B.2 .3 .4) Quota pounds would be divisible down to the single pound.	$\mathbf{\nabla}$	\checkmark	\mathbf{N}	\checkmark	\checkmark
SubElement B.2.3.5 Liens on QS/QP and the use of QS/QP as collateral.					
This element deals with the possibility that QS/QP may be used as collateral and whether liens may be placed on QS/QP.					
Option A (B.2.3.5)Allow the use of QS/QP as collateral. Allow liens to be placed on QS/QP. See B.3.1 regarding establishment of a central registry to record the use of QS/QP and liens on QS/QP		V	V		حا م
Note: Previously this read simply that "no options have been proposed to restrict liens" and provided encouragement for the creation of a central lien registry system.			_		
<i>Option B (B.2.3.5)</i> Do not allow the use of QS/QP as collateral. Do not allow liens to be placed on QS/QP. See B.3.1 regarding establishment of a central registry to record the use of QS/QP and liens on QS/QP.					
SubElement B.2.3.6 Accumulation Limits on QS/QP					
is component deals with the possibility of placing limits on the amount of QS/QP a person (or with respect to use, a ssel) may own, control, or use.					
iven that current options allow corporate, partnership and other legal entities to own QS/QP, decisions need to be adde as to how QS/QP owned by these legal entities count toward caps of the individuals and persons who own those					

IFQ Program Alternatives, Components, Elements, Subelements, Provisions and Options	Alt. 2C	Alt. 3A	Alt. 3B	Alt. 3C	Alt. 4C
legal entities and how QS/QP owned by individuals and persons owning those legal entities count toward the caps for the legal entities. The first provision of this sub-element addresses how ownership and control will be evaluated with respect to entities such as corporations and partnerships.					
Following the section defining ownership and control are sections with the options for control caps, ownership caps and vessel (use) caps. Separate sets of options are provided for caps on groundfish in aggregate (except whiting), individual species and species groups, and whiting.					
Ownership Cap: An accumulation limit on the ownership of QS/QP. This element would mean that no registered owner of QS/QP could own more than a predetermined percentage of the Quota Share Pool or Quota Pound Pool.					
Control Cap: An accumulation limit on the control of QS/QP. This element would mean that no person could control more than a predetermined percentage of the quota share pool or quota pound pool, regardless of whether that control was established through ownership, leasing or other means. Control would go beyond ownership and leasing and include any situation where an entity had the ability to independently direct how QS/QP would be used. Enforcement of the provision would be through investigations initiated based on reasonably substantiated complaints of those who believe they are encountering adverse effects from excess control by an individual entity.					
Vessel Use Cap: An accumulation limit on the QP that may be used on a single vessel during the year. This element would mean that no vessel could use more than a predetermined percentage of the quota pound pool.					
Provision 1 (B.2.3.6) Determination of Ownerhship/Control: The ownership or control of QS/QP by a particular legal entity will be construed as the combination of (1) all the QS/QP directly owned or controlled by that particular legal entity, (2) all of the QS/QP owned or controlled by the persons who own that particular legal entity and (3) all or a portion of the QS/QP owned by other legal entities that are at least partially owned by that particular legal entity. The portion of the QS/QP owned by a particular legal entity through ownership of another entity will be calculated through one of the following methods. (Note a "particular legal entity" may also be an individual).					
This element determines the definition of ownership or control.					
Provision 1, Option i Proration: A person's share in ownership of the entity will be multiplied by the total QS or QP owned or controlled by that entity to determine the person's ownership or control of QS or QP owned or	\checkmark	\checkmark	\checkmark	\checkmark	\checkmark

IFQ Program Alternatives, Components, Elements, Subelements, Provisions and Options	Alt. 2C	Alt. 3A	Alt. 3B	Alt. 3C	Alt. 4C
controlled by that entity for the purpose of applying accumulation caps.					
Provision 1, Option ii Count all: Every person with an ownership interest in an entity will be considered to fully own or control all QS or QP owned or controlled by that entity (for the purpose of applying accumulation caps).					
Provision 1, Option iii Count all with at least 10%: Every person with at least a 10% ownership interest in an entity will be considered to fully own or control all QS or QP owned or controlled by that entity (for the purpose of applying accumulation caps).					
Provision 2 (B.2 .3 .6) Accumulation Caps					
Provision 2 , Option i The caps will be as specified in the column for Option i of Table 2-5. In general, these caps run from 50% to no cap.		\checkmark			
Provision 2, Option ii The caps will be as specified in the column for Option ii of Table 2-5. A full range is specified. This range will be narrowed after preliminary analysis is provided.			V		
Provision 2, Option iii The caps will be as specified in the column for Option iii of Table 2- 5. A range encompassing low (1%-5%) and medium (10%-25%) levels is specified. This range will be narrowed after preliminary analysis is provided.	V			V	\checkmark
SubElement B.2.3.7 Vertical Integration Limits No additional limits to restrict vertical integration (beyond accumulation limits).					
Note: Vertical integration limits were considered but none are recommended beyond the limits that would be effective as a result of the accumulation limits.					
Component B.3 Program Administration					
Element B.3.1 Tracking Quota Pounds and Quota Shares, Monitoring Landings, and Enforcement					
The following options are structured together as enforcement programs described in Table of the scoping document. Many of the elements and options are interrelated. The interrelationships are noted in the options.					

Program Alternatives, (Components, Elements, Subelements, Provisions and Options	Alt. 2C	Alt. 3A	Alt. 3B	Alt. 3C
SubElement B.3.1.1	At-sea monitoring				
Option A (B.3.1.	1) 100% at-sea monitoring by compliance observers		\checkmark	\checkmark	
Sub-Opt A.1	(B.3.1.1) No small vessel provision		\checkmark	\checkmark	
Sub-Opt A.2	(B.3.1.1) Small vessels may be allowed to carry a camera instead of a compliance observer.		\checkmark	\checkmark	
Option B (B.3.1.	1) 100% at-sea monitoring by compliance observers or video monitoring. This option requires a limitation on discards and enhanced timeliness of bycatch reporting, selection of Option B (B.3.1.2) prohibiting discards or [Option C (B.3.1.2)partially prohibiting discards and Option A (B.3.1.3) requiring enhanced timeliness of discard reporting].	V			V
SubElement B.3.1.2	Discarding				
Option A (B.3.1.	2) Discards allowed.		\checkmark		
Option B (B.3.1.	2) No discards. Full retention required.			\checkmark	
Option C (B.3.1	2) Discards allowed only if a compliance observer is present. Discards are not allowed when video monitoring is used instead of a compliance observer, unless the Council and NMFS determine the video monitoring technology as improved sufficiently to allow complete and accurate monitoring of discards through video equipment or other technologies.	V			V
SubElement B.3.1.3	Bycatch reporting		\checkmark		
Option A (B.3.1.	3) Bycatch reporting timed to be concurrent or in advance of landings reporting.	\checkmark	\checkmark		\checkmark
Option B (B.3.1.	3) Bycatch reporting not needed. This option requires a full retention requirement for all participating vessels (selection of Option B (B.3.1.2)).			\checkmark	
SubElement B.3.1.4	Electronic landings tracking.				
Ontion A (B 3 1	4) Federal electronic landings tracking system paralleling the state system.	N			\mathbf{N}

IFQ Program Alternatives, Components, Elements, Subelements, Provisions and Options	Alt. 2C	Alt. 3A	Alt. 3B	Alt. 3C	Alt. 4C
Option B (B.3.1.4) Upgrade current state paper based fish ticket systems to electronic based system.		\checkmark	\checkmark		
SubElement B.3.1.5 Shorebased monitoring (both options require advance notice of landings (SubElement B.3.1.6).					
Option A (B.3.1.5) Shorebased monitoring opportunity through the advance notice of landing requirement (< 100% shorebased monitoring capability).	\checkmark	\checkmark			\checkmark
Option B (B.3.1.5) 100% shorebased monitoring (Cost control through limit on landing hours, Option B (B.3.1.7).			\checkmark		
SubElement B.3.1.6 Advance notice of landings (including hale weights)	\checkmark	\checkmark	\checkmark	$\mathbf{\nabla}$	\checkmark
SubElement B.3.1.7 Landing Hours					
Option A (B.3.1.7) No limit on landing hours.	\checkmark	\checkmark		\checkmark	\checkmark
Option B (B.3.1.7) Limited landing hours (more specification needed for the analysis?)			$\mathbf{\nabla}$		
Landing hours would be limited to reduce the cost of 100% shorebased monitoring (Option B (B.3.1.5))					
SubElement B.3.1.8 Landings limited to licensed sites					
Option A (B.3.1.8) Landings limited to licensed sites. The number of sites licensed would be unlimited					
but certain standards would have to be met with respect to scale location, opportunity to observer, electronic communication capabilities etc.		$\mathbf{\nabla}$		$\mathbf{\nabla}$	\checkmark
Option B (B.3.1.8) Landings limited to specific ports. Landing ports would be limited to reduce the cost of 100% shorebased monitoring (Option B (B.3.1.5))			\checkmark		
SubElement B.3.1.9Electronic tracking of quota pound account balances and transfers.	$\mathbf{\overline{\mathbf{A}}}$	\checkmark	\checkmark	$\mathbf{\nabla}$	\checkmark
SubElement B.3.1.10 Quota Share Tracking. Quota share ownership and lease transfers will be reported to NMFS and tracked in an electronic system.					
<i>Option A (B.3.1.10)</i> Create a central lien registry including all related ownership information and transaction value information.	\checkmark		\checkmark	N	\checkmark
Option B (B.3.1.10) Create a central lien registry but include only essential ownership information and		\checkmark			

IFQ Program Alternatives, Components, Elements, Subelements, Provisions and Options	Alt. 2C	Alt. 3A	Alt. 3B	Alt. 3C	Alt. 4C
transaction value information.					
Element B.3.2 Cost Recovery/Sharing and Rent Extraction					
The exact means by which the fees would be extracted needs to be specified (e.g. fees on initial issuance, fees on transfers, annual fees, etc.)					
Note: One method for extracting rents would be through the initial allocation of quota shares through an auction on a one time or periodic basis. This option has been rejected, in part, because it is not currently allowed under the Magnuson-Stevens Act.					
Option A (B.3.2.1) Cost recovery for management (not enforcement or science). Up to 3% of ex-vessel value, the limit specified in the Magnuson Stevens Act.					
Privatization of some elements of the management system. In particular, privatization for			$\mathbf{\nabla}$		
Monitoring of IFQ landings (e.g. industry pays for their own compliance observers)		V	V		
 Fishtickets (industry payment for Trawl IFQ program landings information to be fed into a federal electronic system) 					
Option B (B.3.2.1) Landings fee plus privatization of elements of the management system. In particular, privatization for monitoring of IFQ landings (e.g. industry pays for their own compliance observers)					
Elements not privatized	\checkmark			\checkmark	$\mathbf{\nabla}$
Stock assessments and					
Electronic fish ticket system					
Element B.3.3 Program Duration and Procedures for Program Performance Monitoring, Review and Revision					
The following 5 subelements are covered under this element.					
Subelement 1 Revision Process: Standard for FMP and regulatory amendments.					
Subelement 2 Sunset Provisions and Fixed Term Entitlements: None.					

IFQ Program Alternatives, Cor	nponents, Elements, Subelements, Provisions and Options	Alt. 2C	Alt. 3A	Alt. 3B	Alt. 3C	Alt. 4C
processes, clear	Response to Forthcoming National Policy: Standard revision FMP and regulatory public notice that the IFQ may be revoked and/or reissued and that the program may cancelled without compensation.					
	Monitoring: Annual data summarized biennially. Reports from a community advisory committee.					
Subelement 5	Review: Every four years					
	Process for Revision: Revision of the IFQ program will be achieved through FMP latory amendments in compliance with the Magnuson-Stevens Act and policies and es already specified in the FMP and Council procedural guidelines.	\checkmark	V	V	V	\square
SubElement B.3.3.2 of the NR	Sunset Provisions and Fixed Term Entitlements: In line with the recommendations RC, program sunset provisions are not included in this option.	V	\mathbf{N}	\checkmark	\checkmark	$\mathbf{\nabla}$
Option A (B.3.3.2)	No Fixed Term Entitlements: Under a fixed term entitlement, the IFQ program would not sunset but quota shares would periodically expire and be reissued. The term of quota shares would not be limited under the adopted program; future FMP and regulatory amendments, however, may adjust/limit QS/QP privileges and obligations or totally eliminate the IFQ program. Persons with an interest in QS/QP will not be entitled to compensation for losses associated with changes to or elimination of the IFQ program. A notice that explains that losses due to such changes will not be compensated will be included on communications, certificates or other documentation provided to quota share owners/lessees informing them of the amounts of quota share or quota pounds under their control.		V	V	V	V
Option B (B.3.3.2)	Fixed Term: Fixed term quota shares will be used to adjust characteristics of the quota shares, so long as (1) delayed implementation of changes to the nature of the quota shares do not result in significant adverse biological, economic, or social impacts and (2) the maintenance of shares with different characteristics does not add excessive complexity to enforcement and administration of the program. Quota shares will be valid for a maximum of 10 years. Unless the program is modified or eliminated through FMP or regulatory amendment, shares will be automatically replaced at the end of 10 years. If program adjustments made through amendment					

IFQ Program Alternatives, Components, Elements, Subelements, Provisions and Options	Alt. 2C	Alt. 3A	Alt. 3B	Alt. 3C	Alt. 4C
 processes have included delayed implementation features, the characteristics of the replacement shares (i.e., associated privileges and obligations) may vary from those of the original shares. If it is found that maintaining a system with two different types of shares will not create an excessive enforcement or administrative burden or otherwise substantially increase costs or reduce program benefits, quota share owners may be given the option of replacing their original shares with new shares at any time. Nothing in this option precludes NMFS or Council action to make program adjustments that result in immediate modification of the characteristics of all quota shares. No compensation will be due any quota share owner/lessee from changes to or elimination of the JFQ program. A notice of the uncompensatable nature of the privilege associated with quota shares and quota pounds will be included on all communications, certificates, or other documentation provided to quota share owners/lessees informing them of the amounts of quota share or quota pounds under their control. 					
SubElement B.3.3.3 Response to Forthcoming National Policy: If necessary and required for compliance with forthcoming national standards and policies, IFQ issued under the current program may be revoked and reissued in a manner that complies with such new national standards and policies. Revocation and reissuance will be a last resort means for achieving compliance with future national policy. This section of the IFQ program re-emphasizes that IFQs are not property rights and are subject to modification or elimination through FMP and regulatory amendments without compensation to IFQ owners/lessees.	V	V	V	V	V
SubElement B.3.3.4Monitoring Program Performance:While the NRC recommends annual reports describing trends in the fishery and effects of the IFQ program, the Council's groundfish fishery is managed on a biennial cycle. Therefore, while data on the fishery will be collected annually, it will be summarized every two years, except for issues where annual reports are needed to assess criteria, such as for overfishing.Community Advisory Committee.The Council will convene a committee comprised of	Ø	V	V	V	V

Program Alternatives, Components, E		Alt. 2C	Alt. 3A	Alt. 3B	Alt. 3C	Alt. 4C	
representatives from committee would m pertaining specifically regions, processors a responsibilities.							
years commencing in cycle occurring at le amendment to the pr of the decision proce be reset such that the after the amendment every four years. The	hedule: The performance of the IFQ program will in the first management "off-year" of the groundfish east four years after the initiation of fishing under rogram is made, and this includes a comprehensive ss, this will count as a program review. The review e next review will occur in the first "off year" occu t's implementation. Certain criteria may be assesse e following are some of the main criteria on which	a biennial management an IFQ system. If an program review as part schedule may therefore rring at least four years d more frequently than basis the program will					
augmented with forth would be better to re	e documents in which the criteria will be assessed. hcoming national standards on IFQ programs. Con wiew the program as part of the biennial manageme	nsider whether or not it nt process.					
augmented with forth would be better to re Source of Criteria	ncoming national standards on IFQ programs. Conview the program as part of the biennial manageme Criteria	nsider whether or not it nt process. Report					
augmented with forth would be better to re Source of Criteria Objective 1	hcoming national standards on IFQ programs. Conview the program as part of the biennial manageme Criteria Vessel Efficiency	nsider whether or not it nt process. Report 4 Year Review					
augmented with forth would be better to re Source of Criteria Objective 1 Objective 1	hcoming national standards on IFQ programs. Conview the program as part of the biennial manageme Criteria Vessel Efficiency Processor Efficiency	nsider whether or not it nt process. Report 4 Year Review 4 Year Review	V	Ø	V	V	V
augmented with forth would be better to re Source of Criteria Objective 1 Objective 1 Objective 2	hcoming national standards on IFQ programs. Conview the program as part of the biennial manageme Criteria Vessel Efficiency Processor Efficiency Habitat Impacts	nsider whether or not it nt process. Report 4 Year Review 4 Year Review 4 Year Review	7	V	V	V	V
augmented with forth would be better to re Source of Criteria Objective 1 Objective 2 Objective 3	hcoming national standards on IFQ programs. Conview the program as part of the biennial manageme Criteria Vessel Efficiency Processor Efficiency Habitat Impacts Discard Mortality	nsider whether or not it nt process. Report 4 Year Review 4 Year Review 4 Year Review Annual Report	V	V	V	V	V
augmented with forth would be better to re Source of Criteria Objective 1 Objective 1 Objective 2 Objective 3 Objective 4	hcoming national standards on IFQ programs. Conview the program as part of the biennial manageme Criteria Vessel Efficiency Processor Efficiency Habitat Impacts Discard Mortality Externalities (Individual Accountability)	nsider whether or not it nt process. Report 4 Year Review 4 Year Review 4 Year Review Annual Report 4 Year Review	V	Ø	V	V	V
augmented with forth would be better to re Source of Criteria Objective 1 Objective 2 Objective 3 Objective 4 Objective 5	Accoming national standards on IFQ programs. Conview the program as part of the biennial manageme Criteria Vessel Efficiency Processor Efficiency Habitat Impacts Discard Mortality Externalities (Individual Accountability) Regulatory Stability	Asider whether or not it nt process. Report 4 Year Review 4 Year Review 4 Year Review Annual Report 4 Year Review 4 Year Review 4 Year Review	V	V	V	V	
augmented with forth would be better to re Source of Criteria Objective 1 Objective 2 Objective 3 Objective 4 Objective 5 Objective 6	Accoming national standards on IFQ programs. Conview the program as part of the biennial manageme Criteria Criteria Vessel Efficiency Processor Efficiency Habitat Impacts Discard Mortality Externalities (Individual Accountability) Regulatory Stability Operational Flexibility	nsider whether or not it nt process. Report 4 Year Review 4 Year Review 4 Year Review Annual Report 4 Year Review	V	Ø	V	V	V
augmented with forth would be better to re Source of Criteria Objective 1 Objective 2 Objective 3 Objective 4 Objective 5	Accoming national standards on IFQ programs. Conview the program as part of the biennial manageme Criteria Vessel Efficiency Processor Efficiency Habitat Impacts Discard Mortality Externalities (Individual Accountability) Regulatory Stability	nsider whether or not it nt process. Report 4 Year Review 4 Year Review 4 Year Review Annual Report 4 Year Review 4 Year Review 4 Year Review 4 Year Review	V	V	V		V
augmented with forth would be better to re Source of Criteria Objective 1 Objective 2 Objective 3 Objective 4 Objective 5 Objective 6 Objective 7	Account of the biennial manageme Criteria Criteria Vessel Efficiency Processor Efficiency Habitat Impacts Discard Mortality Externalities (Individual Accountability) Regulatory Stability Operational Flexibility Adverse Community Effects	nsider whether or not it nt process. Report 4 Year Review 4 Year Review 4 Year Review Annual Report 4 Year Review 4 Year Review 4 Year Review 4 Year Review 4 Year Review	V	V			V
augmented with forth would be better to re Source of Criteria Objective 1 Objective 2 Objective 3 Objective 4 Objective 5 Objective 6 Objective 7 Objective 8	Account of the biennial manageme Criteria Vessel Efficiency Processor Efficiency Habitat Impacts Discard Mortality Externalities (Individual Accountability) Regulatory Stability Operational Flexibility Adverse Community Effects Employment Effects	Asider whether or not it nt process. Report 4 Year Review 4 Year Review 4 Year Review Annual Report 4 Year Review 4 Year Review 4 Year Review 4 Year Review 4 Year Review 4 Year Review	7		V	V	V
augmented with forth would be better to re Source of Criteria Objective 1 Objective 2 Objective 3 Objective 4 Objective 5 Objective 6 Objective 7 Objective 8 Constraint 1	Incoming national standards on IFQ programs. Conview the program as part of the biennial manageme Criteria Criteria Vessel Efficiency Processor Efficiency Habitat Impacts Discard Mortality Externalities (Individual Accountability) Regulatory Stability Operational Flexibility Adverse Community Effects Employment Effects Effects on Biological Status of the Stock	A Year Review 4 Year Review 4 Year Review 4 Year Review 4 Year Review Annual Report 4 Year Review 4 Year Review 4 Year Review 4 Year Review 4 Year Review 4 Year Review 5 Year Review	V	V	V		V

Program Alternatives, Components,	Elements, Subelements, Provisions and Optior	S	Alt. 2C	Alt. 3A	Alt. 3B	Alt. 3C	Alt 40
Constraint 5	Quota Concentration	4 Year Review					
Constraint 6	Enforcement Effectiveness	4 Year Review					
Constraint 7	Assess Review Process	4 Year Review					
Other Criteria 1	Degree to which Available Quota Pounds are Adequately Utilized	4 Year Review					
Other Criteria 2	Existence of Localized Depletion Problems	4 Year Review					
lement B.3.4 Data Collection							
Option A (B.3.4.1) Expanded	mandatory submission of economic data:						
 Include transaction is added text]. Formal monitoring Mandatory Provisions: The Service shall have the authority and employment data, congroundfish industry harvest this authority will be maintain than staffs of Federal and second council's authority and the staffs of the second secon		lational Marine Fisheries cost, revenue, ownership, nbers of the West Coast ty. Data collected under eleased to any party other t of the fisheries under the	V		V		Σ
trawl IFQ program and con employment data will be control the information necessary to analyze the economic and localities. This data collection associated with the IFQ pro-	n program shall be developed and implemented tinued through the life of the program. Cost, rev ollected on a periodic basis (based on scientific re o study the impacts of the IFQ program. This dat social impacts of future FMP amendments on ind on effort is also required to evaluate achievement ogram. Both statutory and regulatory language sh data. Additional funding (as compared to status)	enue, ownership, and quirements) to provide a could also be used to ustry, regions, and of goals and objectives all be developed to ensure					

IFQ Program Alternatives, Components, Elements, Subelements, Provisions and Options	Alt. 2C	Alt. 3A	Alt. 3B	Alt. 3C	Alt. 4C
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 would be taken if inaccuracies are found in mandatory data submissions. The intent of this action would 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 quota share owners/lessees. Such information would 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.					
 Option B (B.3.4.1) Expanded voluntary submission of economic data: Voluntary submission of economic data for LE trawl industry (expanded survey efforts) 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. Voluntary Provisions: Attempts will be made to collect, on a voluntary basis, the same types of data identified for collection through a mandatory program. Additional funding (as compared to status quo) will be needed to support the collection of these data. Central Registry: Information on transaction prices will be included in a central registry of quota share owners/lessees. Such information would 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. 					
 Option C (B.3.4.1) Status quo data collection: 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. 					

IFQ Program Alternatives, Components, Elements, Subelements, Provisions and Options	Alt. 2C	Alt. 3A	Alt. 3B	Alt. 3C	Alt. 4C
Central Registry: The program will include no new central registries for quota share 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.					
Component B.4 Community Provisions					
Element B.4.1 Adopt a community stability holdback program with the following provisions. A portion of annual quota pounds would be held back and allocated for proposals submitted by quota share owners/lessees. The proposals would be evaluated based on quantitative criteria that prioritizes community benefits. The quota pounds held back for this purpose will continue to be "trawl quota pounds" and must be used in a manner consistent with the scope of the trawl individual quota program.	V			V	V
SubElement B.4.1.1 Set Aside. Some amount of the trawl QP would be set aside to be allocated to QS owners/lessees who submit proposals for using the community stability holdback program allocation in a manner that benefits communities. The total amount set aside for all such proposals would be as determined in SubElement B.2.2.5.					V
* It may be determined that the optimal period for these allocations is greater than one year.					
SubElement B.4.1.2Management Body: A Council Appointed CommitteeCommittee Authority and Appointment: Magnuson-Stevens Act authority. Appointed by the Council. Recommendations would require approval by the Council before being forwarded to NMFS.Committee Role: Use specific measurable criteria to make recommendations to the Council on the amount of quota pounds to be allocated for proposals presented by QS owners/lessees for the purpose of achieving specific community development, enhancement, or stabilization goals.Composition: The committee would be composed of representatives of West Coast regions, port districts, processors, and fishermen as determined under a Council operating procedure.	V			V	
<i>Option A (B.4.1.2)</i> Joint Staffing and Administration: Committee reports would be developed for the committee by the staff of the NMFS Limited Entry Office and related expenses would	\checkmark			\checkmark	\checkmark

IFQ Program Alternatives, Components, Elements, Subelements, Provisions and Options	Alt. 2C	Alt. 3A	Alt. 3B	Alt. 3C	Alt. 4C
be included as part of program costs to be covered by fees. Other staffing functions would be carried out by the Council.					
<i>Option B (B.4.1.2)</i> Council Staffing and Administration: All staffing functions would be carried out by the Council.	V			\checkmark	\checkmark
SubElement B.4.1.3 Eligibility for Participation Proposals may be submitted by individual QS holders or groups of QS holders. QS holders may only participate in one proposal for any given time period.	V			\checkmark	V
SubElement B.4.1.4Criteria allocating among proposals. A set of quantitative criteria will be developed that can be applied to objectively determine the amount of QP to be allocated to a proposal. The Council may determine that for stability and planning reasons the allocations for some or all proposals should be for periods longer than 1 or 2 years.					
Calculation of Allocation. Each criterion will be scaled such that they are evenly weighted and values fall between 0 and 1 (or between 0 and 100). Scores for all criteria would be added together to derive a single score for each proposal. The scores for all proposals would be summed. The amount to be allocated to each collaborative proposal would be the score for that proposal divided by the sum of all scores times the total holdback for each species covered by the application.	V			V	V
Nine potential criteria are listed in the following options. The Council may select one or all of the criteria options.					
The following are not necessarily mutually exclusive.					
Option A (B.4.1.4) Past Performance: The degree to which the quota committed to previous projects was utilized in accordance with the commitments made (does not apply to overfished species).	V			V	V
Option B (B.4.1.4) Utilization: Proportion of raw product to be converted to consumptive and non- consumptive human use (including meal and fertilizer) times past performance on utilization commitments. Indicator of wastage and potential pollution externalities.	V			V	V
Option C (B.4.1.4) Local Added Value: Fair market value of proposed exports from community divided	V			\checkmark	\checkmark

IFQ Program Alternatives, Cor	nponents, Elements, Subelements, Provisions and Options	Alt. 2C	Alt. 3A	Alt. 3B	Alt. 3C	Alt. 4C
	by fair market value of ex-vessel landings. The committee will determine a fair market value and apply the same per pound market values to all proposals. (Apply as a past performance measure if advance commitment to product forms is not tenable). For this criterion, scores of all proposals will be scaled proportionally such that a score of 1 will be assigned to the proposal with the greatest added value ratio.					
Option D (B.4.1.4)	Local Labor 1: Local employees divided by total individuals employed (FTE) by the firms that are parties to the proposal.	\checkmark			\checkmark	\checkmark
<i>Option E (B.4.1.4)</i>	Local Labor 2: Total local wages to be paid per dollar fair market value of proposed exports or final products. Proportionally scale the scores of all proposals such that the proposal with the largest ratio is scaled to one.	V			\checkmark	\checkmark
<i>Option F (B.4.1.4)</i>	Quota pounds committed to the project by the applicants: The ex-vessel fair market value of all pound committed (based on previous year's prices) will be summed and divided by the fair ex-vessel value of all pounds committed by all proposals. For this criterion, scores of all proposals will be scaled proportionally such that a score of 1 will be assigned to the proposal with the greatest amount of pounds committed to the proposal.	V				V
Option G (B.4.1.4)	Public Debt Related to Fisheries Development: For the port in which the landings will be made, the amount of public debt directly related to investments supporting the fishing industry and relying on fishing activity for debt recovery divided by the total amount of debt identified in all such proposals and scaled proportionally such that a score of 1 is assigned to the proposals benefiting ports with the greatest fishing infrastructure related debts.				V	V
Option H (B.4.1.4)	Public Investment Dedicated to Fisheries : For the port in which the landings will be made, the amount of public investments directly supporting the fishing industry divided by the total amount of such investments identified in all such proposals and scaled proportionally such that a score of 1 is assigned to the proposals benefiting ports with the greatest fishing industry related debts.	V			V	V
Option I (B.4.1.4)	Port Dependence: Proportion of port revenue from activities of vessels, buyers, and processors divided by total port revenues. Proportion of revenues in all proposals will	\checkmark			\checkmark	\checkmark

IFQ Program Alternatives, Components, Elements, Subelements, Provisions and Options	Alt. 2C	Alt. 3A	Alt. 3B	Alt. 3C	Alt. 4C
be adjusted proportionally such that the largest proportion of revenues receives a score of one.					
SubElement B.4.1.5 Accumulation Limits. All additional quota acquired by a person through participation in a proposal will count toward accumulation caps.	Ń			\checkmark	V
SubElement B.4.1.6 Transferability. Quota pounds issued for proposals may be transferred as long as their use is consistent with the proposal and fish are caught, handled and landed in all manners originally specified in the proposal.	\mathbf{N}			\checkmark	V

Table 2-5. Ownership cap, control cap, and vessel cap options to define QS/QP accumulation limits in IFQ Program Alternatives. Within each cell, a single percentage value needs to be selected

Stock	Option i				Option ii			Option iii			
	Ownership Cap (%)	Control Cap (%)	Vessel Cap (%)		Owner- ship Cap (%)	Control Cap (%)	Vessel Cap (%)		Owner- ship Cap (%)	Control Cap (%)	Vessel Cap (%)
Range currently specified for use in each option.	50, 100 (No limit)	50, 100 (No limit)	50, 100 (No limit)		1, 5, 10, 25	1, 5, 10, 25	1, 5, 10, 25		1, 5	1, 5	1, 5
Above ranges to be nar	rowed for each	option and a	applied to spe	cie	s and specie	es groups b	ased on pr	elin	ninary analys	is	
All nonwhiting groundfish (in aggregate)											
Lingcod - coastwide c/								-			
N. of 42 (OR & WA)								1			
S. of 42 (CA)											
Pacific Cod				Ì							
Pacific Whiting								1			
Sablefish (Coastwide)				Ì							
N. of 36 (Monterey north)				Ì							
S. of 36 (Conception area)				Ì							
PACIFIC OCEAN PERCH				Ì							
Shortbelly Rockfish											
WIDOW ROCKFISH											
CANARY ROCKFISH											
Chilipepper Rockfish											
BOCACCIO											
Splitnose Rockfish											
Yellowtail Rockfish											
Shortspine Thornyhead - coastwide											
Shortspine Thornyhead - N. of 34deg27'											
Shortspine Thornyhead - S. of 34deg27'											

Stock		Option i			Option ii		Option iii				
	Ownership Cap (%)	Control Cap (%)	Vessel Cap (%)	Owner- ship Cap (%)	Control Cap (%)	Vessel Cap (%)	Owner- ship Cap (%)	Control Cap (%)	Vessel Cap (%)		
Longspine Thornyhead - coastwide											
Longspine Thornyhead - N. of 34deg27'											
Longspine Thornyhead - S. of 34deg27'											
COWCOD - S. of 36 (Conception area)											
COWCOD - Monterey area											
DARKBLOTCHED											
YELLOWEYE g/											
Black Rockfish											
Black Rockfish (WA)											
Black Rockfish (OR-CA)											
Minor Rockfish North											
Nearshore Species											
Shelf Species											
Slope Species											
Minor Rockfish South											
Nearshore Species											
Shelf Species											
Slope Species											
California scorpionfish											
Cabezon (off CA only)											
Dover Sole											
English Sole											
Petrale Sole (coastwide) c/											
Arrowtooth Flounder											
Starry Flounder											
Other Flatfish											
Other Fish								1			

2.4 Comparison of the Direct, Indirect and Cumulative Effects of the Alternatives

This section provides an overview of all the alternatives, and offers a quick comparison of the different environmental impacts associated with each alternative. Table 2- provides brief narrative descriptions of the major direct and indirect effects of each alternative, while Table 2-6 summarizes the major cumulative effects of the alternatives. The information presented is based on the scientific analysis of the direct, indirect and cumulative effects of each alternative presented in Chapter 4. The narrative descriptions of the impacts include the significance of the predicted changes from baseline conditions as compiled in Table 4-3 and Table 4-4.

The rows in the tables below list the stakeholder and resource groups that have been initially identified as being possibly affected by the alternatives. The columns in the tables list the alternatives. Alternative 3 consists of five options that vary by the IFQ allocation rules used. Because the impacts of these options may differ, each is treated as a stand-alone alternative in the effects analysis.

	Alternative 1	Alternative 2	Alternative 3A	Alternative 3Ba	Alternative 3Bb	Alternative 3Bc	Alternative 3C	Alternative 4	Alternative 5
Stakeholder & Resource Groups		-	-	Narrat	ive Description of E	ffects			
Trawl Catcher Vessels									
Trawl Catcher Processors Processors of Trawl Groundfish Non-Trawl Commercial Harvesters Buyers and Processors that do Not Purchase Trawl									
Groundfish Recreational Harvesters of Groundfish									
Communities									
Tribes									
Input Suppliers									
Wholesalers and Retailers									
Consumers									
General Public									
Management agencies									
Groundfish Resources									
Other Fish Resources									
Marine Mammals									
Seabirds									
Other Protected Resources									
Habitat									
Trophic Relationships									

Table 2-6. Comparison of the Direct and Indirect Effect of the Alternatives

	Alternative 1	Alternative 2	Alternative 3A	Alternative 3Ba	Alternative 3Bb	Alternative 3Bc	Alternative 3C	Alternative 4	Alternative 5
Stakeholder & Resource Groups		-	-	Narrat	ive Description of E	ffects			
Trawl Catcher Vessels									
Trawl Catcher Processors Processors of Trawl									
Groundfish Non-Trawl Commercial Harvesters									
Buyers and Processors that do Not Purchase Trawl Groundfish									
Recreational Harvesters of Groundfish									
Communities									
Tribes									
Input Suppliers									
Wholesalers and Retailers									
Consumers									
General Public									
Management agencies									
Groundfish Resources									
Other Fish Resources									
Marine Mammals									
Seabirds									
Other Protected Resources									
Habitat									
Trophic Relationships									

Table 2-6. Comparison of the Cumulative Effects of the Alternatives

4 Effects of Alternatives

This section forms the scientific and analytic basis for the comparison of the effects of the No-Action and Action Alternatives on the resource and stakeholder groups of concern. A "resource-based" approach is used to present the effects analysis, whereby a single section of the document describes the effects of all of the alternatives for a particular resource or stakeholder group.

The description of the effects of the alternatives is prefaced by a section that provides an overview of the analytical framework used to guide the analysis. Specifically, the analytical framework includes the following elements:

- Comparative Baseline
- Analytical Timeline
- Types of Effects Analyzed
- Analytical Scenarios
- Significance Criteria and Ratings
- Cumulative Effects Analysis
- Data Collection and Models for Estimating Impacts

4.1 Analytical Framework

4.1.1 Comparative Baseline

A major analytic assumption is the baseline used as the reference point for determining the incremental effect each alternative will have on the resource and stakeholder groups of interest. Chapter 3 of this document contains a comprehensive assessment of the human (physical, biological, and socioeconomic) environment potentially affected by the alternative actions under consideration. For each of the resource or stakeholder groups used to analyze the impacts of the alternatives in this document, a comparative baseline has been developed. The baseline incorporates the status of the resource or stakeholder group at a given point in time. In general, the baseline condition for this effects analysis is the status of potentially affected resource and stakeholder groups as of 2005. The baseline conditions provide a benchmark against which the specific effects of each alternative, including the No-Action Alternative, are compared.

The baseline does not necessarily represent a static 'snapshot' of the resource and stakeholder groups. To the extent feasible, trends in the data from the description of historical conditions are used to depict baseline conditions more accurately (i.e., by incorporating variation over time). The cumulative past and present effects of groundfish fishery activity, as well as effects external to the groundfish fishery such as other fishery impacts, human-induced impacts, and climatic events influencing the resource and stakeholder groups, all contribute to the state of the baseline condition.

In terms of regulations, the comparative baseline includes all existing regulations as modified by actions that the Council has approved, but which have not yet been implemented by NMFS. The

following bulleted list summarizes the assumptions with respect to the regulations that are considered part of the comparative baseline:³⁷

- Activity restrictions in areas that are currently defined will remain in place, as will any
 restrictions resulting from designation of Habitat Areas of Particular Concern (HAPCs) that
 were approved under Amendment 19. It is assumed that these restrictions will not
 significantly alter the species composition of catch, catch per unit effort, or location of
 landings.
- The Council will approve Amendment 10, implementing as a plan amendment the shoreside whiting monitoring and full retention program currently run through EFPs.
- Sector total catch limits for groundfish, especially for overfished species, will continue to be used for the non-tribal whiting fishery.³⁸
- All other enforcement, monitoring, catch accounting and observer coverage levels will be equivalent to those seen in 2005.

A critical component of the comparative baseline is the assumption that will be used for the ABC and OY levels for groundfish. Two options exist:

- Use the ABCs and OYs from 2005 and 2006
- Use the ABCs and OYs that will be in effect for 2007 and 2008.

The preliminary 2007/2008 OYs are likely to result in lower landings levels than were seen in 2005 primarily because the OY for sablefish is lower and perhaps more importantly the OY for yelloweye (a constraining overfished species) are also lower. Therefore, the use of 2007/2008 may not be consistent with the amount of effort that was actually seen in 2005. For this reason, a decision has been made to use the 2005/2006 OYs for this EIS.

4.1.2 Analytical Timeline

As in any analysis that tries to predict the effects of future actions, it is critical to examine the time periods covered by the available historic and current data, the period in which the analysis will occur, and the period over which the analysts must make projections. In general, there is a significant time lag between the period during which the analysis is undertaken and the period in which the effects of a proposed action will occur. Specifically, the analysis is scheduled to be completed in June 2007. The effects of the proposed action won't begin to occur until 2010, and most likely will not be fully realized until some years later. The purpose of this section is to provide an understanding of the timing issues that complicate the trawl IFQ program analysis and to propose an analytical approach that can overcome the potential problems.

Figure 4-1 provides a quarterly timeline for analysis and implementation of the trawl IFQ program analytical from 2004 through 2015. The first section of the figure, labeled "Analysis of TIQ Alternatives," indicates the time frame over which the analysis of the trawl IFQ program takes place. Sections 2 through 4 of show the availability of key sets of data that will be necessary for the analysis. Section 5, Approval & Implementation, shows the timeframe for the Council and Secretarial decision

³⁷ This list was developed through discussions between the Consulting Team and staff members from PFMC and NMFS.

³⁸ While groundfish sector allocations were approved in concept in Amendment 18, specific sector allocations have not yet been approved by the Council. Nonetheless, Council and NMFS staff members believe that sector allocations should be considered part of the comparative baseline.

process and implementation of the approved program by NMFS. The last section of the figure, Fishery Regulations, indicates the timing of regulatory changes that are projected to occur during the first years of fishing under the program.

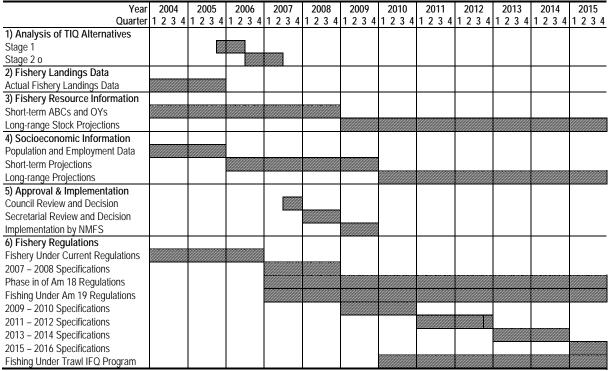


Figure 4-1. Trawl IFQ Program Analytical and Implementation Timeline

Note: The fact that the timeline begins in 2004 does not mean that data from earlier periods will not be used in the analysis.

As seen in the first section of Figure 4-1, Stage 1 of the analysis (development of the analytical framework and outline) runs approximately one year, from the 4th quarter of 2005 into the 2nd quarter of 2006. The second stage of the trawl IFQ program analysis is currently scheduled to begin in the 3rd quarter of 2006 and run through the 2nd quarter of 2007. The figure examines data availability from the perspective of the Stage 2 analysis—at least some data will only be available after Stage 1 is underway or completed.

Section 2 of the figure shows the period over which actual fishery landings data will be available. By the time the Stage 2 analysis is underway, fishery data for 2005 should be available. Information for earlier years will also be available and used to describe historical conditions of potentially affected resource and stakeholder groups, but it is not shown in the figure.

The figure's third section describes the availability of stock assessment information. Under the current management regime, the groundfish stock specifications cover two-year periods, and Council recommendations are made at the end of the 2nd quarter each even-numbered year. Therefore, in the 3rd quarter of 2006—the beginning of the Stage 2 analysis—the specifications containing Acceptable Biological Catch (ABC) and Optimum Yield (OY) projections for 2007 and 2008 should be available. The specifications are based on periodic Stock Assessment and Fishery Evaluations (SAFE) documents that provide not only an indication of the stock levels and OYs for the near term, but generally also provide longer range projections. As indicated in the figure, these long-range projections of stock sizes are likely to be generally available through at least 2015 for most species.

The fourth section of the figure deals with available socioeconomic information, including two critical data sets, population and employment. In general, population and employment estimates through 2005 will be available at the community or county level by the time Stage 2 of the analysis is underway. Reliable population and employment projections through 2009 should also be available, but projections beyond 2009 are likely to be less certain, primarily because population estimates are recalibrated every 10 years to the decennial US census.

Assuming that the analysis of the trawl IFQ program proceeds as currently scheduled, the Council should receive a preliminary draft analysis at the end of the 2nd quarter in 2007, and is presumed to make its final recommendations by the end of that year. Following the Council decision, it is presumed that development of a draft analysis for Secretarial review will be required. Drafting of plan amendment language, implementation plans, proposed changes to the regulation, and the Secretarial review and decision process will require at least a full year (2008). Assuming the Secretary approves the program, it is anticipated that implementation of the program by NMFS will require an additional year (2009).

The sixth and final section of the figure shows the major regulatory regimes under which the fishery will operate between 2004 and 2015. The current regulations are expected to remain in effect through 2006. By then it is anticipated that new groundfish stock and harvest specifications would be in place, that some regulations based on Amendment 18 will have been put into place, and that regulations developed under Amendment 19 will have been implemented. It is assumed that fishing would continue under those regulations through 2009. In 2010, it is anticipated that fishing under the trawl IFQ program would begin and that program regulations would replace Amendment 18 regulations for the trawl fishery.

The end of 2015 is used as the "end point" for the cumulative effects analysis described in more detail in Section 4.1.5. The time horizon of the analysis is more than a few years after implementation of an alternative management regime in order to include fleet consolidation and other possible effects.

4.1.3 Types of Effects Analyzed

This analysis considers the terms "effects" and "impacts" to be synonymous, and the terms are used interchangeably. One of the main functions of this document is to comply with NEPA requirements for preparation of an EIS. The Council on Environment Quality (CEQ) regulations implementing NEPA state that effects or impacts include ecological (such as the effects on natural resources and on the components, structures, and functioning of affected ecosystems), aesthetic, historic, cultural, economic, social, or health, whether direct, indirect or cumulative. CEQ NEPA regulations define direct, indirect or cumulative effects on the human environment as follows:

Direct Effects—are caused by the action and occur at the same time and place.

Indirect Effects—are caused by the action and are later in time or further 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 Effects—are the impacts on the environment which 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 actions. Cumulative effects can result from individually minor but collectively significant actions taking place over a period of time. As noted above, this analysis utilizes a resource-based approach for describing the effects of the alternatives. For each resource or stakeholder group, the effects of all of the alternatives are described sequentially in a single section of the document. Within the assessment of each alternative there is a subsection that describes the direct and indirect effects and a subsection that describes the cumulative effects.

4.1.4 Analytical Scenarios

Given the complexity of the affected environment in which the West Coast groundfish trawl fishery occurs, current conditions of some resource and stakeholder groups are uncertain, and future conditions are always uncertain. Moreover, the baseline year, 2005, may not necessarily be representative of a typical year for the fishery. To account for this inherent uncertainty in the fishery, this analysis employs a set of "what if" scenarios in the effects analysis. The scenarios are developed as a means to demonstrate differences in the way the various alternatives perform under conditions that are plausible, but that are not necessarily likely because they may represent extreme events. Although some scenarios may be deemed highly unlikely, they nonetheless create an analytical vehicle to isolate important effects of the alternatives. The scenarios examined for a particular resource or stakeholder group are limited to those that have a significant bearing on the impacts described for that group. The list of scenarios below is not fixed—scenarios may be added or removed as deemed appropriate during development of the analysis.

4.1.4.1 Scenarios for Analyzing All of the Alternatives

Projected OYs and ABCs for 2007 and 2008

Under this scenario, Acceptable Biological Catch (ABC) and Optimum Yield (OY) are equal to projections for 2007 and 2008.

High Trawl Allocation Levels of Groundfish Species

Under this scenario, OYs are higher than those likely under baseline conditions. Trawl allocation levels may vary because of explicit changes in the allocation or because of changes in the OY (stock biomass).

Low Trawl Allocation Levels of Groundfish Species

Under this scenario, OYs are lower than those likely under baseline conditions. Trawl allocation levels may vary because of explicit changes in the allocation or because of changes in the OY (stock biomass).

A Stock that is Currently Not Overfished Falls into Overfished Status

Under this scenario, more restrictive catch constraints are imposed to rebuild a newly designated overfished stock (e.g., for sablefish, whiting or yelloweye rockfish).

A Stock that is Currently in an Overfished Status is Rebuilt

Under this scenario, a species that has been in an overfished status is rebuilt, and OYs return to levels that allow targeted harvesting of the species.

Alternative Sector Allocations

This array of scenarios examines various allocations of groundfish species among the trawl sectors (e.g. shoreside, mothership deliveries, and catch processors).

4.1.4.2 Scenarios for Analyzing the No-Action Alternative

Alternative Levels of Observer Coverage on Trawl Vessels

Under this scenario, the level of observer coverage under the existing management regime is increased.

Alternative Requirements for the Reporting of Bycatch for Trawl Vessels

Under this scenario, total catch reporting under the existing management regime is required.

4.1.4.3 Scenarios for Analyzing the Action Alternatives

The following scenarios are used to help assess potential efficiency gains under a trawl IFQ program and the possible impacts a of a trawl IFQ program on communities and fishing crews.

No Transfers of IFQs Occur

Under this scenario, no IFQ transfers occur under a trawl IFQ program, but vessel owners have opportunities to optimize their harvesting strategies.

Moderate Fleet Consolidation

Under this scenario, IFQ transfers occur under a trawl IFQ program, and vessels exit the fishery such that the average vessel remaining in the fishery fishes 100 days per year.

Considerable Fleet Consolidation

Under this scenario, IFQ transfers occur under a trawl IFQ program, and vessels exit the fishery such that the average vessel remaining in the industry fishes 200 days per year.

Quick Transition to a Moderately Consolidated Fleet

Under this scenario, the fleet experiences moderate consolidation during the first year of a trawl IFQ program.

Gradual Transition to a Moderately Consolidated Fleet

Under this scenario, the fleet experiences moderate consolidation over the first five years of a trawl IFQ program.

4.1.5 Cumulative Effects Analysis

As described in Section 4.1.3, cumulative impacts are those *combined effects* on the condition of the resource and stakeholder groups of concern that result from the incremental impact of each alternative when added to other past, present, and reasonably foreseeable future actions. For a description of the effects of past and present actions, the cumulative effects analysis draws on the historical and baseline conditions of affected resource and stakeholders presented in Chapter 3. Reasonably foreseeable future actions (RFFAs) that have the potential to affect the resource and stakeholder groups of concern were developed by the Consulting Team in consultation with Council staff and NMFS representatives.

RFFAs may be endogenous (external) or exogenous (internal) to the federal fishery management regime. Examples of endogenous RFFAs include changes in ABCs and OYs. Other endogenous RFFAs might include the reauthorization of the MSA with proposed changes to national standards, or a declaration that a particular stock has been rebuilt. Examples of exogenous RFFAs include higher than anticipated population growth in coastal communities, or a declaration of critical habitat for an endangered seabird.

The end of 2015 is used as the "end point" for the cumulative effects analysis in terms of identifying RFFAs. The time horizon of the analysis is more than a few years after implementation of an alternative management regime in order to include fleet consolidation and other possible effects.

The initial list of exogenous RFFAs included in the cumulative effects analysis is as follows:

- Human population increases in affected communities
- Increased tourism and recreational opportunities in affected coastal communities
- Increased demand for retirement destinations in affected coastal communities
- Increased demand for seafood and possibly protein in general
- Continued growth and scope of the aquaculture industry
- Increased public awareness and scrutiny of the fishing industry
- Increased demand for ecosystem-wide fishery management approaches

The Consulting Team, in consultation with Council staff and NMFS representatives, developed the following initial list of endogenous RFFAs:

- Real-time reporting of electronic fish tickets and electronic logbook entries will be required.
- Vessel Monitoring Systems (VMS) for all licensed and all open access vessels will be in place, enforced, and monitored.
- POP, darkblotched rockfish, and widow rockfish stocks will be declared rebuilt and will be removed from "overfished" status.
- Annual OYs for lingcod, POP, darkblotched rockfish, and widow rockfish will allow for limited targeting of these species.

Analysts will re-evaluate this list after reauthorization of the MSA to see if adjustments are needed.

4.1.6 Significance Criteria and Ratings

The effects analysis includes a set of criteria for identifying significant effects on the resource and stakeholder groups of concern. Determinations of significance in an EIS are the focus of analysis because they lead to inclusion of additional mitigation (or a detailed justification for not implementing mitigation).

The criteria for defining significance are discussed in the individual effects analysis sections. These criteria or thresholds are set as specific numerical standards, qualitative standards, and/or desired management goals. Using explicit significance criteria and significance thresholds defined in quantitative terms, helps to ensure consistent understanding of the results among readers with a wide diversity of backgrounds and points of view. Ideally, these thresholds would be derived from existing environmental laws, regulations, or standards. However, for socioeconomic impacts in particular there are no established definitions of "significant" (See SBA (2002) for a detailed discussion of this issue in the context of the Regulatory Flexibility Act (RFA). According to the SBA, since the RFA does not define what Congress meant by "significant economic impact," agencies must tailor the level, scope and complexity of their analysis to the regulated entities at issue in each proposed regulation.)

Following the analysis of effects and determination of significance, the following impact ratings are applied:

Significantly adverse (S-): Significant adverse effect based on ample information and data and the professional judgment of the analysts who addressed the topic.

Conditionally significant adverse (CS-): This determination is lacking in quantitative data or information; however, the professional judgment of the analysts is that the alternative will cause a decline in the condition of the resource.

Not significant (NS): This determination is based on information and data, along with the professional judgment of the analysts that suggest that the effects will not cause a significant change in the condition of the resource.

Conditionally significant beneficial (CS+): This determination is lacking in quantitative data and information; however, the professional judgment of the analysts is that the alternative will cause an improvement in the condition of the resource.

Significantly beneficial (S+): Significant beneficial effect based on ample information and data and the professional judgment of the analysts who addressed the topic.

Unknown (U): This determination is characterized by the absence of information or data sufficient to adequately assess the significance of the impacts, either because the impact is impossible to predict, or because insufficient information is available to determine the condition of the resource.

4.1.7 Data and Models for Estimating Impacts

4.1.7.1 Data Collection

The Consulting Team suggests that a greater understanding of the dynamics and structure of the West Coast groundfish trawl fishery could be gained through an interview-based data collection process involving key informants in the fishing industry and fishery management agencies. The way in which trawl groundfish harvesters and processors prosecute the fishery depend on a complex array of factors, including ex-vessel prices, fishing and processing costs, other fishing opportunities and harvester-processor relationships. Semi-structured interviews with key informants will help qualitatively inform a number of these components of the overall effects analysis. Optimal use of the key informant approach would not trigger the need for Paperwork Reduction Act clearance and Office of Management and Budget approval.

4.1.7.2 Models

This subsection provides an overview of possible model development for predicting how trawl groundfish harvesters and trawl groundfish processors would respond under each alternative. The choice of models depends upon the amount and quality of information available. The following bullets describe some of the data issues complicating model development for this analysis:

- Cost and earnings data for individual harvesters are still under development, and at best will be available only for a single year. A comprehensive predictive model would require information showing how costs change with different OY levels and exogenous prices.
- Cost and earnings data for individual processors are unavailable and unlikely to become available in the timeframe of the analysis.
- Comprehensive primary data on processed products and product prices are unavailable.
- Final market demand for groundfish products is not well known.

• Data showing the total catch of groundfish by individual vessels are unavailable. Estimates of total catch are currently made in the NMFS Bycatch Model by combining observer data, logbook data, and landings data.

Given these data shortcomings and the advice of individuals knowledgeable about the West Coast groundfish trawl fishery, the Consulting Team determined that a comprehensive predictive model would not be feasible for use in the effects analysis. Instead, the Consulting Team proposes to develop a set of models designed to focus on specific issues. These issues include:

- The distributional effects of the initial allocation of IFQs in a trawl IFQ program.
- The potential consolidation of the trawl groundfish harvesting sector following the allocation of IFQs.
- The potential to reduce catches of incidental species.
- The potential to increase profits.

These models could be constructed using existing data sources, combined with the interview data discussed above and/or analysts' judgment to fill the numerous data gaps.

4.1.7.2.1 Model to Assist in Assessing the Effects of the Initial Allocation of IFQ

The Consulting Team believes the initial allocation of IFQs has a potentially significant effect on the way in which trawl groundfish harvesters and processors prosecute the fishery. The Consulting Team believes that an examination of the initial allocation options and a determination of how permit owners would fare relative to current participation levels would indicate the socioeconomic changes that may be expected in the fishery as a result of the initial allocations.

The initial allocation model would consist of four modules as follows:

- Historical Landings Module: This module would include landings by year and species from 1994 -2005 for individual operations, including data on participation in fisheries other than the West Coast groundfish trawl fishery. The module would also include data indicating the volume of purchases of trawl groundfish by individual buyers and processors. Finally the module would contain demographic information including vessel class with which the permit is associated, community of residence of the permit owner, physical location of processing facility, etc., for each potential recipient of IFQ.
- 2) Allocation Rules Module: This module would contain the specific allocation rules included in the alternatives. As described in Chapter 2, there are six different allocation splits between harvesters and processors included in the main suite of alternatives. All of the options in the main suite alternatives would allocate IFQs based on a historical landings basis, but the way that catch history is used varies by program. In addition to the allocation options in the main suite of alternatives, the Council has indicated that other allocation methodologies should be examined. These additional allocation methodologies are detailed in the 2nd half of the Components Table in Chapter 2. Most of these ancillary options merely tweak the allocation rules in the main suite by changing the eligibility years, the minimum landings requirements, or the length of the historical period. However one of the included ancillary options uses a very different methodology for allocating IFQ for overfished species and other incidentally caught groundfish. This methodology allocates IFQs for overfished and incidentally caught groundfish species in proportion to the amount of IFQ issued for target species-the proportions would be based on average incidental catch rates in recent years as estimated in the NMFS Bycatch Model.

- 3) Incidental Catch Rate Module: This module will consist of estimates of incidental catch rates of overfished species and other incidentally caught groundfish species on a target species basis for the years 2001 2005.³⁹ The estimates will be based on the NMFS Bycatch Model. This module will be used for two different purposes: 1) It will be used in conjunction with the Allocation Rules Module to project IFQ allocations under the option that allocates IFQs on the basis of incidental catch rates; 2) The Incidental Catch Rate Module will be used to examine the different allocation outcomes and to assess "winners and losers" among the initial quota recipients.
- 4) Comparison Module: In this module the allocations of IFQs will be compared to actual 2005 landings and ex-vessel values. Initial QS allocations will be translated to QPs based on the OYs and trawl apportionment targets from 2005. Ex-vessels prices from 2005 will be used to assign a "QP proxy value" to the hypothetical QP allocations for 2005. Each individual's QP proxy value will be compared to the individual's actual ex-vessel value of landings from 2005.⁴⁰ The absolute value of the difference between the QP proxy value and the allocation will be used as one measure of the allocation effect. Allocation options that result in relatively larger values indicate that the option would result in greater change from 2005 conditions.

A second means of comparison using this module will examine the allocation of QP for overfished species, and compare this allocation to the "overfished species requirements" of each individual. Overfished species requirements would be calculated by applying the Incidental Catch Rate Module to hypothetical 2005 QP allocations of target species. The absolute value of the difference between each hypothetical overfished species QP allocation and estimated overfished species requirements in 2005 will be calculated. The larger this difference, the greater the change relative to 2005 conditions.

4.1.7.2.2 Model to Assist in Assessing the Effects of Fleet Consolidation

The Consulting Team believe that consolidation under the IFQ and permit stacking alternatives will be a key impact mechanism. The Consulting Team plans to develop a model to provide rough "order of magnitude" projections of the effects of consolidation. This model will not predict the level of consolidation, but rather will predict which fishing operations are most likely to leave the fishery under a given level of consolidation. The model will not be able to predict whether recipients of IFQs will sell or lease QS when leaving the fishery. However, for purposes of analysis the model will unless otherwise specified, assume that QS are sold during consolidation. This information will be then be used in other models and in the community impact analysis. Actual levels of consolidation will be discussed in the context of the scenarios described in Subsection 4.1.4.3.

In general, the Consulting Team believes that post-IFQ consolidation of the West Coast groundfish trawl fishery will depend on several factors as listed below:⁴¹

1) Participation in 2005. The Consulting Team assumes *a priori* that fishing operations that did not participate in 2005 are unlikely to re-enter the West Coast groundfish trawl fishery regardless of their initial allocation. In other words the Consulting Team will assume that all initial quota

³⁹ The WCGOP began collecting bycatch data in August 2001.

⁴⁰ While the "baseline" has been set as 2005, it may be reasonable to compare IFQ allocations to average landings over a longer period, or to landings in the last year of participation. These types of additions would be discussed during the Stage 2 analysis.

⁴¹ The assumptions listed are starting points--during the Stage 2 analysis they would be verified during key informant interviews. In addition, it is likely that other factors (e.g., distance from operating base to primary fishing grounds, length of tenure of permit ownership) may be added to the mix.

recipients that did not also fish in 2005 will transfer their allocations and leave the fishery. Other assumptions with regard to this issue are also possible and would be examined during the Stage 2 analysis. Validating these assumptions would be part of the key informant process.

- 2) Ownership linkages to processors. The Consulting Team believes that—all other factors being equal—fishing operations that have direct ownership linkages to processors are more likely to remain in the fishery than operations that do not.
- 3) Relative efficiency within the vessel class in terms of average catch per day as reflected in logbook data. This will be used as a proxy for relative profitability—the Consulting Team does not believe that cost and earning data being developed in the ongoing NMFS survey will be adequate to measure relative profitability.
- 4) Relative ranking within the fishing operation's vessel class in terms of gross revenue in 2005. Operations that rank higher are assumed to be less likely to exit.
- 5) Relative ranking within the fishing operation's vessel class in terms of the absolute difference between QP proxy value (discussed in the previous section) and actual 2005 ex-vessel value. Higher ranked operations (i.e. less difference) are assumed less likely to exit the fishery.
- 6) Relative ranking within the fishing operation's vessel class in terms of the absolute difference between the hypothetical allocation of 2005 QP of overfished species (developed in the initial allocation model) and the operation's overfished species requirements as determined by amounts of target species QS initially allocated and industry standard incidental catch rates. It is assumed that operations that would not need to purchase overfished species QPs (based on standard incidental catch rates) are assumed to be more likely to remain in the fishery.
- 7) Relative ranking within the fishing operation's vessel class in terms of the dependence on trawl groundfish revenues as a percentage of all other fish harvesting revenues. The Consulting Team assumes that the greater the dependence on the West Coast groundfish trawl fishery, the greater the likelihood of remaining in the fishery.

The consolidation model will calculate a weighted average of these factors and provide an overall ranking of each operation within its vessel class. The higher the ranking, the greater the likelihood a fishing operation would remain in the fishery under the various consolidation scenarios.

The final steps of the consolidation model assume that each fishing operation remaining in the fishery would acquire enough target species QPs such that it lands the same proportion of target species as it landed in 2005, as compared to the other operations remaining in the fishery.

4.1.7.2.3 Model to Estimate Potential Reductions in Incidental Catch Rates of Overfished Species

The incentive to reduce incidental catch of overfished species is expected to differ markedly across the alternatives. The Consulting Team proposes to use the data developed for the NMFS Bycatch Model to project potential reductions in incidental catch rates and subsequent levels of target species catches.

The proposed incidental catch rate model will utilize observed incidental catch rates by haul, target strategy, and month from 2001 – 2005. Each haul will be ranked on the basis of incidental catch of overfished species relative to the catch of target species with ties going to the haul with the greater amount of target catch. These haul-by-haul records will examined based on specific assumptions about the ability of harvesters to reduce bycatch rates. For example, it might be assumed that all hauls ranked at or below the 25th percentile over the course of the year (i.e., the 25% of hauls with the highest incidental catch per target species catch) would be eliminated from each target fishery. After these hauls are eliminated, the remaining hauls would be aggregated and a new incidental catch rate

for the target species would be calculated. Next, all target catches would be expanded proportionally until the level of estimated 2005 trawl catch of the overfished species is reached, but not expanded by more than the OYs for the target species. Finally, average ex-vessel prices by month from 2005 would be applied to the catches of all retained species, and the result compared to the total ex-vessel value attained in 2005.

The following *a priori* assumptions are proposed, although the Consulting team expects this list to be revised after examining the data during the Stage 2 analysis:

- 1) Assume that all hauls ranked in the 25th percentile or less over the course of the year are eliminated from each target fishery.
- 2) Assume that all hauls ranked in the 50th percentile or less over the course of the year are eliminated from each target fishery.
- 3) Assume that all hauls ranked in the 25th percentile or less over the course of each two-month period are eliminated from each target fishery.⁴²
- 4) Assume that all hauls ranked in the 50th percentile or less over the course of each two-month period are eliminated from each target fishery.
- 5) Assume that all hauls ranked in the 25th percentile by vessel class over the course of the year are eliminated from each target fishery
- 6) Assume that all hauls ranked in the 50th percentile by vessel class over the course of the year are eliminated from each target fishery.

4.1.7.2.4 Methodologies to Assist in the Projection of Ex-Vessel Prices

Ex-vessel prices of groundfish species influence, and will be influenced by, the impacts of the alternatives. While trends in ex-vessel prices by month of landing or by volume can be examined with PacFIN data, ex-vessel prices are influenced by many factors that are not so easily studied. For example, ex-vessel prices are affected by retail prices and consumer demand. The influence of the relative bargaining power of processors and harvesters on ex-vessel prices is also important, and a trawl IFQ program has the ability to shift the balance of power between harvesters and processors. The available literature (e.g., Halvorsen et al., 2000; Matulich et al., 1996; Matulich and Sever, 1999; Matulich and Clark, 2003) can be used to guide a qualitative evaluation of changes in market power under the alternatives. However, it is important to recognize that existing studies may rely on assumptions that do not provide an appropriate characterization of the West Coast groundfish trawl fishery should include a careful analysis of similarities and difference in market conduct. Market conduct refers to the patterns of behaviour that firms follow in adapting or adjusting to the markets in which they sell (or buy) (North Pacific Fishery Management Council Scientific Statistical Committee, 2002). For instance, if firms are sellers, market conduct encompasses mainly:

- The "pricing policies" of firms, whether acting individually of collectively, and
- The process or mechanism of interaction, cross-adaptation, and coordination of the policies of sellers in any market.

A lack of information on market conduct in the West Coast groundfish trawl fishery coupled with difficulties associated with predicting how a trawl IFQ program would affect the market, may make

⁴² Under this and the following assumption set, the expansion of remaining hauls would be undertaken such that the proportion of target catches in each month would remain constant.

any statement on changes in market power and the distribution of rents between harvesters and processors subject to considerable uncertainty. Nevertheless, some insights into the effects of a trawl IFQ system on ex-vessel prices could be gained from an analysis of the structure of the groundfish industry and how this structure affects buying and selling activity. Structure—the number of harvesters, buyers and processors, their independence and how they interact—is important because it determines competitive conditions in the market and the "fairness" of resulting prices. The information forming the basis for the analysis would be obtained primarily from interviews with a few key industry stakeholders. The results of this analysis could then be used to compare market conduct in the West Coast groundfish trawl fishery with that in fisheries in which IFQ programs have been implemented.

Game theory and experimental economics may also provide insights into the effects of an allocation of harvesting shares to processors and on the potential affects that a trawl IFQ system would have on ex-vessel prices. Experimental economic analysis is the use of a controlled institutional environment with real money incentives to examine economic outcomes. These methods are particularly useful for testing theories that are applied in an uncontrolled environment. They are also useful for examining a complex institutional system too rich for comprehensive theoretical analysis. Experimental economics was used by the North Pacific Fishery Management Council in its assessment of the effects of processor shares in the IFQ program for the Bering Sea-Aleutian Islands crab fishery. The experimental analysis determined whether differences in the bargaining strength of harvesters and processors were inherent in different arbitration structures intended to resolve ex-vessel price disputes (NPFMC/NMFS, 2004)

4.1.7.2.5 Model to Assess the Likelihood that Additional Profits Would Offset Additional Observer Costs

An important feature of all of the Action Alternatives is the requirement that all vessels in the West Coast groundfish trawl fishery carry observers 100 percent of the time, or use video monitoring equipment approved by NMFS at all times. Under the current management regime, it is considered infeasible to require this level of catch monitoring because the costs of the program could not be supported by the level of profits generated in the fishery. It is presumed that if the alternatives lead to increased profits, then requiring 100 percent observers or video monitoring could be justified.

This section describes the model that would be used to assess the likelihood that profits in the West Coast groundfish trawl fishery under the alternatives could increase enough to offset the increased costs of observers and monitoring.⁴³ Initial estimates of the cost of an expanded observer program in the West Coast groundfish trawl fishery range from \$300-\$1,000 per fishing day.

The "observer cost offset model" will utilize the incidental catch rate model in conjunction with the consolidation model to find combinations of: 1) potential revenue increases from higher targets species catches due to lower incidental catch rates of overfished species; and 2) fixed and variable cost savings resulting from fleet consolidation. The combination of these results will be used to assess whether the potential increased profitability of different vessel classes could fully offset the cost of observers assuming that the average catch per day of target species for the remaining vessels would remain at 2005 levels.

It is acknowledged that this is a relatively simplistic model; however, more sophisticated models would require more data than are likely to be available. Therefore, the quantitative results will be combined with qualitative information.

⁴³ It should not necessarily be inferred that industry would be required to cover the additional observer costs.

4.1.7.2.6 Profitability Model

The profit motive of fishery participants is an incentive present in all of the alternatives. Potential changes in profits under the alternatives will be estimated using NMFS trawl vessel cost-earnings survey results applied to each vessel class. This information, combined with the output of the models listed above, will be used to estimate the net revenue attainable on purchased QS based on a range of assumed changes in variable costs scenarios. The components of the profitability model include:

- NMFS vessel cost-earnings survey data will be used to estimate the average fixed cost of vessels by vessel class, and the average variable cost per target pound.
- The consolidation model will be use to predict the number of vessels remaining in the fleet at varying levels of consolidation and improvement in incidental catch rates at those consolidation levels.
- The incidental catch rate model will be used to estimate potential additional catches and value of target species for each vessel class
- Fixed cost savings will be estimated based on the number of vessels remaining in each vessel class.
- Variable cost savings per target pound will be assumed. The Consulting Team assumes *a priori* that the following variable cost savings percentages will be used: 1) no change, a 5 percent reduction, and a 10 percent reduction.⁴⁴

4.2 Summary of the Potential Effects of the Alternatives

This section "sets the stage" for the detailed analysis of environmental consequences presented below by providing a broad overview of the potential socioeconomic impacts of the alternatives considered.⁴⁵ Specifically, it discusses the major economic incentives⁴⁶ that are likely to determine the way in which trawl groundfish harvesters and trawl groundfish processors prosecute the fishery under the different alternatives and highlights the socioeconomic consequences of those incentives for all affected groups.

This section also uses a tabular format to summarize the direct, indirect and cumulative effects of the alternatives. The summary table is shown in Table 4-3 on page 283 will utilize the significance criteria and ratings introduced in Section 4.1.6 for each of the indicators listed.

4.2.1 No-Action Alternative (Alternative 1)

The current management regime utilizes two-month cumulative trip limits to spread harvests out over the year. When trip limits are exceeded, all subsequent catches of that species must be discarded, but

⁴⁴ While it may be possible to develop a more quantitative model for estimating variable cost savings, such a model would likely be highly dependent on detailed data from the NMFS cost survey and key informant interviews. The Consulting Team questions whether this model would be cost-effective.

⁴⁵ The initial overview of impacts contained in this document is largely based on the findings of a three-day workshop sponsored by the Pacific Fisheries Management Council in April 2006. The purpose of the workshop was to present the proposed approach for analysis of fishery management alternatives and completion of an EIS to members of the harvesting and processing community and provide them with an opportunity to share information that may assist in understanding the potential effects of these alternatives.

⁴⁶ An economic incentive is based on the desire to increase or maintain current profit, and avoid reductions in profit.

the fisher can continue fishing for other species. Bycatch estimates are used to set fleet landings targets such that landings plus estimated bycatch do not exceed the fleet's catch limit. Vessel landing limits are then set and adjusted as necessary inseason to ensure that fleet landings do not exceed target levels.

As a result of the legal requirement to minimize bycatch of overfished species, considerable harvest opportunity is being forgone. The OYs for many overfished species have been set at low levels, placing a major constraint on the industry's ability to fully harvest the available OYs of the more abundant target species that co-occur with the overfished species. Because overfished species are constraining catches of target species, operations are compelled to take multiple trips that increase operating costs and that fail to fully utilize vessel capacities.

The use of average discard rates for the fleet to project bycatch of overfished species, together with the absence of a requirement to report catches that are not landed, creates little direct incentive for individual vessels to do everything possible to reduce vessel bycatch rates. It is clearly in the best interest of all vessels to reduce bycatch. However, if some vessels contribute to the joint bycatch reduction effort while others "free-ride," the provision of the collective benefit is less than optimal (Ostrom, 1990). Overall, the current management regime provides little individual bycatch accountability and limits opportunities and incentives for vessels to reduce bycatch.

Further, the current management regime is not responsive to the wide variety of fishing business strategies and operational concerns. For example, some fishermen would prefer to be able to pursue a more seasonal groundfish fishing strategy to take advantage of changes in market, weather, and harvest conditions that occur during the fishing year. The cumulative limit regime requires fishing to be spread across the year, currently in two-month increments.

4.2.2 IFQ Alternatives (Alternatives 2 - 4)

The following subsection discusses the primary impact mechanism and behavior changes that are likely under the three IFQ alternatives (Alternatives 2 – 4). While the three alternatives are not identical, it is anticipated that they would have the same basic impacts.

4.2.2.1 Potential Effects of Management Measures on Harvesters and Processors

A trawl IFQ program is intended to achieve the TIQ goals and objectives (Section 1.1.2) by introducing an alternative system of incentives that would change the way in which trawl groundfish harvesters and trawl groundfish processors prosecute the fishery. The program would accomplish this through management measures that

- Create annual IFQs;
- Grant IFQ transferability; and
- Require total catch reporting and monitoring.

The discussion below briefly discusses how these measures are expected to help achieve the TIQ goals and objectives, and identifies potential countervailing incentives that may limit the positive impacts.

The creation of annual IFQs would remove most of the regulatory constraints on the timing of harvest under the current bimonthly cumulative trip limit regime, thereby allowing harvesters to optimize their fishing patterns during the year so as to maximize the net revenue from the amount of IFQ they

hold. Removing the timing constraints would allow operations to adjust their harvest so that greater amounts of target species can be harvested for a given amount of incidental catches of constraining overfished species. The removal of harvest timing constraints would also allow harvesters to consolidate their own fishing activities, rather than being forced by regulation to divide their harvesting activities into six two-month periods.

Notwithstanding the new freedom, harvesters would have to consider processor demand in the timing of their fishing activities. Buyers and processors of trawl groundfish operate under capacity constraints and in response to wholesale market demand. They will likely continue to have preferences with respect to when fish are delivered and may offer lower prices for fish delivered at less preferred times. Harvesters would need to take these purchasing patterns into account in order to maximize their profits. While harvesters may wish to harvest their entire IFQ of fish in one month, they must determine whether that timing meets their operational objectives given the buyers available and the prices offered.

The granting of transferability provides harvesters an opportunity to optimize the size of their allocation by matching their allocation with the harvesting capabilities of their vessels and crew. Transferability not only would allow some operations to increase the size of their harvests in order to increase profitability, it would also allow permit owners to leave the fishery with compensation. In other words, transferability is likely to cause consolidation of the trawl harvesting sector. This consolidation would reduce fixed costs by removing redundant capital from the fishery and increase the efficiency of remaining vessels as more efficient operations purchase the IFQs of less efficient operations.

Temporary transfers of quota are a means of meeting short-term mismatches between catches and holdings. Without this transferability some fishers would likely rapidly reach their allowable catches of a few overfished species, and then would have to cease operations in those segments of the fishery where those species are caught.

Imposing a total catch reporting and monitoring requirement would make each vessel responsible and accountable for all groundfish caught, rather than the amounts retained. All catch would count against an individual's IFQ; discards would be allowed but would be subtracted from quota limits. By preventing unreported discarding when quotas are exceeded, this increased accountability provides an incentive for individual vessels to reduce their incidental catch rates of species that have constraining quotas (e.g., overfished species). Possible ways this reduction could be accomplished include targeting or avoiding particular fishing locations, fishing during certain seasons and using more selective fishing gear.

4.2.2.2 Potential Effects of Initial Allocation of IFQs on Harvesters and Processors

Because any allocation of quota is inescapably distributional (i.e., it defines who wins, who loses and how much), the initial IFQ allocation rule could also have a major impact on harvesters and processors depending on the specific details of the allocation rule chosen. The initial allocation may cause behavioral changes in the West Coast groundfish trawl fishery because it could change the opportunities available to each initial assignee of IFQ. The only situation in which the initial allocation would not cause behavioral changes would be an allocation of IFQ to each active permit owner in the 2005 West Coast groundfish trawl fishery that meets the following conditions:

1) The allocation of pounds of each species fairly reflects historical catch;

2) Any additional pounds that can be allocated while remaining within the OY of each species would be allocated in proportion to the percentage of the total catch of that species each initial recipient harvested.

Under such an allocation all of the participants in the 2005 West Coast groundfish trawl fishery would be no better or worse off relative to the baseline conditions in terms of amount of fish harvested. Any other allocation would force operations to buy and sell quota shares to return to the level of harvest they would have attained without the allocation.

Harvesters will examine their initial allocation of IFQs to determine if it makes economic sense for them to remain in the trawl fishery or to sell their allocation and leave the fishery. Of particular importance will be the initial allocation of overfished species. Operations that receive low allocations of overfished species relative to their allocation of target species will be at a disadvantage and are less likely to remain in the fishery, as they would have to incur significant costs to purchase additional IFQs of overfished species to remain.

The allocation of IFQs to processors will also cause behavioral changes, as any such allocation means that more harvesters are likely to need to obtain access to additional IFQ in order to attain preallocation harvest levels. Processors may use their shares to leverage delivery commitments from harvesters, thereby potentially restricting the ability of harvesters to get the best prices for their catches. Under this scenario, vessel owners could become contractors to fish quotas held by processing firms; the firms would contract for fishing their quotas at times and places that would suit them best (National Research Council 1999). In addition, the allocation of IFQs to processors may make it more difficult for new entrants in the processing sector. Ex-vessel markets for fish may already be quite thin in the West Coast groundfish trawl fishery, with few buyers in a number of locations. Constraints on processor entry will make these markets thinner yet. The number of buyers competing for fish may be reduced to a few or a sole buyer in some cases. The possible result of this reduced competition for landings would be a shift in income from harvesters to processors.

On the other hand, it has been argued that if an allocation were not provided to processors, the bargaining power of processors relative to harvesters would be compromised. Once IFQ is issued, every harvester can—either individually or through a collective bargaining association such as a cooperative—withhold product from the processing sector without fear of someone else harvesting it. The ability to withhold product is a powerful tactic that fishers can use to leverage higher prices. A change in the relative bargaining positions would allow harvesters to increase their profitability at the expense of processors.

Of course, if IFQs are freely transferable, a fishermen, vessel owner or processor could increase his bargaining strength by obtaining IFQs. The fact that anyone could do this decreases the gain in bargaining strength that IFQs provides to any one group. Nevertheless, the initial distribution of IFQs could have an effect on the ability of individuals to obtain IFQs. Those who are given IFQs are made wealthier and more able to control IFQs. Therefore, an IFQ could increase the wealth and bargaining strength of the initial recipients of the IFQs (Terry 1993). In short, the segment or segments of the fishing industry that control quota will benefit at the expense of those that don't (Alcock 2006).

In the event that an allocation of IFQs to processors occurs, processors would examine their initial allocation, and the relationships they have with harvesters that remain in the fishery to determine what they do with their IFQs. Potential options for processors include: 1) transferring IFQ pounds to harvesters at no or nominal cost to ensure continued deliveries of raw product and divest themselves of their own vessels, if any; 2) selling or leasing IFQs to harvesters at the prevailing market prices and divest themselves of their own vessels, if any; 3) using the IFQ to augment the catches of their own vessels.

4.2.2.3 Potential Indirect Effects

Many of the behavioural changes of harvesters and processors discussed above would result in indirect socioeconomic effects on stakeholder groups. For example, the decision of some harvesters to leave the West Coast groundfish trawl fishery following the implementation of an IFQ program could result in:

- Lost employment opportunities for crew members; however, the workers who remain in the fishery may work more hours during the year and earn more money.
- Loss of supplies of raw product to some buyers and processors.
- Reduced demand for fishing inputs.
- A shift in fishing effort to other fisheries.
- Changes in the socioeconomic importance of fishing in coastal communities

4.2.3 Permit Stacking (Alternative 5)

The permit stacking alternative would continue the bimonthly cumulative trip limits currently used to manage the West Coast groundfish trawl fishery, but would include the following two differences:

Additional Transferability: Permit holders would be able to acquire additional permits, and each permit held for a vessel (up to three) would result in an additional trip limit amount. For example, if the cumulative trip limit for a species was set at 50,000 lbs, a vessel with three permits would receive three cumulative trip limits for each period or 150,000 lbs. The additional transferability would allow permit holders to better optimize their operations and provides industry-funded compensation for those permit owners that wish to exit the fishery.

Total Catch Reporting and Monitoring: As with the IFQ alternatives, total catch reporting would be required as well as observers or video monitoring on all limited-entry trawl groundfish vessels.

4.2.3.1 Potential Effects of Management Measures on Harvesters and Processors

This section discusses potential effects and impact mechanisms of the permit stacking alternative. In general the effects of permit stacking alternative come about as permit holders acquire additional permits. Because each permit holder could apply up to three permit to their vessel, in theory, the number of potential harvest operations under permit stacking could drop to 1/3 of the current number (to 92 from 274).

In general this mean that the cumulative trip limits that each operation will be allowed to harvest in a given time period is likely to increase. The increase in amount each operation could harvest will tend to each remaining operation more profitable. In theory the additional profits could make it economically feasible for vessels to carry and pay for observers and/or video monitoring equipment, which in turn would make it feasible to require that 100 percent of the catch be reported.

However, it does not necessarily follow that cumulative trip limits for each vessel would increase in proportion to the number of permits held. This is because cumulative trip limits are currently set at levels higher than could be supported if all permit holders harvested their entire limit during the each period. The best way to explain this is by using a hypothetical example that is a stylistic representation of the general methodology used by NMFS to set cumulative trip limits.

Assume there are currently 30 permits in a fishery with each permit assigned to a single vessel, and that the fishery (with an OY of 60,000 tons) is managed by NMFS using two-month cumulative trip limits with a mandate to balance the harvests in each period (10,000 tons per period). Further assume that during the first and last two-month periods (January/ February and November/December) only the 10 largest vessels fish, while in the second and fifth periods (March/April and September/October) only the largest 20 vessels fish. Only during the two mid-year periods (May/June and July/August) is it likely that all 30 vessels fish.

In an effort to keep the harvest in each period equal, NMFS adjusts the cumulative trip limits to account for the likely number of vessels in each period. Thus in period 1 they set the cumulative trip limits at 1,000 tons, and hope that only 10 vessels chose to participate. If in fact the 10 largest vessels harvest their entire limited as expected, then the total harvest for the period with equal 10,000 tons. However, there is the potential that all 30 vessels participate. If that happens then the harvest for the will exceed the goal and trip limits for later periods would be reduced. The same process is used to set the cumulative trip limits for the second period. Twenty vessels are expected to participate, so the 10,000 ton period total is divided by 20 and trip limits are set at 500 tons. Similarly the trip limits for the third period are set at 333 tons (10,000 tons \div 30). Table 4-1 shows hypothetical trip limits amounts and harvests, assuming that each vessel participates exactly as expected and that each harvests their full trip limit amount.

	Large Vessels	Medium Vessels	Small Vessels	All Vessels
Number of Vessels	10	10	10	30
Number of Permits per Vessel	1	1	1	1
Trip Limit per Permit in Period 1	1,000.00	1,000.00	1,000.00	1,000.00
Harvest per vessel in Period 1	1,000.00			333.33
Total Harvest in Period 1	10,000.00	-	-	10,000.00
Trip Limit per Permit in Period 3	500.00	500.00	500.00	1,000.00
Harvest per vessel in Period 2	500.00	500.00		333.33
Total Harvest in Period 2	5,000.00	5,000.00	-	10,000.00
Trip Limit per Permit in Period 3	333.33	333.33	333.33	333.00
Harvest per vessel in Period 3	333.33	333.33	333.33	333.33
Total Harvest in Period 3	3,333.33	3,333.33	3,333.33	10,000.00
Trip Limit per Permit in Period 4	333.33	333.33	333.33	333.00
Harvest per vessel in Period 4	333.33	333.33	333.33	333.33
Total Harvest in Period 4	3,333.33	3,333.33	3,333.33	10,000.00
Trip Limit per Permit in Period 5	500.00	500.00	500.00	1,000.00
Harvest per vessel in Period 5	500.00	500.00		333.33
Total Harvest in Period 5	5,000.00	5,000.00	-	10,000.00
Trip Limit per Permit in Period 6	1,000.00	1,000.00	1,000.00	1,000.00
Harvest per vessel in Period 6	1,000.00	-		333.33
Total Harvest in Period 6	10,000.00	-	-	10,000.00
Average Trip Limit per Permit	611.11	611.11	611.11	777.67
Average Harvest Per Vessel per Period	611.11	277.78	111.11	333.33
Total Harvest per Vessel	3,666.67	1,666.67	666.67	2,000.00
Total Harvest	36,666.67	16,666.67	6,666.67	60,000.00

Now, assume that permit stacking is allowed, and that stacking occurs generally in proportion to the existing distribution of vessel by size. After consolidation there are 4 large vessels 3 medium vessel and 3 small vessels with each vessel holding 3 permits. Hypothetical cumulative trip limits under this scenario are depicted in Table 4-2, which assumes the same OY. NMFS will set the cumulative trip limits in the first period at 833.33 tons because they can assume that all 4 large vessels will fish and that a total of 12 trip limits will be harvested for a period total of 10,000 tons. Note however, that even though the trip limit decreased, the average harvest of each of the large vessel increases. In the second period trip limits are set at 476.19 tons because a total of 21 trip limits are expected to be utilized. Again in spite of the smaller trip limits the average catch per participating vessel increases. In the third period all 30 permits are expected to be utilized, and as in the status quo, the trip limits are set at 333.33 tons. Again however, the average catch per vessel in the period increases relative to average harvests in the status quo. Over the entire year the average trip limit size declines by 30 percent. However, average harvests per vessel are 3 times higher.

	Large Vessels	Medium Vessels	Small Vessels	All Vessels
Number of Vessels	4	3	3	10
Number of Permits per Vessel	3	3	3	3
Trip Limit per Permit in Period 1	833.33	833.33	833.33	833.33
Harvest per vessel in Period 1	2,500.00	-		1,000.00
Total Harvest in Period 1	10,000.00	-	-	10,000.00
Trip Limit per Permit in Period 3	476.19	476.19	476.19	476.19
Harvest per vessel in Period 2	1,428.57	1,428.57	-	1,000.00
Total Harvest in Period 2	5,714.29	4,285.71	-	10,000.00
Trip Limit per Permit in Period 3	333.33	333.33	333.33	333.33
Harvest per vessel in Period 3	1,000.00	1,000.00	1,000.00	1,000.00
Total Harvest in Period 3	4,000.00	3,000.00	3,000.00	10,000.00
Trip Limit per Permit in Period 4	333.33	333.33	333.33	333.33
Harvest per vessel in Period 4	1,000.00	1,000.00	1,000.00	1,000.00
Total Harvest in Period 4	4,000.00	3,000.00	3,000.00	10,000.00
Trip Limit per Permit in Period 5	476.19	476.19	476.19	476.19
Harvest per vessel in Period 5	1,428.57	1,428.57		1,000.00
Total Harvest in Period 5	5,714.29	4,285.71	-	10,000.00
Trip Limit per Permit in Period 6	833.33	833.33	833.33	833.33
Harvest per vessel in Period 6	2,500.00	-	-	1,000.00
Total Harvest in Period 6	10,000.00	-	-	10,000.00
Average Trip Limit per Permit	547.62	547.62	547.62	547.62
Average Harvest Per Vessel per Period	1,642.86	809.52	333.33	1,000.00
Total Harvest per Vessel	9,857.14	4,857.14	2,000.00	6,000.00
Total Harvest	39,428.57	14,571.43	6,000.00	60,000.00

Table 4-2. Hypothetical Example of Cumulative Trip Limits under Permit Stacking

4.2.3.1.1 Impact Mechanisms under Permit Stacking—Alternative 5

From the previous example it is clear that the Permit Stacking Alternative could significantly impact the groundfish fisheries. The following lists the mechanism through which impacts of this alternative are likely to be felt.

- Increased harvests on vessels with stacked permits. Notwithstanding the likelihood of smaller cumulative trip limits, the overall effect of permit stacking is likely to result in higher total harvests for vessels that choose to acquire additional permits. The higher catches will mean higher revenues and more cost-effective operations.
- **Total catch reporting**: The Alternative will require total catch reporting. This will provide NMFS with more accurate information on fishing mortality and could lead to changes in OYs. Any operations that in the past discarded fish without reporting will most likely find it more profitable to land any fish with value, which could increase their revenue per trip, but could reduce the number of trips if increased reporting resulting in fishery closures.
- **100 Percent observer coverage and/or video monitoring systems**: The Permit Stacking Alternative will require 100 percent observers and/or video monitoring systems. This will result in an additional cost burden for all operations regardless of whether the vessel acquired additional permits. The costs of the observer/monitoring system will clearly be an incentive to acquire additional permits.
- Changes in crew size and trip lengths: The observer program not only requires extra direct expenses, but is also likely have on impact on crew size and possibly trip lengths. This is because observers will require bunks and space in which to conduct their work. If space is limited—which more likely on smaller vessels—the number of crew members may need to be reduced to accommodate the observer. Alternatively the vessel could take shorter trips (i.e. day trips) reducing the need for additional bunk space.
- Increase in permit prices: The Permit Stacking Alternative would lead to higher market prices for limited entry trawl permits. A primary reason for the increase is that additional value may be generated with the permits without the need for significant investment in harvesting platforms and equipment. Under the status quo, a permit has value only if it is accompanied, or can be paired with, a vessel that does not already participate in the groundfish fishery. With Permit Stacking operations already participating in the limited entry trawl fishery could potentially generate additional value by purchasing permits. This additional value potential will naturally increase the market value of permits.
- Increases the opportunity costs of owning latent or under utilized permits: Under the status quo, the opportunity costs of holding on to a latent or under utilized permit are minimal. With Permit Stacking a latent or under utilized permit would be viewed as a lost opportunity with real costs. For example, if a permit could be sold for \$50,000 more under the permit stacking alternative then under the status quo, holding on to an un-used permit at a minimum costs the owner the interest that could be earned on \$50,000.
- Provides or enhances exit strategies for owners of latent or under utilized permits: If the market value of a permit increases significantly, the alternative may provide an exit strategy of owners that would like to leave the fishery. For example, the added value could be enough to entice participants in the whiting fishery that also participate in the Alaska Pollock fishery, to sell their permit and concentrate on Alaska Fisheries.
- Consolidation of harvesting operations: The Permit Stacking Alternative would likely lead to the
 reduction in latent permits and a consolidation of harvesting operations. If all potential permit
 stacking were to occur, then the fleet would be reduced from a potential 274 vessels to 92
 vessels. The maximum level of stacking is probably unlikely to occur. One reason is that permit
 stacking would not directly benefit participants in the whiting fishery because that fishery is not
 managed with cumulative trip limits.

- Changes in the operating costs for remaining vessels: Vessels that utilize multiple permits to increase their catch per period would see an overall decline in the average cost per pound as long as the increased revenue more than offset the increased cost of the observer and monitoring programs. This is because total fixed cost would remain constant while overall harvests would increase. It is uncertain whether permit stacking would reduce variable costs.
- **Reductions in incidental catches**: It is possible, but not certain, that the Permit Stacking Alternative could reduce incidental catches of non-target species. Reductions could occur if the operations that exit the fishery are those that have had higher incidental catch rates in the past. If there is a positive correlation between activity levels and incidental catch and if less active operation are more likely to exit the fishery, then it is possible that overall incidental catch rates could decline.
- Changes in the distribution of operations: With consolidation there could be changes in the geographic distribution of harvesting operations. A change in the geographic distribution of harvesting operation would occur if there are cost advantages to operating out of particular ports. Evidence that there are geographic differences in profitability was seen in the 2003 buy-back. In the buy-back, a greater proportion of vessels from California left the fishery than vessels from Oregon and Washington.

4.2.4 Comparative Summary of the Significance of the Effects of the Alternatives

Table 4-3 provides a comparative summary table of the direct and indirect effects of the alternatives on resource and stakeholder groups. The table shows some of the key indicators or measurement criteria used to describe the potential impacts of the alternatives in terms of changes from baseline conditions. Other indicators will be added as needed. The columns in the table list the main suite of alternatives, along with the five different allocation programs associated with Alternative 3. The cells of the table indicate the significance of the predicted changes from baseline conditions using the significance ratings in Section 4.1.6. Table 4-4 is similar to Table 4-3 except that it lists the significance of cumulative effects.

Stakeholders, Resources & Indicators	Alternative 1	Alternative 2	Alternative 3A	Alternative 3Ba	Alternative 3Bb	Alternative 3Bc	Alternative 3C	Alternative 4	Alternative 5
Trawl Catcher Vessels	Alternative 1	Alternative 2	Alternative 3A	Alternative 3Ba	Alternative 3BD	Alternative 3BC	Alternative 3C	Alternative 4	Alternative
)	T				· · · · · · ·	T		
Eligible permit holders									
Ex-vessel value to 2005									
participants									
Value of transfers to restore									
participants to 2005 levels									
Number of permit holders with moderate consolidation									
Number of days fished with									
moderate consolidation									
Fixed cost savings with moderate									
consolidation									
Value of additional target with									
moderate incidental catch rate									
improvements									
Observer costs with moderate									
consolidation and moderate									
incidental catch rate									
improvements									
Trawl Catcher Processors						·			
Eligible permit holders									
Ex-vessel value of allocation to									
2005 participants									
Value of transfers to restore									
participants to 2005 levels									
Processors of Trawl Groundfish						·			
Eligible processors		ľ							
Ex-vessel value of allocation									
Seasonality of raw product									
supply									
Bargaining power relative to									
harvesters									
Non-Trawl Commercial Harvesters	J	L			J	IĮ	I		
Participation by trawl groundfish	1	Т				1			
harvesters									
Other potential impacts	<u>/</u>								
Buyers and Processors that do No	t Purchase Trawl G	roundfish							
Market share relative to trawl						Ĭ			
groundfish processors									
groundingit processors								1	

Table 4-3. Summary of the Direct and Indirect Effects of the Alternatives

Regulatory Social Initial Regulatory Flexibility Analysis

Stakeholders, Resources &									
Indicators	Alternative 1	Alternative 2	Alternative 3A	Alternative 3Ba	Alternative 3Bb	Alternative 3Bc	Alternative 3C	Alternative 4	Alternative 5
Recreational Harvesters of Grour							1		
Political power relative to trawl							Ĩ		
groundfish sector									
Communities	•			•		•			
Number of trawl groundfish									
vessels by community									
Number of buyers and									
processors of trawl groundfish									
Nnumber of harvesting and									
processing jobs									
Local input suppliers									
Dependency on trawl groundfish									
harvesting and processing									
Geographic distribution of									
harvests									
Overall economic impact from									
fisheries Tribes		l				<u> </u>			
ITIDES						1	T	ľ	
Input Suppliers				1			T	r	
Revenue									
Wholesalers and Retailers									
Product availability									
Consumers									
Product price, quality and									
availability									
General Public		,					,		
Non-market and non-									
consumptive benefits from the									
marine ecosystem Management agencies									
Management costs	1			1					
-									
Enforcement feasibility									
Reliability of fishery data									
Risk to the resource									
Groundfish Resources	·								
Fishing mortality									
Biomass level									
Spatial/temporal concentration of									
catch population									
Prey availability									
Habitat suitability									
Hashar Sunability									

Stakeholders, Resources &		, and the second se							
Indicators	Alternative 1	Alternative 2	Alternative 3A	Alternative 3Ba	Alternative 3Bb	Alternative 3Bc	Alternative 3C	Alternative 4	Alternative 5
Other Fish Resources	······································	Δ				-			
Fishing mortality									
Biomass level									
Spatial/temporal concentration of		Î							
catch population									
Prey availability									
Habitat suitability									
Marine Mammals									
Incidental take/entanglement in									
marine debris									
Harvest of prey species									
Spatial/temporal concentration of									
fishing effort Disturbance									
		l				<u> </u>			
Seabirds Incidental take in gear and vessel		T				1			
strikes									
Prey availability and fishery									
wastes									
Habitat suitability									
Other Protected Resources	i.							i.	
Level of fishing effort									
Spatial/temporal characteristics									
of catch									
Prey availability									
Habitat suitability									
Habitat									
Gear interactions with habitat by									
gear									
Location of interactions with									
habitat Habitat type affected									
Trophic Relationships Prey abundance									
Predator abundance									
Average trophic level									

Stakeholders, Resources & Indicators	Alternative 1	Alternative 2	Alternative 3A	Alternative 3Ba	Alternative 3Bb	Alternative 3Bc	Alternative 3C	Alternative 4	Alternative 5
Trawl Catcher Vessels									
Eligible permit holders									
Ex-vessel value to 2005									
participants									
Value of transfers to restore participants to 2005 levels									
Permit holders with moderate consolidation									
Number of days fished with						J			
moderate consolidation									
Fixed cost savings with moderate consolidation									
Value of additional target with									
moderate incidental catch rate improvements									
Observer costs with moderate									
consolidation and moderate									
incidental catch rate									
improvements Trawl Catcher Processors]							<u> </u>	
1									
Eligible permit holders									
Ex-vessel value of allocation to 2005 participants									
Value of transfers to restore									
participants to 2005 levels									
Processors of Trawl Groundfish					2			;	
Eligible processors									
Ex-vessel value of allocation									
Seasonality of raw product supply									
Bargaining power relative to harvesters								,	
Non-Trawl Commercial Harvesters	;								
Participation by trawl groundfish harvesters									
Other potential impacts									
Buyers and Processors that do No	t Purchase Trawl G	roundfish							

Table 4-4. Summary of the Cumulative Effects of the Alternatives

Stakeholders, Resources & Indicators	Alternative 1	Alternative 2	Alternative 3A	Alternative 3Ba	Alternative 3Bb	Alternative 3Bc	Alternative 3C	Alternative 4	Alternative
Market share relative to trawl groundfish processors					711011121110 000				
Recreational Harvesters of Groun	dfish								
Political power relative to trawl groundfish sector									
Communities									
Number of trawl groundfish vessels by community									
Number of buyers and processors of trawl groundfish									
Number of harvesting and processing jobs									
Local input suppliers									
Dependency on trawl groundfish harvesting and processing									
Geographic distribution of harvests									
Overall economic impact from fisheries									
Tribes									
		L							
Input Suppliers		Г						ľ	
Revenue	<u> </u>	L					I		
Wholesalers and Retailers									
Product availability									
Consumers			,						
Product price, quality and availability									
General Public									
Non-market and non- consumptive benefits from the marine ecosystem									
Management agencies	i						in an		
Management costs									
Enforcement feasibility									
Reliability of fishery data									
Risk to the resource									
i									

Stakeholders, Resources & Indicators	Alternative 1	Alternative 2	Alternative 3A	Alternative 3Ba	Alternative 3Bb	Alternative 3Bc	Alternative 3C	Alternative 4	Alternative 5
Groundfish Resources									
Fishing mortality									
Biomass level									
Spatial/temporal concentration of									
catch population									
Prey availability									
Habitat suitability									
Other Fish Resources					•				
Fishing mortality									
Biomass level									
Spatial/temporal concentration of									
catch population									
Prey availability									
Habitat suitability									
Marine Mammals					•				
Incidental take/entanglement in	ľ								
marine debris Harvest of prey species									
Spatial/temporal concentration of fishing effort									
Disturbance					<u>.</u>				
L	I	l			L	<u> </u>		I	
Seabirds Incidental take in gear and vessel		ľ						I	
strikes									
Prey availability and fishery									
wastes Habitat suitability									
Other Protected Resources									
Level of fishing effort									
Spatial/temporal characteristics									
of catch Prey availability									
Habitat suitability									
		I			I				
Habitat									
Gear interactions with habitat by									
gear									

Stakeholders, Resources & Indicators	Alternative 1	Alternative 2	Alternative 3A	Alternative 3Ba	Alternative 3Bb	Alternative 3Bc	Alternative 3C	Alternative 4	Alternative 5
Location of interactions with habitat									
Habitat type affected									
Trophic Relationships Prey abundance									
Prey abundance									
Predator abundance									
Average trophic level									

4.3 Limited Entry Trawl Groundfish Catcher Vessels

This section describes the effects of the alternatives on limited-entry trawl groundfish catcher vessels. Many of the effects on permit owners, vessel owners, vessel operators and crew members are based on the analysis of the effects on trawl catcher vessels and trawl catcher processors (Section 4.4). Consequently, some the effects on these stakeholders will be included in the effects analysis for trawl catcher vessels and catcher processors. Additional information on the impacts on these stakeholders is presented in the section on community impacts. The West Coast groundfish trawl fishery is generally regulated through rules applied to the vessel, and fishery data is collected at the vessel level. The initial impact of most of the regulations that would be promulgated under the alternatives would be at the vessel level. Therefore, this analysis first considers how the regulations affect different groups of vessels. On the basis of these impacts on vessels, consideration is then given to how permit owners, vessel owners, vessel operators and crew members may be affected. In the discussion on the effects of the alternatives on each of these groups, the impacts of other program elements are also taken into account. For example, provisions allowing crew members to buy quota shares and capping the number of shares any one person may own affect individuals rather than the vessels.

The section begins with an overview of the analytical approach used to compare baseline and future conditions of trawl catcher vessels under the alternatives. The analytical approach includes 1) potential impacts; 2) mechanisms that relate the proposed action to the impacts; 3) measurement criteria or indicators used in assessing each type of impact; 4) models and data sets used in the analysis; and 5) the significance criteria or thresholds.

4.3.1 Format of Effects Analysis

The effects sections of the Stage 2 analysis will describe the direct, indirect and cumulative effects of the alternatives with respect to limited-entry trawl groundfish catcher vessels. Within the assessment of each alternative there will be a subsection that describes the direct and indirect effects. This subsection will be followed by an assessment of the cumulative effects of the alternative. Within each effects subsection the analysis will have the following format:

- 1) Identifies the impact mechanisms that are likely to change the conditions of limited-entry trawl groundfish catcher vessels and associated permit owners, vessel owners, vessel operators and crew members.
- 2) Projects the conditions of limited-entry trawl groundfish catcher vessels and associated permit owners, vessel owners, vessel operators and crew members under the alternative using the indicators developed in Chapter 3.
- 3) Compares the projected conditions with the baseline conditions and determines the significance of the change.

All of the headings for the effects analysis for limited-entry trawl groundfish catcher vessels are shown. In order to avoid redundancy these headings have been eliminated in the outline sections for other resource and stakeholder groups.

The effects sections of the Stage 2 analysis will contain tables that summarize the direct, indirect and cumulative effects of the alternatives on each resource and stakeholder group. The tables will be organized so as to facilitate a comparison between the baseline conditions and the specific effects of each alternative. For example, differences between the baseline and alternatives with respect to the values of quantitative indicators will be presented in terms of the percentage difference.

Tables will also be included to summarize the findings of the "what if" scenarios described in Section 4.1.4. The scenarios examined for a particular resource or stakeholder group will be limited to those that have a significant bearing on the impacts described for that group.

4.3.2 Analytical Framework

Table 4-5 provides an overview of the analytical approach used to compare baseline and future conditions of trawl catcher vessels under the alternatives. The analytical approach includes 1) potential impacts; 2) mechanisms that relate the proposed action to the impacts; 3) measurement criteria or indicators used in assessing each type of impact; 4) models and data sets used in the analysis; and 5) the significance criteria or thresholds.

Potential Impacts	Impact Mechanisms	Measurement Criteria or Indicators	Data and Models	Significance Criteria or Thresholds
Changes in	Distribution of harvest	Number of initial QS recipients	Changes in quantitative	+/- 20% change
economic performance	privileges	Number of initial QS recipients that participated in 2005	indicators are based on model projections as	+/- 20% change
(e.g., profitability) of individual		Ex-vessel value of QPs allocated to 2005 participants	described in Section 4.1.7.2 combined with	+/- 20% change
vessels		Ex-vessel value of transfers to restore participants to 2005 level	the scenarios described in Section 4.1.4; predicted changes in	+/- 20% change
		Ex-vessel value of QPs allocated to permit holders that did not participate in 2005	qualitative indicators will be based on information	+/- 20% change
	Distribution of fishing privileges; pace of harvesting; and variety of marketing channels	Balance of bargaining power between harvesters and processors	collected from interviews with key informants, a review of relevant literature, and	Will not be able to derive quantitative thresholds, but will discuss qualitatively
	Reporting and monitoring	Vessel-level fixed costs	the judgment of the analysts.	+/- 20% change
	requirements, individual incentives to avoid discards,	Variable costs per fishing day and per pound of target species		+/- 20% change
	and vessel operational flexibility	Target species OY utilization rates		+/- 20% change
	nexibility	Revenue from target species		+/- 20% change
		Number of trips per year		+/- 20% change
		Number of fishing days per year		+/- 20% change
		Seasonal distribution of fishing effort		Chi-square tests
		Geographic distribution of fishing effort		Chi-square tests
Changes in fishing vessel safety	Fleet size; vessel operational flexibility; and financial ability to invest in vessel maintenance and safety equipment	Occurrence of safety-related incidents		+/- 20% change and qualitative assessment
Changes in economic		Variable costs per pound of target species		+/- 20% change
efficiency of		Number of fishing days per year		+/- 20% change
harvesting sector as a	Fleet consolidation	Number of active vessels		+/- 20% change
whole		Number of permit holders		+/- 20% change
		Fleet-wide fixed cost	1	+/- 20% change
Changes in crew	Fleet consolidation; and	Number of crew members		+/- 20% change and qualitative assessment
conditions	compensation system	Income of crew members		

 Table 4-5. Overview of Analytical Approach Used to Compare Baseline and Future Conditions of Trawl

 Catcher Vessels under the Alternatives

4.3.2.1 Potential Impacts and Impact Mechanisms

In terms of projecting future socioeconomic effects of continuing the status quo, the general downward trend in landings, ex-vessel revenues, and vessel participation in the West Coast groundfish trawl fishery is expected to persist.

Experience with IFQ programs in other fisheries suggests that improvements in the economic performance of the limited-entry trawl groundfish catcher vessels due to increased value and reduced costs may be substantial under the three IFQ alternatives (Alternatives 2 - 4). However, because landing limits under the current management regime have been used in the West Coast groundfish trawl fishery to smooth out fishing and landings over the year, these vessels already experience some of the typical gains from an IFQ program that result from elimination of the derby-style race for fish phenomenon, such as longer fishing seasons, mitigation of market gluts, and opportunities to improve product quality.

Nevertheless, a trawl IFQ program would be expected to increase the value of production of trawl groundfish catcher vessels for a variety of reasons. Currently, an annual landed catch OY must be set below the ABC to account for the expected bycatch. Under a trawl IFQ program, this reduction would not be necessary because all catch mortality would be measured through expanded observer coverage. Consequently, the total amount of fish available for harvest would increase.⁴⁷ Further, increases in the value of production may be achieved as the harvest volume increases in fisheries that were previously constrained by landing limits. For example, some fishers may successfully modify gear and/or purchase enough canary rockfish IFQ to take advantage of yellowtail rockfish IFQ. On the price side, the opportunities for enhancing the value of harvested fish may be substantial (Alcock 2006). When the fishing season is spread out over a longer period of time under an IFQ program, fishers may be able to better calibrate their harvesting activity to respond to market demands and shop around for the best dockside price.

In addition, the costs of harvesting are expected to fall for a variety of reasons. The ability of harvesters to catch their entire quota of certain species during periods of time when the species aggregate could substantially reduce fishing costs. In addition, individual vessels will have a greater ability to optimize their harvest strategy, including selecting the least-cost combination of fishing inputs. There are opportunities for efficiency gains with both fixed and operational costs (Alcock 2006). On the fixed cost side, fishers could choose to deploy smaller boats or less capital-intensive harvesting methods that may catch fish a little more slowly but that do it with significant cost savings. Operational cost savings can result from smaller crews and greater flexibility in planning trips that again sacrifice a little time and fishing power for significant cost reductions. At the fleet-wide level, costs will fall because production is expected to shift over time toward the most cost-effective harvesting operations. The resulting consolidation will generate significant economic gains to the remaining fishery participants. However, access to capital is an important prerequisite for permanent purchases of IFQs (Alcock, 2006). For example, efficient, small-scale fishers may find it difficult to finance such quota purchases. Larger-scale actors with the means to finance quota purchases can more easily acquire it even if they're less efficient in terms of overall cost vs. revenue calculations in their existing operations.

Consolidation may mean not only fewer boats, but also less employment. On the other hand, the crew members who remain in the fishery may work more hours during the year and earn more income. The introduction of a trawl IFQ program may also have other implications for crew. For

⁴⁷ Assuming that fishery managers have been risk averse when estimating discards under the status quo, it is likely a system of accurate accounting of discards in the groundfish fisheries would allow fishery managers greater certainty in setting ABCs and OYs.

example, in some fisheries the shift to IFQs shifted the compensation system from a share of profits system to a wage system. Another important component of the analysis of impacts on vessel crews will be to consider the allocation of a portion of the annual harvest in the fishery for crew members (as well as entry level fishermen and small vessel owners) who do not hold or qualify for IFQs, as required under Sec. 303(d)(5)(C) of the MSA.

The economic benefits of a trawl IFQ program must be weighed against the additional operating costs that vessel owners will incur from reporting and monitoring requirements. The increase in net revenues that commercial harvesters are expected to experience under a trawl IFQ program may render them better able to sustain the costs of complying with these requirements. However, even if the economic benefits of a trawl IFQ program system are fully realized, it is likely that paying these costs would not be economically feasible for many vessels.

The initial allocation rules specific to each IFQ alternative would change the distribution of access privileges. A given allocation may force some permit owners to buy quota shares to return to the level of participation they would have attained without the allocation.

An IFQ program may also result in a shift in the balance of bargaining strength between harvesters and processors. This shift, in turn, can affect the distribution of efficiency gains resulting from an IFQ program (see Section 4.2.2.2 for more details). For example, the more leisurely pace of harvesting and a possible increase in the variety of marketing channels may reduce the bargaining power of processors versus fishers. On the other hand, the allocation of IFQs to processors would mean that more harvesters would likely need to obtain access to additional IFQ in order to attain pre-allocation harvest levels.

As with a number of effects previously discussed, the gains in fishing vessel safety that are typically attributed to an IFQ program are partially realized under the status quo. These fishing safety benefits include the opportunity to fish at a more leisurely pace and avoid fishing in dangerous weather or locations, within the constraints of two-month fishing periods. However, under the three IFQ alternatives the constraints of two-month periods would be eliminated, allowing vessels to operate in the best possible conditions. The result would be further reductions in injury and loss of life. In addition, if higher net earnings are realized under a trawl IFQ program, individual harvesters will have additional funds for vessel maintenance and safety equipment. On the other hand, market opportunities may still encourage fishers to fish at times or in places that are unsafe.

Under Alternative 5, permit stacking will allow the creation of larger limits. These larger limits will provide greater flexibility to harvesters, with the possibility that the fleet could see some of the benefits that might be experienced under a trawl IFQ program. Consolidation of the trawl fleet will occur under permit stacking as there are only a set number of permits, and stacking would likely cause geographic shifts in the concentration of fishing effort. The overall efficiency of the fleet would increase because permits would tend to migrate to more profitable vessels.

4.3.2.2 Measurement Criteria and Significance Criteria

Table 4-5 provides an overview of the indicators or measures of impact and the significance thresholds that will be used. As noted in Section 4.1.6, for socioeconomic impacts in particular there are no established definitions of "significant". As a preliminary significance threshold for quantitative indicators, this section utilizes +/- 20 percent to indicate whether the measured change in the indicator from the comparative baseline is significant. The same threshold is used to roughly assess changes in some qualitative indicators (e.g., fishing vessel safety). For other qualitative indicators (e.g., balance of bargaining power between harvesters and processors) no quantitative significance

thresholds are available; determinations of the significance of effects will be based on information collected from interviews with key informants, a review of relevant literature, and the judgment of the analyst.

4.3.2.3 Data and Models

Changes in quantitative indicators will be based on model projections as described in Section 4.1.7.2 combined with the scenarios described in Section 4.1.4. The initial allocation rules will be used in the initial allocation model to determine changes in harvest levels relative to baseline conditions. The incidental catch rate model utilizes catch rate data by target species and month, and variance between individual harvesters. Projections of the geographic distribution of fishing effort will be derived from the initial allocation model, incidental catch rate model, and the fleet consolidation model, together with data from key informant interviews. As discussed in Section 4.1.7.2.4, a market structure analysis and other techniques may help determine the effects of the alternatives on ex-vessel prices by examining changes in the relative bargaining power of harvesters and processors. Predicted changes in indicators that are largely qualitative such as fishing vessel safety will be based on information collected from interviews with key informants, a review of relevant literature, and the judgment of the analysts.

4.3.3 Alternative 1: The No-Action Alternative

- 4.3.3.1 Direct and Indirect Effects Analysis
- 4.3.3.1.1 **Projected Conditions under the Alternative**
- 4.3.3.1.2 Changes from the Baseline Conditions
- 4.3.3.2 Cumulative Effect Analysis
- 4.3.3.2.1 Discussion of Effects of Past, Present and Future Actions
- 4.3.3.2.2 Cumulative Effects under the Alternative
- 4.3.4 Alternative 2: IFQs for Whiting and Trawl Target Species
- 4.3.4.1 Direct and Indirect Effects Analysis
- 4.3.4.1.1 Projected Conditions under the Alternative
- 4.3.4.1.2 Changes from the Baseline Conditions

4.3.4.2 Cumulative Effect Analysis

4.3.4.2.1 Discussion of Effects of Past, Present and Future Actions

4.3.4.2.2 Cumulative Effects under the Alternative

4.3.5 Alternative 3: IFQs for All Groundfish except Other Species

Alternative 3 consists of five options that vary by the IFQ allocation rules used. Because the impacts of these options may differ, each is treated as a stand-alone alternative in the effects analysis.

4.3.5.1 Alternative 3A: IFQ for all but Other Species with 50/50 QS Allocation Split between Harvesters and Processors

- 4.3.5.1.1 Direct and Indirect Effects Analysis
- 4.3.5.1.1.1 Projected Conditions under the Alternative
- 4.3.5.1.1.2 Changes from the Baseline Conditions
- 4.3.5.1.2 Cumulative Effect Analysis
- 4.3.5.1.2.1 Discussion of Likely RFFAs
- 4.3.5.1.2.2 Discussion of Effects of Past, Present and Future Actions
- 4.3.5.1.2.3 Cumulative Effects under the Alternative
- 4.3.5.2 Alternative 3Ba: IFQ for all but Other Species with a 100/0 QS Allocation Split between Harvesters and Processors
- 4.3.5.2.1 Direct and Indirect Effects Analysis
- 4.3.5.2.1.1 Projected Conditions under the Alternative
- 4.3.5.2.1.2 Changes from the Baseline Conditions
- 4.3.5.2.2 Cumulative Effect Analysis
- 4.3.5.2.2.1 Discussion of Effects of Past, Present and Future Actions
- 4.3.5.2.2.2 Cumulative Effects under the Alternative

- 4.3.5.3 Alternative 3Bb: IFQ for all but Other Species with a 90/10 QS Allocation Split between Harvesters and Processors
- 4.3.5.3.1 Direct and Indirect Effects Analysis
- 4.3.5.3.1.1 Projected Conditions under the Alternative
- 4.3.5.3.1.2 Changes from the Baseline Conditions
- 4.3.5.3.2 Cumulative Effect Analysis
- 4.3.5.3.2.1 Discussion of Effects of Past, Present and Future Actions
- 4.3.5.3.2.2 Cumulative Effects under the Alternative
- 4.3.5.4 Alternative 3Bc: IFQ for all but Other Species with a 50/50 QS Allocation Split between Harvesters and Processors for Whiting and a 100/0 Split for Non-whiting
- 4.3.5.4.1 Direct and Indirect Effects Analysis
- 4.3.5.4.1.1 Projected Conditions under the Alternative
- 4.3.5.4.1.2 Changes from the Baseline Conditions
- 4.3.5.4.2 Cumulative Effect Analysis
- 4.3.5.4.2.1 Discussion of Effects of Past, Present and Future Actions
- 4.3.5.4.2.2 Cumulative Effects under the Alternative
- 4.3.5.5 Alternative 3C: IFQ for all but Other Species with 75/25 QS Allocation Split between Harvesters and Processors
- 4.3.5.5.1 Direct and Indirect Effects Analysis
- 4.3.5.5.1.1 **Projected Conditions under the Alternative**
- 4.3.5.5.1.2 Changes from the Baseline Conditions
- 4.3.5.5.2 Cumulative Effect Analysis
- 4.3.5.5.2.1 Discussion of Effects of Past, Present and Future Actions
- 4.3.5.5.2.2 Cumulative Effects under the Alternative
- 4.3.6 Alternative 4: IFQs for All Groundfish Species

- 4.3.6.1 Direct and Indirect Effects Analysis
- 4.3.6.1.1 **Projected Conditions under the Alternative**
- 4.3.6.1.2 Changes from the Baseline Conditions
- 4.3.6.2 Cumulative Effect Analysis
- 4.3.6.2.1 Discussion of Effects of Past, Present and Future Actions
- 4.3.6.2.2 Cumulative Effects under the Alternative
- 4.3.7 Alternative 5: Permit Stacking
- 4.3.7.1 Direct and Indirect Effects Analysis
- 4.3.7.1.1 **Projected Conditions under the Alternative**
- 4.3.7.1.2 Changes from the Baseline Conditions
- 4.3.7.2 Cumulative Effect Analysis
- 4.3.7.2.1 Discussion of Effects of Past, Present and Future Actions
- 4.3.7.2.2 Cumulative Effects under the Alternative

4.4 Trawl Catcher Processors

4.4.1 Analytical Framework

Table 4-6 provides an overview of the analytical approach used to compare baseline and future conditions of trawl catcher processors under the alternatives. The analytical approach includes 1) potential impacts; 2) mechanisms that relate the proposed action to the impacts; 3) measurement criteria or indicators used in assessing each type of impact; 4) models and data sets used in the analysis; and 5) the significance criteria or thresholds.

Potential Impacts	Impact Mechanisms	Measurement Criteria or Indicators	Data and Models	Significance Criteria or Thresholds
Changes in	Distribution of harvest	Number of initial QS recipients	Changes in	+/- 20% change
the economic performance	privileges	Number of initial QS recipients that participated in 2005	quantitative indicators are based on model	+/- 20% change
(e.g., profitability) of individual		Ex-vessel value of QPs allocated to 2005 participants	projections as described in Section 4.1.7.2 combined with	+/- 20% change
vessels		Ex-vessel value of transfers to restore participants to 2005 level	the scenarios described in Section	+/- 20% change
		Ex-vessel value of QPs allocated to permit holders that did not participate in 2005	4.1.4; predicted changes in qualitative indicators are based	+/- 20% change
	Reporting and monitoring	Vessel-level fixed costs	on information	+/- 20% change
	requirements, individual incentives to avoid discards,	Variable costs per fishing day and per pound of target species	collected from interviews with key informants, a review of relevant literature, and the judgment of the analysts.	+/- 20% change
	and vessel operational flexibility	Target species OY utilization rates		+/- 20% change
		Revenue from target species		+/- 20% change
		Number of trips per year		+/- 20% change
		Number of fishing days per year		+/- 20% change
		Seasonal distribution of fishing effort		Chi-square tests
		Geographic distribution of fishing effort		Chi-square tests
Changes in fishing vessel safety	Fleet size; vessel operational flexibility; and financial ability to invest in vessel maintenance and safety equipment	Occurrence of safety-related incidents		+/- 20% change and qualitative assessment
Changes in economic	Fleet consolidation	Variable costs per pound of target species		+/- 20% change
efficiency of		Number of fishing days per year		+/- 20% change
harvesting sector as a		Number of active vessels		+/- 20% change
whole		Number of permit holders		+/- 20% change
		Fleet-wide fixed cost		+/- 20% change
		Number of crew members		+/- 20% change

Table 4-6. Overview of Analytical Approach Used to Compare Baseline and Future Conditions of Trawl Catcher Processors under the Alternatives

4.4.1.1 Potential Impacts and Impact Mechanisms

In general, the assessment of the impacts of the alternatives on catcher processors mirrors the assessment of impacts on catcher vessels. A key difference, however, is the fact that with catcher processors there is no concern about the marketing power balance between the harvesting and processing sectors since the catch is processed on-board. Furthermore, the impacts of the three IFQ alternatives (Alternatives 2 – 4) would be minimized because catcher processors currently operate under the Pacific Whiting Conservation Cooperative. These vessels are unlikely to experience significant changes in incidental catch and the utilization of target species. On the other hand, the initial allocation rules could affect the economic performance of catcher processors. For example, the initial allocation could lead to a termination of the cooperative, thereby allowing individual vessels to capture their own profits rather than sharing profits as part of the cooperative.

4.4.1.2 Measurement Criteria and Significance Criteria

Table 4-6 provides an overview of the indicators or measures of impact and the significance thresholds that will be used. For quantitative indicators, this section will utilize a significance threshold of +/-20 percent to indicate whether the measured change in the indicator from the comparative baseline is significant. The same threshold is used to roughly assess changes in qualitative indicators (e.g., fishing vessel safety).

4.4.1.3 Data and Models

Changes in quantitative indicators will be based on model projections as described in Section 4.1.7.2 combined with the scenarios described in Section 4.1.4; predicted changes in qualitative indicators are based on information collected from interviews with key informants, a review of relevant literature, and the judgment of the analysts.

4.5 Processors of Trawl Groundfish

4.5.1 Analytical Framework

Table 4-7 provides an overview of the analytical approach used to compare baseline and future conditions of shoreside processors of trawl groundfish under the alternatives. The analytical approach includes 1) potential impacts; 2) mechanisms that relate the proposed action to the impacts; 3) measurement criteria or indicators used in assessing each type of impact; 4) models and data sets used in the analysis; and 5) the significance criteria or thresholds.

Potential Impacts	Impact Mechanisms	Measurement Criteria or Indicators	Data and Models	Significance Criteria or Thresholds	
Changes in the economic performance (e.g., profitability)	Distribution of fishing privileges	Number of initial QS recipients	Changes in quantitative	+/- 20% change and qualitative	
of individual shoreside processors	Target species OY utilization rates	Total purchases of trawl- caught groundfish by species	indicators are based on model projections as described in Section 4.1.7.2	assessment	
	Distribution of harvest privileges, pace of harvesting, and variety of marketing channels	Balance of bargaining power between harvesters and processors	combined with the scenarios described in Section 4.1.4; predicted changes in qualitative indicators are based on information collected	Will not be able to derive quantitative thresholds, but will discuss qualitatively	
	Location and timing of harvests	Product mix by species	from interviews with key informants, a review of relevant literature, and the judgment of the analysts.	Will not be able to derive quantitative thresholds, but will discuss qualitatively	
		Product recovery rates by product and species			
	Combination of above impact mechanisms	Total ex-vessel value of purchases		+/- 20% change and qualitative assessment	
		Total wholesale value of production			
		Total operating costs			
		Net revenues			
		Dependency on trawl groundfish			
Changes in economic efficiency of processing sector as a whole	Consolidation	Number of processors			
		Processing employment			

Table 4-7. Overview of Analytical Approach Used to Compare Baseline and Future Conditions of Processors of Trawl Groundfish under the Alternatives

4.5.1.1 Potential Impacts and Impact Mechanisms

This trend of consolidation in the processing sector is expected to continue under Alternative 1. As the amount of target species delivered to buyers and processors continues to decline, the consulting team expects higher average costs in this sector because of the reduction in the overall level of production. Fixed costs (i.e., costs that do not change with the level of production, such as loan repayments, general office and accounting expenses, and insurance costs) will be allocated to a smaller amount of product, thereby raising the average cost per unit of product. The variable costs of processors and buyers may also increase under a continuation of the status quo, as the reduction in supply of fish is likely to put upward pressure on ex-vessel prices. These cost increases will be larger for those processors and buyers that are most dependent on groundfish. Smaller operations will probably be more affected by changes in landings than larger buyers because smaller buyers are relatively less diversified in the range of species handled.

The economic performance of processors of trawl groundfish could be affected by the three IFQ alternatives (Alternatives 2 - 4) in a number of ways. If harvesters can reduce their incidental catch rates of overfished species, the total purchases of trawl caught groundfish will increase relative to the No-Action Alternative,

The overall level of benefits and the distribution of benefits across processors may depend largely on the initial allocation rules (see Section 4.2.2.2 for more details). If processors are guaranteed IFQs, they would naturally be more likely to benefit. The initial allocation rules will determine the amount allocated to processors (options range from 0 to 50 percent).

Depending on the market power among processors, they may be able to influence incidental catch rates (and thus overall utilization of target species) through ex-vessel price signals and through other working arrangements with harvesters. For example, if a particular processor wants to discourage too much harvest in a particular month in which there are relatively low incidental catch rates, that processor could lower ex-vessel prices for the target species in that month. If the processor has sufficient market share, it would not experience an overall reduction in deliveries even if other processors do not follow suit. If the market leader is able to maintain the lower ex-vessels prices, processors with less market power may lower prices as well.

The increased flexibility of harvesters under a trawl IFQ program could also affect the revenues of processors. For example, harvesters may change their fishing locations in an attempt to reduce incidental catches of overfished species. Changes in areas fished could lead to changes in the fish supply for some processors. On the other hand, the acquisition of IFQs by processors may facilitate vertical integration whereby processors operate their own vessels. A vertically integrated firm might be better able to plan its operations and be more economically efficient than a processing firm having to negotiate with independent vessel owners about prices and delivery conditions (National Research Council 1999).

The increased flexibility of harvesters under a trawl IFQ program could also affect the variety of product types generated from the groundfish trawl fishery. If a trawl IFQ program results in more moderate and regular landings by catcher vessels, processors may be able to increase their production of higher-value products. A slower-paced fishery could also lead to higher product recovery rates. However, because the West Coast trawl groundfish fishery cannot be characterized as a race for fish, the change in product types or recovery rates may not be significant. Moreover, implementation of an IFQ program may cause harvest to be more, rather than less, concentrated over time. Despite individual quotas, harvesters may fish much as though they were in a competitive fishery striving to maximize shares. The economic rationale for this is sound from the perspective of the individual vessel. Catch rates of target species may be high in a particular season, resulting in fewer trips and lower operating costs. Also, fishers may temporally concentrate their fishing effort to reduce incidental catches of overfished species.

Consolidation in the harvesting sector could result in a geographic redistribution of landings and accelerate the current trend of consolidation in the processing sector. If multi-location processors are relatively certain they will receive adequate supplies, they may choose to alter the geographic location of their facilities. In addition, some processors may chose to concentrate their production in fewer operations. This consolidation, in turn, can decrease the level of processing employment.

Under Alternative 5, permit stacking will allow individual harvesting operations to increase their catches in each period. These larger catches may result in larger deliveries to processors, which may mean greater efficiency for some processors due to economies of scale. It is also possible however, that some processors may prefer smaller deliveries, and would not see benefits.

4.5.1.2 Measurement Criteria and Significance Criteria

Table 4-7 provides an overview of the indicators or measures of impact and the significance thresholds that will be used. For quantitative indicators, this section will utilize a significance threshold of +/- 20 percent to indicate whether the measured change in the indicator from the comparative baseline is significant. The same threshold is used to roughly assess changes in some qualitative indicators (e.g., dependency on trawl groundfish). For other qualitative indicators (e.g., balance of bargaining power between harvesters and processors) no quantitative significance thresholds are available; determinations of the significance of effects will be based on information collected from interviews with key informants, a review of relevant literature, and the judgment of the analyst.

4.5.1.3 Data and Models

Changes in quantitative indicators will be based on model projections as described in Section 4.1.7.2 combined with the scenarios described in Section 4.1.4. The initial allocation rules will be used in the initial allocation model, along with data gathered in key interviews, to determine the number of independent buyers that will not receive harvesting QS. The incidental catch rate model utilizes catch rate data by target species and month, and variance between individual harvesters. However, the model is not able to take into account the influence of processors on incidental catch rates. Projections of the geographic distribution of processing facilities will be derived from the initial allocation model and incidental catch rate model, together with data from key informant interviews. As discussed in Section 4.1.7.2.4, a market structure analysis and other techniques may help determine the effects of the alternatives on ex-vessel prices by examining changes in the relative bargaining power of harvesters and processors.. Predicted changes in qualitative indicators such as product mix and product recovery rates will be based on information collected from interviews with key informants, a review of relevant literature, and the judgment of the analysts.

4.6 Non-Trawl Commercial Harvesters

4.6.1 Analytical Framework

Table 4-8 provides an overview of the analytical approach used to compare baseline and future conditions of non-trawl commercial harvesters under the alternatives. The analytical approach includes 1) potential impacts; 2) mechanisms that relate the proposed action to the impacts; 3) measurement criteria or indicators used in assessing each type of impact; 4) models and data sets used in the analysis; and 5) the significance criteria or thresholds.

Potential Impacts	Impact Mechanisms	Measurement Criteria or Indicators	Data and Models	Significance Criteria or Thresholds
Changes in the participation, fishing patterns and economic performance of non-trawl commercial harvesters	Spillovers to other fisheries, and effects of	Number of participating catcher vessels	Available literature, together with - expert opinion and	Will not be able to derive quantitative thresholds, but will discuss qualitatively
	and enects of management of trawl fleet on management of non-trawl vessels.	Landings, ex-vessel revenues and ex-vessel prices by species	other pertinent information, will be used in a qualitative analysis of each criterion	
		Distribution of landings by month		
		Geographic distribution of effort		
		Distribution of ex-vessel revenue by permit holder residence	-	

Table 4-8. Overview of Analytical Approach Used to Compare Baseline and Future Conditions of Non-Trawl Commercial Harvesters under the Alternatives

4.6.1.1 Potential Impacts and Impact Mechanisms

While non-trawl vessels, and their owners and crew, would not be directly affected by the three IFQ alternatives (Alternatives 2 – 4), they may be indirectly affected. The most obvious indirect effects are the economic impacts of spillovers resulting from fleet consolidation. If the trawl fleet consolidates, vessels and crew members no longer employed in trawl fisheries will potentially be able to switch into non-trawl fisheries. The increased effort in non-trawl fisheries would likely have a negative impact on the economic performance of the fishers already engaged in those fisheries. Catch per unit effort and individual harvest for existing fishers could decline substantially due to crowding and intensified fishing pressure on stocks. Moreover, an increase in fishery participants would result in greater market competition. These changes in economic performance could, in turn, affect the participation levels and fishing patterns of non-trawl vessels.

Management action taken with respect to the trawl fleet could influence future actions taken with respect to non-trawl vessels. Any projection of changes in the management regime for non-trawl vessels would be speculative, but future management actions would likely lead to changes in the conditions of these vessels.

4.6.1.2 Measurement Criteria and Significance Criteria

Table 4-8 provides an overview of the indicators or measures of impact and the significance thresholds that will be used. Quantitative significance thresholds are inappropriate because of the absence of data and models. Instead, qualitative judgments as to the significance of effects will be made.

4.6.1.3 Data and Models

Available literature, together with expert opinion and other pertinent information, will play a critical role in the analysis of each criterion.

4.7 Buyers and Processors That Do Not Purchase Trawl Groundfish

4.7.1 Analytical Framework

Table 4-9 provides an overview of the analytical approach used to compare baseline and future conditions of buyers and processors that do not purchase trawl groundfish under the alternatives. The analytical approach includes 1) potential impacts; 2) mechanisms that relate the proposed action to the impacts; 3) measurement criteria or indicators used in assessing each type of impact; 4) models and data sets used in the analysis; and 5) the significance criteria or thresholds.

Table 4-9. Overview of Analytical Approach Used to Compare Baseline and Future Conditions of Buyers and
Processors That Do Not Purchase Trawl Groundfish under the Alternatives

Potential Impacts	Impact Mechanisms	Measurement Criteria or Indicators	Data and Models	Significance Criteria or Thresholds
Change in the processing patterns and economic performance of buyers and	Ability to enter the trawl- caught	Number of buyers and facilities	Available literature, together with – expert opinion and	Will not be able to derive quantitative thresholds, but will
performance of buyers and processors that do not purchase trawl groundfish	groundfish processing market; and level of competition.	Total purchases by fishery	other pertinent information, will be	discuss qualitatively
		Relative market share	used in a qualitative analysis of each criterion	
		Geographic distribution of participation		

4.7.1.1 Potential Impacts and Impact Mechanisms

Because buyers and processors that do not purchase trawl groundfish are not involved in the West Coast groundfish trawl fishery they will not be directly affected by the three IFQ alternatives (Alternatives 2 – 4). However, these buyers and processors would be indirectly affected if a trawl IFQ program (in particular, the allocation of IFQs to processors) restricts their ability to enter the trawl-caught groundfish processing market in the future. They would also be affected if higher profits for processors of trawl groundfish encourage them to increase their level of activity in non-trawl groundfish fisheries or non-groundfish fisheries. The potential restrictions on market entry and increased competition could have a negative impact on the economic performance of the buyers and processors in this category, and cause them to adjust their processing patterns.

4.7.1.2 Measurement Criteria and Significance Criteria

Table 4-9 provides an overview of the indicators or measures of impact and the significance thresholds that will be used. Quantitative significance thresholds are inappropriate because of the absence of data and models. Instead, qualitative judgments as to the significance of effects will be made.

4.7.1.3 Data and Models

Available literature, together with expert opinion and other pertinent information, will play a critical role in the analysis of each criterion.

4.8 Recreational Harvesters

4.8.1 Analytical Framework

Table 4-10 provides an overview of the analytical approach used to compare baseline and future conditions of recreational harvesters under the alternatives. The analytical approach includes 1) potential impacts; 2) mechanisms that relate the proposed action to the impacts; 3) measurement criteria or indicators used in assessing each type of impact; 4) models and data sets used in the analysis; and 5) the significance criteria or thresholds.

Potential Impacts	Impact Mechanisms	Measurement Criteria or Indicators	Data and Models	Significance Criteria or Thresholds
Changes in the ability of recreational harvesters to influence fishery management decision- making	Profitability of trawl harvesters and processors affects level of participation and influence in management processes	Power to influence fishery management decision-making	Qualitative assessment based on expert opinion, together with model projections of profits of trawl harvesters as described in Section 4.1.7.2	Will not be able to derive quantitative thresholds, but will discuss qualitatively
Changes in the value of the recreational groundfish fishing experience	Geographic distribution of fishing effort of trawl harvesters	Geographic distribution of fishing effort of trawl harvesters	Qualitative assessment based on expert opinion, together with model projections of geographic distribution of fishing effort of trawl harvesters as described in Section 4.1.7.2	

 Table 4-10. Overview of Analytical Approach Used to Compare Baseline and Future Conditions of Recreational Harvesters under the Alternatives

4.8.1.1 Potential Impacts and Impact Mechanisms

In terms of projecting future effects of Alternative 1, the general downward trend in recreational landings is expected to persist due primarily to the long-term nature of efforts to rebuild overfished rockfish stocks. This decline is expected to have a negative effect on the value of the recreational groundfish fishing experience and may induce some anglers to either choose not to fish or to target other species.

As indicated in Section 3.9, recreational harvesters of groundfish may be indirectly affected by the three IFQ alternatives (Alternatives 2 - 4). Perhaps the most significant way in which recreational harvesters could be affected is through a change in the political balance of power in the fishery management process. If trawl groundfish harvesters and processors become more profitable under a trawl IFQ program, their level of participation and influence in Council and NMFS management processes may increase. This additional participation could ultimately result in increased constraints on the growth potential of the recreation fisheries. In addition, efforts by trawl harvesters to reduce incidental catch rates of overfished species may result in a geographic redistribution of fishing effort and the number of trawl groundfish vessels operating in fishing areas used by recreational harvesters. Increased effort by trawl harvesters. The value of the recreational groundfish fishing experience could decline substantially due to crowding and intensified fishing pressure on stocks.

4.8.1.2 Measurement Criteria and Significance Criteria

Table 4-10 provides an overview of the indicators or measures of impact and the significance thresholds that will be used. Quantitative significance thresholds are inappropriate because of the absence of data and models. Instead, qualitative judgments of the significance of effects will be made.

4.8.1.3 Data and Models

The assessment of impacts on recreational harvests will primarily be qualitative in nature, but will also be based on projected changes in the commercial groundfish harvesting and processing sectors, including projected profits of trawl harvesters and processors and projected geographic distribution of fishing effort. Section 4.1.7.2 describes the models used to generate these projections.

4.9 Communities

4.9.1 Analytical Framework

Table 4-11 provides an overview of the analytical approach used to compare baseline and future conditions of communities under the alternatives. The analytical approach includes 1) potential impacts; 2) mechanisms that relate the proposed action to the impacts; 3) measurement criteria or indicators used in assessing each type of impact; 4) models and data sets used in the analysis; and 5) the significance criteria or thresholds.

Potential Impacts	Impact Mechanisms	Measurement Criteria or Indicators	Data and Models	Significance Criteria or Thresholds
Changes in employment by	Consolidation of harvest operations, and changes in	Number of active vessels	Vessel count	+/-20% change
sector in community	distribution of harvest operations	Number of permit holders	Permit data	+/- 20% change
	Consolidation of processing operations, and changes in distribution of processing operations	Number of active processors	Output from sector analysis	+/- 20% change
	Consolidation and change in geographic distribution of harvesting and processing sectors	Estimated number of jobs in harvesting and processing sectors	Output from sector analysis	+/- 20% change
Changes in income in community	Change in share based compensation structure for crew, and loss of employment income through consolidation	Estimated income in harvesting and processing sectors	Output from sector analysis	+/- 20% change
Changes in public revenues in community	Shift in geographic patterns of economic activity, and changes in raw and processed product cost/value	Estimated municipal revenues	Derived from output from sector analysis	+/- 20% change
Changes in support service sector in community	Consolidation of harvesting and processing sectors as well as spatial and temporal redistribution of fishery related activity	Qualitative discussion of changes in demand for support services	Built on assumptions derived from sector analysis	Will not be able to derive quantitative thresholds, but will discuss qualitatively

Table 4-11. Overview of Analytical Approach Used to Compare Baseline and Future Conditions of Communities under the Alternatives.

4.9.1.1 Potential Impacts and Impact Mechanisms

The current economic deterioration of the West Coast groundfish trawl fishery would likely continue under the No-Action Alternative. This continuing deterioration would be a major concern for fishing communities that have a vital interest in the short-term and long-term economic viability of the fishery, the income and employment opportunities it provides, and the safety of participants in the fishery.

If the history of the implementation of other IFQ programs is a guide, the three IFQ alternatives (Alternatives 2 - 4) will result in social impacts being felt in a range of communities, as fewer vessels will participate in the fishery and fewer communities will be the sites of processing effort. In some ways, transition to a trawl IFQ program could be viewed as neutral or a zero-sum exercise from an economic perspective, where presumably similar overall harvest levels will be sustained and potential losses in landings in one area (from a shift in distribution of effort), for example, would be offset by potential gains in landings elsewhere. From a social impact perspective, however, impacts result from at-risk and beneficiary populations or communities being different. Furthermore, there is intended to be an overall gain in value of the fishery with the transition to a trawl IFQ program through an increase in efficiency and the increase in participant's ability to pursue value-added opportunities, among other program aspects. Again, if history is a guide, there will be fewer, if more stable, jobs across a range of sectors as efficiencies are increased and a redistribution of income and revenue opportunities will occur. The mechanisms that relate a trawl IFQ program to various potential social impacts are outlined in more detail below.

Vessel consolidation

- Employment: loss of skipper and crew positions
- Income: change in compensation structure
- Vessel related support service demand decline
- Vessel activity related public revenues decline

Processor consolidation

- Employment and income changes for processing employees
- Processing activity related support service demand changes
- Processing activity related public revenue changes

Changes in spatial distribution of effort

- Changes in the spatial distribution of vessel homeports and/or other vessel activity or vessel related activity (including support service activity)
- Changes in the distribution of landing patterns
- Changes in the distribution of processing effort
- Changes in temporal distribution of effort
- Changes in timing and duration of harvester related activities
- Changes in timing and duration of processing related activities
- Changes in timing and duration of support services demand
- Other economic changes such as;

- Changes in price/value of raw and processed product(s) and therefore related revenue as seen on a localized basis
- Changes in vessel/processor ratios or other changes influencing shifting rent between sectors as seen on a localized basis

4.9.1.2 Measurement Criteria and Significance Criteria

Measurement criteria or indicators are summarized in Table 4-11. These include estimated counts or values associated with the various indicators noted. As important as overall counts or absolute measurements, however, is the potential for redistribution between communities through changes in spatial distribution of effort, not necessarily associated with harvest activity itself, but through shifts brought about by consolidation and the pursuit of efficiency, which may favor particular communities or types of communities over others.

Consistent with the significance criteria utilized in the individual sector analyses, it is assumed that a 20 percent change in key indicators at the community level will be significant. Beyond individual sector changes, however, overall community level impact analysis will be driven by the combination of (a) direct fishery related changes and (b) community attributes of dependency and/or vulnerability. Further, indirect or cumulative impacts may prove significant in specific communities based on the combination of fishery engagement through direct participation and support service business participation. In the case of support service engagement, there are no standardized measures of community engagement or dependency, so there are no straightforward ways to establish quantitative thresholds of significance. Where quantitative thresholds are not of practical use, the significance of change will be discussed in terms of the nature, direction, and magnitude of likely impacts.

4.9.1.3 Data and Models

Information on likely numbers of harvesters and processors, and related derived measures, such as employment and income, will derive from information developed for the individual sectors as described in the previous sector profile sections of this document. These will then be applied to the community base.

Projections of change will not be made for each individual community, but communities at risk will be identified. Patterns of redistribution accompanying or following consolidation, which will be important for the ultimate assessment of community impacts, will necessarily be described in qualitative terms, based on the experience of previous IFQ programs as informed by the specific alternative attributes.

4.10 Tribes

4.10.1 Analytical Framework

As noted in Chapter 3, tribal groundfish fisheries are regulated by the participating tribes themselves, with the type of overall allocations varying by groundfish species or species group. While not necessarily directly affected by Federal and state management measures, tribal entities are involved in the Council process and craft their groundfish management measures in cooperation with federal and state managers. Further, tribes and tribal related entities may be direct participants in the non-tribal fisheries subject to management under the proposed alternatives (as may any other entity) and it is

known that at least some tribes are involved with fisheries support service business ventures that rely to at least some degree on potentially affected non-tribal fishing entities. Further, tribes may experience impacts resulting from the crowding and stock effects of capital and fishing effort spillover, market competition, and processing related impacts. These factors will be addressed primarily in qualitative terms, as will potential impacts to the coastal distribution of fishing activity and potential changes in the distribution of income derived from fishing activities. Tribal comment will be needed during this process.

4.11 Input Suppliers

4.11.1 Analytical Framework

Table 4-12 provides an overview of the analytical approach used to compare baseline and future conditions of input suppliers under the alternatives. The analytical approach includes 1) potential impacts; 2) mechanisms that relate the proposed action to the impacts; 3) measurement criteria or indicators used in assessing each type of impact; 4) models and data sets used in the analysis; and 5) the significance criteria or thresholds.

Table 4-12. Overview of Analytical Approach Used to Compare Baseline and Future Conditions of Input Suppliers under the Alternatives.

Potential Impacts	Impact Mechanisms	Measurement Criteria or Indicators	Data and Models	Significance Criteria or Thresholds
Changes in the	Consolidation of	Fuel expenditures	Qualitative assessment	+/- 50 percent
economic performance (e.g., profitability) of	harvesting sector as well as spatial redistribution	Food expenditures	based on expert opinion, together with model	+/- 50 percent
individual input suppliers	of fishery related activity	Gear expenditures	projections of	+/- 20 percent
	Reporting and monitoring requirements	Expenditures on observers	geographic distribution of fishing effort of trawl	+/- 20 percent
	Transfers of QS and QP and cumulative trip limits	Ex-vessel value of transfers	harvesters as described in Section 4.1.7.2	+/- 20 percent

4.11.1.1 Potential Impacts and Impact Mechanisms

As indicated in Section 3.12, businesses that supply inputs to the West Coast groundfish trawl fishery may be indirectly affected by the three IFQ alternatives (Alternatives 2 - 4) if a trawl IFQ program causes changes in trawl groundfish harvesting operations. The expectation is that the indirect effects on input suppliers may not be as large as experienced in other IFQ programs because the race for fish in the West Coast groundfish trawl fishery has been virtually eliminated. However, because the implementation of IFQ programs in other fisheries has had significant effects on the economic performance of input suppliers a careful examination of impacts is warranted.

Estimating impacts on input suppliers is complicated by the fact that many of the vessels and processors participating in the West Coast groundfish trawl fishery are not wholly dependent on the fishery. Therefore, while a vessel may exit the West Coast groundfish trawl fishery it may remain active in other fisheries and continue to purchase a similar level of fixed or annual inputs. To simplify the analysis, it is assumed that the only inputs that would be affected by a trawl IFQ program are those related to a vessel's level of fishing production, i.e., variable inputs.

The initial list⁴⁸ of variable inputs of trawl vessels that are likely to be affected by the alternatives include fuel, food, trawl gear, and observers.⁴⁹ For example, fuel expenditures are among the largest expense categories for fishing vessels. Under a trawl IFQ program, fish harvesters are expected to be better able to optimize their fishing activities over the course of the year, thereby decreasing fuel expenditures. As a result, marine fuel suppliers are likely to see a change in the demand for their product.

If a trawl IFQ program results in considerable consolidation within the trawl fleet, fewer trawl gear sets would be needed. On the other hand, consolidation would mean that the gear on the vessels remaining in the fishery will see greater use during the year. Finally, if the remaining trawl harvesters become more profitable under a trawl IFQ program, they may be able to afford to replace and upgrade their gear more often. A trawl IFQ program that includes options for trawl vessels to change to non-trawl gears would also result in increased gear sales.

While fixed inputs are assumed to be unaffected by a trawl IFQ program, it is likely that a program would create new demands for the services of permit and QS brokers; therefore, the effects on these input suppliers are included in the analysis.

4.11.1.2 Measurement Criteria and Significance Criteria

Table 4-12 provides an overview of the indicators or measures of impact and the significance thresholds that will be used. Because food and fuel suppliers are likely to supply these inputs to trawl and non-trawl vessels, the significance threshold for changes in these inputs is set at +/- 50 percent. If a supplier generates 40 percent of its revenue from trawl groundfish harvesters, a 50 percent reduction in trawl expenditures would result in a 20 percent overall decline in revenue, which would be considered significant. Gear suppliers may be more specialized and more dependent on the West Coast groundfish trawl fishery; therefore, the significant threshold is set at 20 percent. Similarly, observer suppliers and permit brokers are likely to be more dependent on the fishery, and a lower threshold is reasonable.

4.11.1.3 Data and Models

The assessment of indirect impacts of the trawl IFQ program on input suppliers is based primarily on projected changes in the trawl groundfish catcher vessel classes. Because total vessel-level expenditures in the West Coast groundfish trawl fishery are unknown, it will not be possible to fully quantify the impacts on input suppliers. The impact analysis will rely primarily on expert opinion, together with model projections of geographic distribution of fishing effort of trawl harvesters as described in Section 4.1.7.2

⁴⁸ This list will be expanded if it is determined that the use of other inputs may change significantly under a trawl IFQ program.

⁴⁹ Observers are included because firms that provide observers are properly considered input suppliers. The inclusion of observers does not imply that vessels would or would not be required to pay for observer coverage.

4.12 Wholesalers and Retailers

4.12.1 Analytical Framework

Table 4-13 provides an overview of the analytical approach used to compare baseline and future conditions of wholesalers and retailers under the alternatives. The analytical approach includes 1) potential impacts; 2) mechanisms that relate the proposed action to the impacts; 3) measurement criteria or indicators used in assessing each type of impact; 4) models and data sets used in the analysis; and 5) the significance criteria or thresholds.

Potential Impacts	Impact Mechanisms	Measurement Criteria or Indicators	Data and Models	Significance Criteria or Thresholds
Changes in the economic performance (e.g., profitability) of individual wholesalers and retailers	Vessel operational flexibility affects utilization of target species, creation of higher-value products and timing of product flows	Volume and value of groundfish products	Assessment will be qualitative, relying largely on key informant interviews and secondary data.	Will not be able to derive quantitative thresholds, but will discuss qualitatively in terms of the direction and degree of change
	Competitive advantage of integrated forms in comparison to non- integrated firms	Market share		

 Table 4-13. Overview of Analytical Approach Used to Compare Baseline and Future Conditions of

 Wholesalers and Retailers under the Alternatives

4.12.1.1 Potential Impacts and Impact Mechanisms

Wholesale and retail suppliers of groundfish would be indirectly affected by the three IFQ alternatives

(Alternatives 2 – 4) to the extent that a trawl IFQ program results in changes in groundfish product variety and product flows generated by trawl groundfish processors. The implementation of IFQ programs in fisheries characterized by a race for fish management regime has led to significant changes in the timing of harvests and types of products generated; for example, with more moderate and regular landings, market gluts have been avoided and the production of higher-value products has increased. These impacts of an IFQ program are less likely to occur in the West Coast groundfish trawl fishery because cumulative trip limits under the status quo have spread harvests out over time, thereby generally preventing market gluts. However, if harvesters can reduce their incidental catch rates of overfished species, the total purchases of trawl caught groundfish will increase relative to the No-Action Alternative.

Wholesale and retail suppliers may be directly affected to the extent that they are vertically integrated with shoreside processors of trawl groundfish. For example, if vertically integrated firms experience greater certainty of supplies under a trawl IFQ program through an allocation of harvest quota, they may gain a competitive advantage over non-integrated firms and be able to increase their relative market share.

4.12.1.2 Measurement Criteria and Significance Criteria

Table 4-13 provides an overview of the indicators or measures of impact and the significance thresholds that will be used. The analysis will not be able to derive quantitative significance thresholds, but the significance of impacts will be discussed qualitative terms.

4.12.1.3 Data and Models

Data documenting the activities of wholesalers and retailers with respect to trawl groundfish are unavailable, as are reliable comprehensive data on wholesale or retail values. Therefore, the assessment of effects on wholesalers and retailers of trawl groundfish will be qualitative, relying largely on key informant interviews and secondary data.

4.13 Consumers of Groundfish Products

4.13.1 Analytical Framework

Table 4-14 provides an overview of the analytical approach used to compare baseline and future conditions of consumers of groundfish products under the alternatives. The analytical approach includes 1) potential impacts; 2) mechanisms that relate the proposed action to the impacts; 3) measurement criteria or indicators used in assessing each type of impact; 4) models and data sets used in the analysis; and 5) the significance criteria or thresholds.

Table 4-14. Overview of Analytical Approach Used to Compare Baseline and Future Conditions of Consumers of Groundfish Products under the Alternatives

Potential	Impact	Measurement	Data and Models	Significance Criteria or
Impacts	Mechanisms	Criteria or Indicators		Thresholds
Changes in consumer surplus	Vessel operational flexibility affects utilization of target species and seasonality of harvest	Availability and price of groundfish products	Assessment will be qualitative, relying largely on key informant interviews	Will not be able to derive quantitative thresholds, but will discuss qualitatively in terms of the direction and degree of change

4.13.1.1 Potential Impacts and Impact Mechanisms

Because landing limits in the groundfish fisheries under the status quo maintain a year-round season, consumers already experience an availability of fresh fish in markets throughout the year. However, if harvesters can reduce their incidental catch rates of overfished species under the three IFQ alternatives (Alternatives 2 - 4), consumers would be expected to benefit from the anticipated increases in fish landings relative to the No-Action Alternative. On the other hand, the impacts of a trawl IFQ program on the market for trawl groundfish may be to increase the seasonality of harvest relative to the status quo.

4.13.1.2 Measurement Criteria and Significance Criteria

Table 4-14 provides an overview of the indicators or measures of impact and the significance thresholds that will be used. The analysis will not be able to derive quantitative significance thresholds, but the significance of impacts will be discussed qualitative terms.

4.13.1.3 Data and Models

Data documenting the market for trawl groundfish are unavailable, as are estimates of consumer surplus. Therefore, the assessment of effects on consumers of trawl groundfish will be qualitative, relying largely on key informant interviews

4.14 General Public

4.14.1 Analytical Framework

Table 4-15 provides an overview of the analytical approach used to compare baseline and future conditions of the general public under the alternatives. The analytical approach includes 1) potential impacts; 2) mechanisms that relate the proposed action to the impacts; 3) measurement criteria or indicators used in assessing each type of impact; 4) models and data sets used in the analysis; and 5) the significance criteria or thresholds.

Table 4-15. Overview of Analytical Approach Used to Compare Baseline and Future Conditions of General Public under the Alternatives

Potential Impacts	Impact Mechanisms	Measurement Criteria or Indicators	Data and Models	Significance Criteria or Thresholds
Changes in	Effect of fishery	Level of discards	Impact analysis in	No quantitative
non- consumptive and non-use	practices on the level of fishery waste and the	Condition of groundfish species as described in Section 4.16	 this document for pertinent resource groups 	threshold available, but will discuss qualitatively in terms of the direction
benefits derived from marine ecosystems and associated species of concern	condition of marine ecosystems and associated species that have non- consumptive or non-use value	Condition of potentially affected marine mammals, seabirds, other protected species, habitat, and predator-prey relationships as described in Sections 4.18-4.20	groups	and degree of change

4.14.1.1 Potential Impacts and Impact Mechanisms

Under the No-Action Alternative, the primary management tool would continue to be two-month cumulative landings limits available to vessels with limited entry trawl permits. Reporting of at-sea discards of groundfish would not be required, and uncertainties about the accuracy of bycatch estimation are likely to continue. As a consequence, members of fishing fleets will continue to place pressure on managers to be less conservative in their estimates of bycatch. The management regime would remain unresponsive to the wide variety of fishing business strategies and operational concerns. The inflexibility of this system limits the ability of individual vessels to do everything possible to reduce waste, discard, and collateral damage to marine plants and animals that have non-consumptive or non-use value.

Implementation of an IFQ system under Alternatives 2 - 4 may cause fishermen to change behavior in a way that could affect the level of waste in the West Coast groundfish trawl fishery and the impact of the fishery on marine ecosystems and associated species: fishermen could change the level of fishing effort they employ, the areas they fish, the time of year they fish, and/or the gear with which they fish. Under Alternative 5, permit stacking will allow the creation of larger limits and provide greater flexibility to harvesters, with the end product being possible changes in time and area of fishing. These changes if fishing practices under Alternatives 2 - 5 are expected to have a positive effect on members of the general public who derive non-consumptive and non-use benefits from marine ecosystems and associated species of concern.

4.14.1.2 Measurement Criteria and Significance Criteria

Table 4-15 provides an overview of the indicators or measures of impact and the significance thresholds that will be used. No quantitative significance thresholds are available for impacts on members of the general public that derive non-consumptive and non-use benefits from marine ecosystems and associated species of concern. Instead, qualitative judgments as to the significance of effects are made after considering information regarding impacts on 1) discards; 2) overfished groundfish species; and 3) marine mammals, seabirds, other protected species, habitat, and predator-prey relationships .

4.14.1.3 Data and Models

The overall costs of directly measuring changes in individuals' non-consumptive and non-use values for potentially affected marine ecosystems under each alternative are likely to be exorbitant. Therefore, the direction and degree of change of selected indicators defined in other sections of the analysis are considered as proxy metrics for the non-consumptive and non-use benefits that the general public derives from marine ecosystems and associated species of concern. In general, it is assumed that positive changes in the status of marine ecosystem and associated species positively affect the flow of non-consumptive and non-use benefits.

4.15 Management Agencies

4.15.1.1 Analytical Framework

Table 4-16 provides an overview of the analytical approach used to compare baseline and future conditions of management agencies under the alternatives. The analytical approach includes 1) potential impacts; 2) mechanisms that relate the proposed action to the impacts; 3) measurement criteria or indicators used in assessing each type of impact; 4) models and data sets used in the analysis; and 5) the significance criteria or thresholds.

Potential Impacts	Impact Mechanisms	Measurement Criteria or Indicators	Data and Models	Significance Criteria or Thresholds
Changes in cost-	Modification to	Management costs	Agency records, ——— various federal	+/- 20% change
effectiveness of	effectiveness of manage the fishery isheries Enforcement feasibility and state reportion discussions with the state report discussions	Enforcement feasibility	and state reports,	Level of change to existing program required
management			Degree of modifications required to existing system	
_		Risk to the resources		Level of management system change required to ensure that fishery catch caps are not exceeded

Table 4-16. Overview of Analytical Approach Used to Compare Baseline and Future Conditions of Management Agencies under the Alternatives

4.15.1.2 Potential Impacts and Impact Mechanisms

Under the No-Action Alternative, the primary management tool would continue to be two-month cumulative landings limits available to vessels with limited entry trawl permits. Reporting of at-sea discards of groundfish would not be required, and uncertainties about the accuracy of bycatch estimation are likely to continue.

The three IFQ alternatives (Alternatives 2 - 4) represent a significant departure from the way the West Coast groundfish trawl fishery has been managed and operated. There are four key operational elements associated with an IQ program: initial issuance of quota, appeals process, quota tracking and catch monitoring. Costs associated with initial issuance will depend upon the number of people or entities issued quota shares, the number of species and area specific allocations, and the availability of complete and accurate historical catch records. The cost of processing appeals will be dependent up the complexity of the initial allocation determination process, the numbers of involved parties and the quality of historical catch records. Quota share tracking involves, for example, monitoring individual harvest quota usage and quota transfers. The current catch monitoring system may require modification to ensure proper functioning of the program. For example, an electronic fish ticket system may provide a faster transmission of data to NMFS allowing for quicker updating of individual quota holdings and, therefore, greater flexibility for fishermen to transfer quota as needed. An observer program is a critical component of a catch monitoring system. In general, these programs are expensive and difficult to operate. However, they provide a way to monitor total removals. Well defined goals and objectives are critical prerequisites of an effective IFQ program. They will facilitate development of the design and operational characteristics of the program. A final important component of this analysis will be to examine the potential for management agencies to recover the actual costs directly related to the management and enforcement of a trawl IFQ program through fees authorized under Sec. 304(d)(2) of the MSA.

4.15.1.3 Measurement Criteria and Significance Criteria

Table 4-16 provides an overview of the indicators or measures of impact and the significance thresholds that will be used.

4.15.1.4 Data and Models

To facilitate analysis of the three IFQ alternatives (Alternatives 2 - 4), it will be necessary to contact the NOAA Fisheries Northwest Regional Office to determine the extent of work that already has been initiated. In addition to management costs, it will be necessary to examine enforcement, data reliability and resource risk issues. Observer/monitoring system costs will be a critical issue in the analysis.

Under Alternative 5, all enforcement, monitoring, catch accounting and observer coverage levels are assumed to be equivalent to those under the No-Action Alternative. It will be necessary to determine the nature of program changes that will be needed to accommodate permit stacking. Once these changes are identified, it will be possible to examine impacts associated with such a change. The remaining effects of this alternative will be determined by consulting with agency staff.

4.16 Groundfish Resources

4.16.1 Analytical Framework

Table 4-17 provides an overview of the analytical approach used to compare baseline and future conditions of groundfish resources under the alternatives. The analytical approach includes 1) potential impacts; 2) mechanisms that relate the proposed action to the impacts; 3) measurement criteria or indicators used in assessing each type of impact; 4) models and data sets used in the analysis; and 5) the significance criteria or thresholds.

Potential	Impact	Measurement		Significance Criteria or
Impacts	Mechanisms	Criteria or Indicators	Data and Models	Thresholds
Changes in the capacity of a stock to	capacity of a monitoring	Fishing mortality	Available literature, — including the - FMP, recent stock assessments, and EISs_together	Relation to overfishing mortality rate
produce MSY on a	requirements, individual incentives to avoid discards,	Biomass level		Stock size relative to minimum stock size threshold (MSST)
continuing basis and in the sustainability of a stock	and vessel operational flexibility	Spatial/temporal concentration of catch	 EISs, together with expert opinion, and other pertinent information will play a critical role 	Concentration of harvest changes jeopardizing the ability of the stock to sustain itself at or above the MSST
		Prey availability	in the analysis of each criterion	Change in the levels and distribution of harvest that leads to a change in prey availability such that it jeopardizes the ability of the stock to sustain itself at or above the MSST
		Habitat suitability		Change in the level of habitat disturbance that leads to a decrease in spawning or rearing success such that it jeopardizes the ability of the stock to sustain itself at or above the MSST

Table 4-17. Overview of Analytical Approach Used to Compare Baseline and Future Conditions of Groundfish Resources under the Alternatives

4.16.1.1 Potential Impacts and Impact Mechanisms

Under the No-Action Alternative, the primary management tool would continue to be two-month cumulative landings limits available to vessels with limited entry trawl permits. Reporting of at-sea discards of groundfish would not be required, and uncertainties about the accuracy of bycatch estimation are likely to continue. As a consequence, members of fishing fleets will continue to place pressure on managers to be less conservative in their estimates of bycatch. The management regime would remain unresponsive to the wide variety of fishing business strategies and operational concerns. Under this system, there is little direct incentive for individual vessels to do everything possible to avoid take of species for which there are conservation concerns, such as overfished species.

The most significant impact of the three IFQ alternatives (Alternatives 2 - 4) on the capacity of target species or related species group(s) to produce maximum sustainable yield (MSY) on a continuing basis and on the sustainability of these stocks results from the flexibility that can be exercised in the use of quota shares. Under these alternatives, quota share holders may have greater freedom in determining the level of fishing effort to employ, selecting the area where to fish, picking the time during the year to fish, and choosing the gear with which they fish. During 2002 and 2003, the fishery was characterized by a significant under harvest of available catch quota for many species. A major factor contributing to this phenomenon was the small catch caps for some groundfish species. The ability to adjust operations to current conditions, together with the transferability of IFQs, should reduce the number of under harvested species. Issuance of IFQs also has the potential to affect the spatial distribution of share holders that could affect the spatial distribution of removals. Such changes if they occur, could affect the status of groundfish fishery resources. Under Alternative 5, permit stacking will

allow the creation of larger limits. These larger limits will provide greater flexibility to harvesters, with the end product being possible reductions in incidental catch levels.

The higher levels of monitoring under the three IFQ alternatives and permit stacking alternative will yield more complete, accurate, and timely estimates of total catch including bycatch. Direct benefits would include in-season adjustments based on current season data and higher compliance rates. Indirect benefits would include improved stock assessments and tracking of rebuilding plans. With specific regard to overfished groundfish species, the primary direct effect of higher levels of monitoring would be reductions in both encounters and bycatch.

4.16.1.2 Measurement Criteria and Significance Criteria

Table 4-17 provides an overview of the indicators or measures of impact and the significance thresholds that will be used. These are same measurement criteria used to describe historical and baseline conditions of groundfish resources in Chapter 3; each criterion is defined in that chapter.

The significance of the effects that are likely to surface as a result of implementation of the alternatives being considered are evaluated as to whether the impacts may be reasonably expected to jeopardize the sustainability of each target species or related species group(s).

Overfishing and stock size thresholds have been developed for key groundfish species. These thresholds are used to evaluate the significance of the effects of the alternative management actions. Fishing mortality rates that exceed the overfishing mortality rate are considered to jeopardize the capacity of the stock to produce MSY on a continuing basis and adversely impact the sustainability of the stock. A related measure of this potential is indicated by change in biomass levels. The significance of effects of the spatial/temporal concentration of the catch, the level of prey availability, and habitat suitability for target species is evaluated with respect to each stock's size relative to its MSST. An action that jeopardizes the stock's ability to sustain itself at or above its MSST is considered to adversely affect the sustainability of the stock. Species or species complexes that do not have reliable estimates of MSST cannot be evaluated for the significance of these effects.

4.16.1.3 Data and Models

Information developed in other sections of this EIS, mainly that dealing with predicted changes in fleet size and fishing practices (e.g., seasonal and spatial distribution of fishing effort, number of trips and days fished, gear type used), will provide insight into how the operation of the fishery might change under the alternatives. Once this information is available, it will be possible to examine each criterion in Table 4-17. Available literature, including the FMP, recent stock assessments, EISs, together with expert opinion and other pertinent information will play a critical role in the analysis of each criterion in the table.

4.17 Other Fish Resources

4.17.1 Analytical Framework

Table 4-18 provides an overview of the analytical approach used to compare baseline and future conditions of Other Fish Resources under the alternatives. The analytical approach includes 1) potential impacts; 2) mechanisms that relate the proposed action to the impacts; 3) measurement criteria or indicators used in assessing each type of impact; 4) models and data sets used in the analysis; and 5) the significance criteria or thresholds.

Table 4-18. Overview of Analytical Approach Used to Compare Baseline and Future Conditions of Other Fish Resources under the Alternatives

Potential Impacts	Impact Mechanisms	Measurement Criteria or Indicators	Data and Models	Significance Criteria or Thresholds
sustainability of r		Fishing mortality	Available literature, – including the FMP, recent stock assessments, and	Level of mortality
a SIUCK		Biomass level		Stock size relative to historical levels
		Spatial/temporal concentration of catch	 EISs, together with expert opinion, and other pertinent 	Change in the concentration of the catch jeopardizes the ability of the stock to sustain itself
		Prey availability	 information will play a critical role in the analysis of 	Availability relative to historical levels
		Habitat suitability	each criterion	Level of damage relative to historical levels

4.17.1.1 Potential Impacts and Impact Mechanisms

Under the No-Action Alternative, the primary management tool would continue to be two-month cumulative landings limits available to vessels with limited entry trawl permits. Reporting of at-sea discards of groundfish would not be required, and uncertainties about the accuracy of bycatch estimation are likely to continue. As a consequence, members of fishing fleets will continue to place pressure on managers to be less conservative in their estimates of bycatch. The management regime would remain unresponsive to the wide variety of fishing business strategies and operational concerns. The inflexibility of this system limits the ability of individual vessels to do everything possible to avoid take of species in this resource category.

While the establishment of groundfish IFQs under the three IFQ alternatives (Alternatives 2 - 4) may be an effective way to limit bycatch of groundfish species, IFQs alone would not directly reduce discards of Other Fish Resources. Under a trawl IFQ program, however, quota share holders would have greater freedom in determining the level of fishing effort to employ, selecting the area where to fish, picking the time during the year to fish, and choosing the gear with which they fish. With the ability to change fishing operations, the bycatch of species in this category may go down in the West Coast groundfish trawl fishery. Issuance of IFQs also has the potential to affect the spatial distribution of share holders that could affect the spatial distribution of removals. Such changes if they occur, could affect the status of Other Fish Resources. Under Alternative 5, permit stacking will allow quota share holders to increase the size of their limits. This should make it possible to reduce the bycatch of species in this resource category.

The higher levels of monitoring under the three IFQ alternatives and permit stacking alternative will allow improvement in the documentation of the bycatch of Other Fish Resources, thereby facilitating management of these species.

4.17.1.2 Measurement Criteria and Significance Criteria

Table 4-18 provides an overview of the indicators or measures of impact and the significance thresholds that will be used. These are same measurement criteria used to describe historical and baseline conditions of Other Fish Resources in Chapter 3; each criterion is defined in that chapter.

Significance of effects is based on the likelihood that population-level changes will result from internal events within the groundfish fishery. An effect that is considered not significant corresponds to a change that is not likely to result in population-level effects on these resources or that lies within the range of natural variability for the species.

4.17.1.3 Data and Models

Information developed in other sections of this EIS, mainly that dealing with predicted changes in fleet size and fishing practices (e.g., seasonal and spatial distribution of fishing effort, number of trips and days fished, gear type used), will provide insight into how the operation of the fishery might change under the alternatives. Once this information is available, it will be possible to examine each criterion in Table 4-18. Available literature, including the FMP, recent stock assessments, EISs, together with expert opinion and other pertinent information will play a critical role in the analysis of each criterion in the table.

4.18 Marine Mammals

4.18.1 Analytical Framework

Table 4-19 provides an overview of the analytical approach used to compare baseline and future conditions of marine mammals under the alternatives. The analytical approach includes 1) potential impacts; 2) mechanisms that relate the proposed action to the impacts; 3) measurement criteria or indicators used in assessing each type of impact; 4) models and data sets used in the analysis; and 5) the significance criteria or thresholds.

Potential Impacts	Impact Mechanisms	Measurement Criteria or Indicators	Data and Models	Significance Criteria or Thresholds
Changes in the reproduction and/or survival	Reporting and monitoring requirements, and	Incidental take/entanglement in marine debris	Available literature,	Stock size or recovery time
of a marine mammal	vessel operational flexibility	Harvest of prey species	 including the FMP, recent stock assessments, and 	Foraging success
species group in a way that could affect the		Spatial/temporal concentration of fishing effort	 EISs, together with expert opinion, and other 	Survival and/or reproductive success
population		Disturbance	pertinent information will play a critical role in the analysis of each criterion	Survival and/or reproductive success

Table 4-19. Overview of Analytical Approach Used to Compare Baseline and Future Conditions of Marine Mammals under the Alternatives

4.18.1.1 Potential Impacts and Impact Mechanisms

Under the No-Action Alternative, the primary management tool would continue to be two-month cumulative landings limits available to vessels with limited entry trawl permits. The management regime would remain unresponsive to the wide variety of fishing business strategies and operational concerns. The inflexibility of this system limits the ability of individual vessels to do everything possible to avoid interactions with marine mammals.

The most significant impact of the three IFQ alternatives (Alternatives 2 - 4) on the reproduction and/or survival of marine mammal species groups results from the flexibility that can be exercised in the use of quota shares. Under these alternatives, quota share holders would have greater freedom in determining the level of fishing effort to employ, selecting the area where to fish, picking the time during the year to fish, and choosing the gear with which they fish. With the ability to change fishing operations, the probability of negative fishery/marine mammal interactions should go down. Such a reduction is in the economic interests of fishers as it may obviate the need for restrictive command-and-control regulations to manage these problems.

Under Alternative 5, permit stacking will allow quota share holders to increase the size of their catch limits. This should make it possible for quota share holders to adjust their fishing activities to reduce the probability of negative fishery/marine mammal interactions.

The enhanced fishery monitoring under Alternatives 2 - 5 will allow improvement in the documentation of fishery/marine mammal interactions. As more is understood about the interactions between groundfish vessels and marine mammals along the Pacific Coast and as this information is passed along to fishers, these alternatives have the potential to reduce interactions with marine mammals.

4.18.1.2 Measurement Criteria and Significance Criteria

Table 4-19 provides an overview of the indicators or measures of impact and the significance thresholds that will be used. These are same measurement criteria used to describe historical and baseline conditions of marine mammals in Chapter 3; each criterion is defined in that chapter.

Potential effects of the alternatives would be estimated in light of the extent of direct take, disturbance by fishing vessels, and competition between the fisheries and marine mammals for food. Two issues to

be explored are: 1) do these effects occur or could they occur under each alternative, and 2) if they do occur, do they occur to an extent that would limit the recovery of a listed species or adversely modify critical habitat. If these effects do occur to an extent that would limit the recovery of a listed species or adversely modify critical habitat, then it would be concluded that the action would have significant effects under NEPA. If these effects do not occur or are insignificant under the ESA, then it is concluded that the action would have no significant effects for the purpose of NEPA.

4.18.1.3 Data and Models

Information developed in other sections of this EIS, mainly that dealing with predicted changes in fleet size and fishing practices (e.g., seasonal and spatial distribution of fishing effort, number of trips and days fished, gear type used), will provide insight into how the operation of the fishery might change under the alternatives. Once this information is available, it will be possible to examine each criterion in Table 4-19. Available literature, including the FMP, recent stock assessments, EISs, together with expert opinion and other pertinent information will play a critical role in the analysis of each criterion in the table.

4.19 Seabirds

4.19.1 Analytical Framework

Table 4-20 provides an overview of the analytical approach used to compare baseline and future conditions of seabirds under the alternatives. The analytical approach includes 1) potential impacts; 2) mechanisms that relate the proposed action to the impacts; 3) measurement criteria or indicators used in assessing each type of impact; 4) models and data sets used in the analysis; and 5) the significance criteria or thresholds.

Table 4-20. Overview of Analytical Approach Used to Compare Baseline and Future Conditions of Seabirds
under the Alternatives

Potential Impacts	Impact Mechanisms	Measurement Criteria or Indicators	Data and Models	Significance Criteria or Thresholds
Changes in the population trends of species outside	Reporting and monitoring requirements, and vessel operational	Incidental take in gear and vessel strikes	Available literature, including the FMP, recent stock	Level of take relative to population level
the range of natural fluctuations	flexibility	Prey availability and fishery wastes	assessments, and Survival or r EISs, together success with expert opinion, and other pertinent	Survival or reproductive success
		Habitat suitability	information will play a critical role in the analysis of each criterion	Survival or reproductive success

4.19.1.1 Potential Impacts and Impact Mechanisms

Under the No-Action Alternative, the primary management tool would continue to be two-month cumulative landings limits available to vessels with limited entry trawl permits. The management

regime would remain unresponsive to the wide variety of fishing business strategies and operational concerns. The inflexibility of this system limits the ability of individual vessels to do everything possible to avoid interactions with seabirds.

The most significant impact of the three IFQ alternatives (Alternatives 2 - 4) on the population trends of seabirds results from the flexibility that can be exercised in the use of quota shares. Under these alternatives, quota share holders may have greater freedom in determining the level of fishing effort to employ, selecting the area where to fish, picking the time during the year to fish, and choosing the gear with which they fish. With the ability to change fishing operations, the probability of negative fishery/seabird interactions should go down. Such a reduction is in the economic interests of fishers as it may obviate the need for restrictive command-and-control regulations to manage these problems.

Under Alternative 5, permit stacking will allow quota share holders to increase the size of their catch limits. This should make it possible for quota share holders to adjust their fishing activities to reduce the probability of negative fishery/seabird interactions.

The enhanced fishery monitoring under Alternatives 2 - 5 will allow improvement in the documentation of fishery/seabird interactions. As more is understood about the interactions between groundfish vessels and seabirds along the Pacific Coast and as this information is passed along to fishers, these alternatives have the potential to reduce interactions with seabirds.

4.19.1.2 Measurement Criteria and Significance Criteria

Table 4-20 provides an overview of the indicators or measures of impact and the significance thresholds that will be used. These are same measurement criteria used to describe historical and baseline conditions of seabirds in Chapter 3; each criterion is defined in that chapter.

Significance criteria for impacts on seabirds are based on whether the proposed action would be likely to result in population level effects, defined as changes in the population trend outside the range of natural fluctuations. There are a large number of unpredictable variables and gaps in current knowledge about particular species and ecosystem effects. Therefore, it is impossible to ascertain significance on a strictly quantitative basis.

Except for the supplemental food provided by fisheries in the form of offal, the effects of fisheries are considered adverse to individual birds. Low levels of incidental take of seabirds are better for conservation purposes than high levels of take, but no amount of incidental take can be considered beneficial to a seabird population.

4.19.1.3 Data and Models

Information developed in other sections of this EIS, mainly that dealing with predicted changes in fleet size and fishing practices (e.g., seasonal and spatial distribution of fishing effort, number of trips and days fished, gear type used), will provide insight into how the operation of the fishery might change under the alternatives. Once this information is available, it will be possible to examine each criterion in Table 4-20. Available literature, including the FMP, recent stock assessments, EISs, together with expert opinion and other pertinent information will play a critical role in the analysis of each criterion in the table.

4.20 Other Protected Resources

4.20.1 Analytical Framework

Table 4-21 provides an overview of the analytical approach used to compare baseline and future conditions of Other Protected Resources under the alternatives. The analytical approach includes 1) potential impacts; 2) mechanisms that relate the proposed action to the impacts; 3) measurement criteria or indicators used in assessing each type of impact; 4) models and data sets used in the analysis; and 5) the significance criteria or thresholds.

Table 4-21. Overview of Analytical Approach Used to Compare Baseline and Future Conditions of Other
Protected Resources under the Alternatives

Potential Impacts	Impact Mechanisms	Measurement Criteria or Indicators	Data and Models	Significance Criteria or Thresholds
Changes in the sustainability of a stock	Reporting and monitoring requirements, and	Level of fishing effort and fishery interactions	Available literature, including the	Level of fishing effort relative to historical levels
	vessel operational flexibility	Spatial/temporal characteristic of catch	assessments, and concentri EISs, together jeopardi with expert the popu opinion, and other itself	Changes in the concentration of the catch jeopardizes the ability of the population to sustain itself
		Prey availability	 pertinent information will play a critical role in the analysis of 	Availability relative to historical levels
		Habitat suitability	each criterion	Level of damage relative to historical levels

4.20.1.1 Potential Impacts and Impact Mechanisms

Under the No-Action Alternative, the primary management tool would continue to be two-month cumulative landings limits available to vessels with limited entry trawl permits. The management regime would remain unresponsive to the wide variety of fishing business strategies and operational concerns. The inflexibility of this system limits the ability of individual vessels to do everything possible to avoid interactions with protected species.

The most significant impact of the three IFQ alternatives (Alternatives 2 - 4) on the stock status of Other Protected Resources results from the flexibility that can be exercised in the use of quota shares. Under these alternatives, quota share holders may have greater freedom in determining the level of fishing effort to employ, selecting the area where to fish, picking the time during the year to fish, and choosing the gear with which they fish. With the ability to change fishing operations, the probability of negative fishery/Other Protected Resources interactions should go down. Such a reduction is in the economic interests of fishers as it may obviate the need for restrictive command-and-control regulations to manage these problems.

Under Alternative 5, permit stacking will allow quota share holders to increase the size of their catch limits. This should make it possible for quota share holders to adjust their fishing activities to reduce the probability of negative fishery/Other Protected Resources interactions.

The enhanced fishery monitoring under Alternatives 2 - 5 will allow improvement in the documentation of fishery/Other Protected Resources interactions. As more is understood about the

interactions between groundfish vessels and Other Protected Resources along the Pacific Coast and as this information is passed along to fishers, these alternatives have the potential to reduce interactions with Other Protected Resources.

4.20.1.2 Measurement Criteria and Significance Criteria

Table 4-21 provides an overview of the indicators or measures of impact and the significance thresholds that will be used. These are same measurement criteria used to describe historical and baseline conditions of Other Protected Resources in Chapter 3.

The significance of these effects is evaluated as to whether the impacts of the proposed action may be reasonably expected to jeopardize the sustainability of each species or species group or its ability to recover over time.

4.20.1.3 Data and Models

Information developed in other sections of this EIS, mainly that dealing with predicted changes in fleet size and fishing practices (e.g., seasonal and spatial distribution of fishing effort, number of trips and days fished, gear type used), will provide insight into how the operation of the fishery might change under the alternatives. Once this information is available, it will be possible to examine each criterion in Table 4-21. Available literature, including the FMP, recent stock assessments, EISs, together with expert opinion and other pertinent information will play a critical role in the analysis of each criterion in the table.

4.21 Habitat

4.21.1 Analytical Framework

Table 4-22 provides an overview of the analytical approach used to compare baseline and future conditions of habitat under the alternatives. The analytical approach includes 1) potential impacts; 2) mechanisms that relate the proposed action to the impacts; 3) measurement criteria or indicators used in assessing each type of impact; 4) models and data sets used in the analysis; and 5) the significance criteria or thresholds.

Table 4-22. Overview of Analytical Approach Used to Compare Baseline and Future Conditions of Habitat
under the Alternatives

Potential	Impact	Measurement	Data and Models	Significance Criteria or
Impacts	Mechanisms	Criteria or Indicators		Thresholds
Changes in	Vessel	Amount of gear interactions with habitat by gear	Habitat database; interviews to	+/-20% change or
adverse impacts	operational		determine changes in time, area, and	discuss qualitatively in
on habitat	flexibility		gear; and available literature,	terms of the direction
	·	Location of interactions with habitat	including the FMP, recent stock assessments, and EISs, together with expert opinion, and other pertinent	and degree of change
		Habitat type affected	information	

4.21.1.1 Potential Impacts and Impact Mechanisms

Under the No-Action Alternative, the primary management tool will continue to be two-month cumulative landings limits available to vessels with limited entry trawl permits. Trawl fishermen currently affect habitat through gear interactions. Little information has been developed for assessing gear impacts on habitat and fish production associated with habitat. The EFH EIS presents conclusions that trawl gear has greater adverse impacts on biogenic structure and vertical relief than on unconsolidated sediments, especially in high energy environments. Fishermen have little flexibility to change fishing behavior, because doing so would result in additional costs or reduced benefits, given market demands for fish. However, management actions under Amendments 18-19 that implement trawl gear restrictions and time-area closures will reduce adverse impacts from fishing on habitat.

Alternatives 2 - 5 will not directly affect habitat or regulations that manage habitat. However, implementation of an IFQ system under Alternatives 2 - 4 may cause fishermen to change behavior in a way that could affect habitat: fishermen could change the level of fishing effort they employ, the areas they fish, the time of year they fish, and/or the gear with which they fish. Under Alternative 5, permit stacking will allow the creation of larger limits and provide greater flexibility to harvesters, with the end product being possible changes in time and area of fishing. Permit stacking would not allow fishers to change gear. Changes in the fishing practices of particular sectors as a result of an IFQ program or permit stacking could indirectly affect the condition of habitat.

4.21.1.2 Measurement Criteria and Significance Criteria

The same measurement criteria used to describe historical and baseline conditions in Chapter 3 will be used to evaluate the effects of the alternatives. Whether evaluation of significance criteria can occur with quantitative or qualitative analysis will depend on the level of detail of information provided by respondents during interviews (see Section 4.1.7.1).

4.21.1.3 Data and Models

As described in Section 4.1.7.1, for each alternative, interview respondents would predict changes in fishing practices: e.g., changes in gear type or configuration; changes in area(s) fished; and changes in fishing effort in area(s) or season. The analysis would examine predicted responses resulting from each alternative relative to the known habitat. For example, if analysis of interviews predicts that a proportion of fishermen will move from a current to a new location for some proportion of the time, new maps of fishing activities would show reduced fishing effort in current areas and increased effort in new areas. Queries of the GIS database would indicate whether the changes in area would translate into changes in distribution of fishing effort on habitat types.

If interviews demonstrate that little change from baseline fishing practices will occur for particular sectors as a result of an IFQ system, little further analysis of fishing impacts on habitat will be required.

4.22 Trophic Relationships

4.22.1 Analytical Framework

Table 4-23 provides an overview of the analytical approach used to compare baseline and future conditions of trophic relationships under the alternatives. The analytical approach includes 1) potential impacts; 2) mechanisms that relate the proposed action to the impacts; 3) measurement

criteria or indicators used in assessing each type of impact; 4) models and data sets used in the analysis; and 5) the significance criteria or thresholds.

 Table 4-23. Overview of Analytical Approach Used to Compare Baseline and Future Conditions of Trophic

 Relationships under the Alternatives

Potential Impacts	Impact Mechanisms	Measurement Criteria or Indicators	Data and Models	Significance Criteria or Thresholds
Changes in ecological functions of	Vessel operational flexibility	Predator abundance	Habitat database; interviews to determine changes in time, area, and gear; and available will discuss qualitat	
predators and prey		Prey abundance	 literature, including the FMP, recent stock assessments, and 	in terms of the direction and degree of change
		Average trophic level	EISs, together with expert opinion, and other pertinent information	

4.22.1.1 Potential Impacts and Impact Mechanisms

Under the No-Action Alternative, the primary management tool will continue to be two-month cumulative landings limits available to vessels with limited entry trawl permits. Trawl fishermen currently affect trophic interactions through adverse impacts on habitat that may affect production of predators and prey, through catch of predators and prey that species composition and relative abundance, and through changes in bio-energetic flow resulting from discards that redistributes food items (e.g., benthic resources redistributed to surface and midwater zones). Little information has been developed for assessing gear impacts on trophic interactions, although the EFH EIS presents summaries on information known for some predators and some prey. Fishermen have little flexibility to change fishing behavior, because doing so would result in additional costs or reduced benefits, given market demands for fish. However, management actions under Amendments 18-19 that implement trawl gear restrictions and time-area closures or change quantities of bycatch discarded could affect some aspects of trophic relationships.

Alternatives 2 - 5 will not directly affect trophic relationships. However, implementation of an IFQ system under Alternatives 2 - 4 may cause fishermen to change behavior in a way that could affect habitat: fishermen could change the level of fishing effort they employ, the areas they fish, the time of year they fish, and/or the gear with which they fish. Under Alternative 5, permit stacking will allow the creation of larger limits and provide greater flexibility to harvesters, with the end product being possible changes in time and area of fishing. Permit stacking would not allow fishers to change gear. Changes in the fishing practices of particular sectors as a result of an IFQ program or permit stacking could indirectly affect the condition of trophic relationships.

4.22.1.2 Measurement Criteria and Significance Criteria

The same measurement criteria used to describe historical and baseline conditions in Chapter 3 will be used to evaluate the effects of the alternatives. No quantitative significance thresholds are available; qualitative judgments as to the direction and magnitude of effects will be made based on pertinent information and literature review.

4.22.1.3 Data and Models

As described in Section 4.1.7.1, for each alternative, respondents would predict changes in fishing practices: e.g., changes in gear type or configuration; changes in area(s) fished; and changes in fishing effort in area(s) or season. The analysis would examine predicted responses resulting from IFQ alternatives relative to the known suite of predator and prey species. For example, if analysis of interviews predicts that a proportion of fishermen would shift from trawls to other gears, the analysis could qualitatively assess the range and amount of species caught and the impact on predator-prey relationships.

If interviews demonstrate that little change from baseline fishing practices will occur for particular sectors as a result of an IFQ system, little further analysis of fishing impacts on trophic relationships will be required.

12 Appendix A: Regulatory Impact Review/Initial Regulatory Flexibility Analysis

12.1 Regulatory Impact Review

12.1.1 Introduction

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. Section 1 of the EO deals with the regulatory philosophy and principles that are to guide agency development of regulations. It stresses that in deciding whether and how to regulate, agencies should assess all of the costs and benefits across all regulatory alternatives. Based on this analysis, NMFS should choose those approaches that maximize net benefits to society, unless a statute requires another regulatory approach.

The regulatory principles in EO 12866 emphasize careful identification of the problem to be addressed. The agency is to identify and assess alternatives to direct regulation, including economic incentives such as user fees or marketable permits, to encourage the desired behavior. Each agency is to assess both the costs and the benefits of the intended regulation and, recognizing that some costs and benefits are difficult to quantify, propose or adopt a regulation only after reasoned determination the benefits of the intended regulation justify the costs. In reaching its decision agency must use the best reasonably obtainable information, including scientific, technical and economic data, about the need for and consequences of the intended regulation.

NMFS requires the preparation of an RIR for all regulatory actions of public interest; implementation of rebuilding plans includes the publication of strategic rebuilding parameters in federal regulations. The RIR provides a comprehensive 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 major alternatives that could be used to solve the problems. The purpose of the analysis is to ensure the regulatory agency systematically and comprehensively considers all available alternatives, so the public welfare can be enhanced in the most efficient and cost-effective way. The RIR addresses many of the items in the regulatory philosophy and principles of EO 12866.

The RIR analysis and an environmental analyses required by NEPA have many common elements and they have been combined in this document. The following table shows where selected elements of an RIR, as required by EO 12866, are located.

Required RIR Element	Corresponding Section
Description of management objectives	Section 1.1.2 Purpose of the Proposed Actions
Description of the fishery	Chapter 3 Resource and Stakeholder Profiles
Statement of the problem	Section 1.1.1 Need for Action (Problems for Resolution)
Description of each alternative considered in the analysis	Chapter 2 Description of Proposed Alternatives

The RIR is designed to determine whether the proposed actions could be considered "significant regulatory actions" according to EO 12866. The EO 12866 test requirements used to assess whether

or not an action would be a "significant regulatory action" and the expected outcomes of the proposed management alternative are discussed below. A regulatory program is "economically significant" if it is likely to result in the following effects:

I.a. Have an 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.

1.b. Present a risk to long term productivity:

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.

4. Raise novel legal or policy issues arising out of legal mandates, the President's priorities, or the principles set forth in this EO.

12.1.2 Economic analysis of the Alternatives

This section will provide a quantitative assessment of net benefits and distributional effects, augmented by a qualitative assessment where appropriate.

The information necessary to fully evaluate net national benefits associated with socioeconomic impacts cannot be reasonably obtained at this time. Currently available information includes historic data on commercial vessel landings and ex-vessel revenue gleaned from fish-tickets and projections of limited entry trawl vessel participation (landings and revenue) under the alternatives provided by the NMFS Bycatch Model. Additional information that is necessary to perform a net benefits analysis includes production cost information for vessels and production cost, product volume and price information for processors.

Efforts are underway to collect representative production cost information from participating commercial fishing vessels. The NMFS Northwest Fisheries Science Center is undertaking a cost-earnings survey of the limited entry trawl fleet during the first quarter of 2005. With a satisfactory response rate, this survey will provide improved data for estimating potential efficiency gains from implementation of a trawl IFQ program.

As described in Section 4.1.7 the Consulting Team proposes to use the information bases available at the time of the impact analysis to develop a set of models designed to focus on the following specific issues:

- The distributional effects of the initial allocation of QS in a trawl IFQ program.
- The potential consolidation of the trawl groundfish harvesting sector following the allocation
- The potential to reduce catches of incidental species.
- The likelihood that additional profits could offset additional observer costs
- The potential to increase profits

The output from these models will enable analysts to 1) determine how permit owners would fare under initial IFQ allocation options relative to baseline (2005) participation levels; 2) predict which permit owners are most likely to leave the fishery under a given level of consolidation. This information will be then be used in other models and in the community impact analysis; 3) predict

the ability of harvesters to reduce bycatch rates; 4) assess whether the potential for increase in profits for vessels in different vessel classes could fully offset increased costs of observers and monitoring; and 5) estimate the marginal revenue attainable from purchased IFQs based on a range of assumed change in variable costs scenarios.

In the absence of adequate data on prices, costs and profitability of buyers and processors, ex-vessel revenue will be used as a proxy indicator of profits. From the buyers' perspective, ex-vessel revenue represents expenditures for a primary production input. Projected change in ex-vessel revenue under the alternatives will be stratified by different categories to examine impacts by buyer/processors' relative size and level of involvement in or dependence on trawl groundfish purchases.

12.1.2.1 Changes in Net Benefits within a Benefit-Cost Framework

This section will provide a quantitative assessment of net benefits, augmented by a qualitative assessment where appropriate.

For businesses, the change in profit can be used as a measure of the change in net benefits. The change in net benefits to consumers can be measured in terms of the change in consumer surplus. In addition changes in non-market value and ecosystem service will be qualitatively assessed.

12.1.2.2 Changes in the Distributional Effects

Changes in the distribution of benefits and costs reflect changes in the benefits and costs of groups of individuals, businesses of differing sizes, and other entities (including small communities and governmental entities).

12.1.2.3 Changes in Income and Employment

Regional economic models, including input-output models, will be used to estimate the regional income and employment effects of alternative regulatory actions.

12.2 Initial Regulatory Flexibility Analysis

12.2.1 Introduction

When an agency proposes regulations, the Regulatory Flexibility Act (RFA) (5 USC. § 601-612) requires the agency to prepare and make available for public comment an initial regulatory flexibility analysis (IRFA) that describes the impact of the proposed rule on small businesses, nonprofit 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.

The level of detail and sophistication of the analysis should reflect the significance of the impact on small entities. Under 5 USC., Section 603(b) of the RFA, each IRFA is required to address:

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

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

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

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

5. An identification, to the extent practicable, of all relevant federal rules that may duplicate, overlap or conflict with the proposed rule;

6. A description of any significant alternatives to the proposed rule that accomplish the stated objectives of applicable statutes and that minimize any significant economic impact of the proposed rule on small entities.

12.2.2 Reasons for Considering the Proposed Rule

The reasons for considering the proposed action are discussed in Section 1.1.1 Need for Action (Problems for Resolution).

12.2.3 Objectives and Legal Basis of the Proposed Rule

The objectives of the proposed action are discussed in Section 1.1.2 Purpose of the Proposed Actions. Section 1.1.3.3 Groundfish Management Context provides information on the legal basis for the proposed rule.

12.2.4 Description and Number of Small Entities to which the Proposed Rule will Apply

12.2.4.1 Definition of a Small Entity

Three types of small entities are defined in the RFA:

<u>Small business</u> - Section 601(3) of the RFA defines a small business as having the same meaning as small business concern under section 3 of the Small Business Act. This includes any firm that is independently owned and operated and is not dominant in its field of operation. The US Small Business Administration (SBA) has established size criteria for all major industry sectors in the US, including fish harvesting and fish processing businesses. A business involved in the commercial catching or taking of finfish is a small business if it is independently owned and operated and not dominant in its field of operation (including its affiliates), and if it has combined annual receipts not in excess of \$4.0 million for all its affiliated operations worldwide. A seafood processor is a small business if it is independently owned and operation (including its affiliates) and employs 500 or fewer persons, on a full-time, part-time, temporary, or other basis, at all its affiliated operations worldwide. A business involved in both the harvesting and processing of seafood products is a small business if it meets the \$4.0 million criterion for fish harvesting operations. Finally, a wholesale business servicing the fishing industry is a small business if it employs 100 or fewer 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. However, business concerns owned and controlled by Indian Tribes, Alaska Regional or Village Corporations organized pursuant to the Alaska Native Claims Settlement Act (43 U. S.C. 1601), Native Hawaiian Organizations, or Community Development Corporations authorized by 42 USC. 9805 are not considered affiliates of such entities, or with other concerns owned by these entities solely because of their common ownership.

Affiliation may be based on stock ownership when (1) A person is an affiliate of a concern if the person owns or controls, or has the power to control 50 percent or more of its voting stock, or a block of stock which affords control because it is large compared to other outstanding blocks of stock, or (2) If two or more persons each owns, controls or has the power to control less than 50 percent of the voting stock of a concern, with minority holdings that are equal or approximately equal in size, but the aggregate of these minority holdings is large as compared with any other stock holding, each such person is presumed to be an affiliate of the concern.

Affiliation may be based on common management or joint venture arrangements. Affiliation arises where one or more officers, directors or general partners control the board of directors and/or the management of another concern. Parties to a joint venture also may be affiliates. A contractor and subcontractor are treated as joint venturers if the ostensible subcontractor will perform primary and vital requirements of a contract or if the prime contractor is unusually reliant upon the ostensible subcontractor. All requirements of the contract are considered in reviewing such relationship, including contract management, technical responsibilities, and the percentage of subcontracted work.

<u>Small organizations</u> - The RFA defines "small organizations" as any not-for-profit enterprise that is independently owned and operated and is not dominant in its field.

<u>Small governmental jurisdictions</u> - The RFA defines small governmental jurisdictions as governments of cities, counties, towns, townships, villages, school districts, or special districts with populations of less than 50,000.

12.2.4.2 Description of Small Entities to Which the Rule will Apply

Federal courts and Congress have indicated that a RFA analysis should be limited to small entities subject to the regulation. As such, small entities to which the rule will not apply are not considered in this analysis.

The proposed alternatives would apply to businesses involved in the harvesting or processing of West Coast groundfish. There do not appear to be any entities that are directly regulated by the proposed action that would qualify as either "small nonprofit" entities, nor "small government jurisdictions."

12.2.4.3 Estimate of the Number of Small Entities to Which the Rule will Apply

[The data presented in this section are preliminary - estimates of the number of small entities will be updated during Stage 2]

The data available for this analysis are based on vessel and buyer/processor identifiers included in the PacF1N data system. The vessel and processor counts are based on unique vessel and buyer/processor identifiers. However, it is known that in many cases a single firm may own more than one vessel, or a buyer/processing facility may include more than one profit center. Therefore, the counts should be

considered upper bound estimates. Additionally, businesses owning vessels and/or buyers and processors may have revenue from fisheries in other geographic areas, such as Alaska, or from non-fishing activities. Therefore, it is likely that when all operations of a firm are aggregated, some of the small entities identified here are actually larger than indicated.

<u>Seafood Harvesters</u> - Most of the vessels, processors, and related businesses engaged in the West Coast groundfish trawl fishery would be classified as small businesses under the SBA definition. A total 4,588 commercial vessels fishing from West Coast ports, 1,709 vessels had some involvement in West coast groundfish fisheries. Of these, 421 held groundfish limited entry permits, and an additional 771 participated in open access groundfish fisheries and derived more than 5% of total revenue from groundfish. Ninety-one limited entry trawl vessels, representing 35% of the limited entry trawl fleet, were permanently retired under a recent buyback program. The share of annual groundfish ex-vessel revenue retired under the buyback was somewhat greater, 36% including whiting or 46% of nonwhiting ex-vessel revenue. There has been some concern that effective capacity in the fishery will not actually be reduced this much due to reactivation of "latent" permits. There were 24 permits not fished at all during 2001 through 2003, and 40 permits not fished at all in 2002 and 2003. Events have shown that of the 20 limited entry trawl permits that have changed hands since the buyback was completed, 14 of these permits had no recorded landings in 2002. Six buyback participants have reentered the limited entry trawl fishery, purchasing a total of 11 permits.

<u>Buyers/Processors</u> - A total 1,780 fish buyers on the West Coast, 732 bought at least some groundfish from commercial fishermen. All but 19 of these purchased less than \$2 million worth of total harvest during the year 2000. A few buyers/processors may not qualify as small businesses under the SBA criterion. Fewer than nine buyers/processors that process groundfish were listed as employing more than 500 people (Warren 2004). However the employee counts for these buyers/processors include operations in Alaska and processing for species other than groundfish. Many of the listed employees are therefore likely in Alaska due to the much higher volumes of fish processing done there. Finally, since most processing employment is seasonal, many of these buyers/processors would not be expected to employ more than 500 employees year round.

12.2.5 Description of the Projected Reporting, Record Keeping and Other Compliance Requirements of the Proposed Rule

- 12.2.5.1 Description of Compliance Requirements of the Proposed Rule
- **12.2.5.2** Description of Compliance Costs Associated with the Proposed Rule
- **12.2.5.3** Estimate of the Regulatory Burden and Distributional Effects
- 12.2.5.4 Description of Potential Benefits of the Proposed Rule to Small Entities

12.2.6 Identification of Relevant Federal Rules that may Duplicate, Overlap or Conflict with the Proposed Rule

NOAA Fisheries is unaware of any duplicative, overlapping, or conflicting federal rules.

12.2.7 Description of Significant Alternatives to the Proposed Rule

An IRFA must consider all significant alternatives that accomplish the stated objectives of the applicable statues and minimize any significant economic impact of the proposed rule on small entities. "Significant alternatives" are those with potentially lesser impacts on small entities (versus large-scale entities) as a whole. The kinds of alternatives that are possible will vary based on the particular regulatory objective and the characteristics of the regulated industry. However, section 603(c) of the RFA gives agencies some alternatives that they must consider at a minimum:

1. Establishment of different compliance or reporting requirements for small entities or timetables that take into account the resources available to small entities.

2. Clarification, consolidation, or simplification of compliance and reporting requirements for small entities.

3. Use of performance rather than design standards.

4. Exemption for certain or all small entities from coverage of the rule, in whole or in part.

13 Appendix B: Social Impact Assessment Technical Appendix

This technical appendix will consist of a set of detailed community and regional profiles that will build on existing descriptive work as informed by the analysis of fishery-related activity specific to the trawl fishery that will potentially be impacted by the proposed management alternatives. Existing work does not provide the detail at the community level of analysis that we would seek, specifically for the links of particular fishery sectors to individual communities and the relationships of those sectors to larger community engagement and dependency attributes.

13.1 Introduction

For the purposes of social impact assessment, a two-pronged approach to analyzing the community or regional components of potential change associated with the proposed trawl management alternatives will be utilized. First, summary tables based on existing quantitative fishery information (and accompanying narrative discussions) will be developed to illustrate patterns of participation in the various components of the fishery. These will be presented in the main body of the RIR and summarized in the relevant EIS sections, as discussed in Section 3.10 and Section 4.10. This analysis will focus on the fishery sectors (e.g., catcher vessels) and portray the baseline distribution of these sectors across communities and regions (Section 3.10), along with associated activities (e.g., landings). The associated analysis of alternatives section in the EIS (Section 4.10) will look at the potential differential distribution of impacts to communities and regions that would accompany potential changes in the sectors brought about by the various management alternatives.

The second approach to producing a comprehensive SIA involves selecting a set of trawl fishery communities for characterization to describe the range, direction, and likely order of magnitude of social and community level impacts associated with the management alternatives for the trawl fishery. In short, this approach uses the community or region as the primary frame of reference or unit of analysis to assess the nature of engagement or dependency on the fishery in terms of the various sectors present in the community and the relationship of those sectors to the rest of the local social and economic context. This approach will be contained in this technical appendix.

Our starting point for defining affected communities will be the 2005-2006 Groundfish Fishery Specification EIS (PFMC, 2004) and data from Davis (2005) which may be used to provide a list of regions, homeports and landing ports (see Table 13-1).

State	Region	Trawl Vessel Homeport	Trawl Landings Port
WA	Northern Puget Sound	Bellingham	
WA	Northern Puget Sound	Blaine	Blaine
WA	Coastal Washington North	Neah Bay	Neah Bay
WA	Coastal Washington South and Central	Westport	Westport
WA	Coastal Washington South and Central	Ilwaco/Chinook	Ilwaco
OR	Astoria	Astoria	Astoria
OR	Tillamook	Tillamook/Garibaldi	Garibaldi
OR	Newport	Newport	Newport
OR	Coos Bay	Coos Bay	
OR	Coos Bay	Florence	Florence
OR	Coos Bay		Charleston
OR	Brookings	Brookings	Brookings
CA	Crescent City	Crescent City	Crescent City
CA	Eureka	Eureka	Eureka
CA	Fort Bragg	Fort Bragg	Fort Bragg
CA	Fort Bragg	Other Mendocino County	
CA	Bodega Bay	Bodega Bay	Bodega Bay
CA	San Francisco	San Francisco	San Francisco
CA	San Francisco	Princeton/Half Moon Bay	Princeton
CA	San Francisco	Other SF Area	
CA	Monterey	Monterey	Monterey
CA	Monterey	Santa Cruz	Santa Cruz
CA	Monterey	Moss Landing	Moss Landing
CA	Morro Bay	Morro Bay	Morro Bay
CA	Morro Bay	Avila	Avila
CA	Los Angeles	Los Angeles	
CA	Los Angeles	Long Beach	
CA	San Diego	San Diego	
CA	San Diego	Oceanside	

Table 12 1 Degions	Homoports and Landing	gs Ports with Trawl Activity
Table 13-1. Regions	, numepuits and Lanum	js Fults with hawi Activity

The choice of specific communities and regions to be profiled in this appendix will be driven by relevant data availability (e.g., information on where are relevant trawl vessels located) and by data confidentiality considerations. Looking at trawl vessel distribution as an example, within the state of Washington only two communities (Port Angeles and Westport, with 4 and 7 vessels, respectively) have three or more vessels each, allowing community level data discussions. Only two other Washington communities are listed as having any relevant catcher vessels (Blaine with 2 vessels and Ilwaco/Chinook with 1 vessel). Neither of these communities can be discussed individually due to confidentiality considerations, so these vessels will either be lumped into larger regional groupings (such as Blaine with Port Angeles into a Northern Puget Sound area and Ilwaco/Chinook with Westport into a Coastal Washington South and Central area), following the groupings utilized in previous groundfish EIS analyses. The advantage of staying with community-specific data is the ability to ultimately better describe impacts (and variations of impacts) at the community level, while the

advantage of utilizing regions is to allow for an analysis that accommodates all available information (but at the expense of community level detail).

Oregon trawl vessel communities that could be described on an individual community basis include Astoria (32 vessels), Newport (20 vessels), Coos Bay (16 vessels), and Brookings (6 vessels). Florence, with 1 vessel, could be lumped with Coos Bay and similarly Tillamook, with 2 vessels, could be lumped with Astoria for a more regional coverage and for the sake of completeness.

Within California, a total of nine communities feature three or more trawl vessels that would, in turn, allow for community level discussions. These are Crescent City (3 vessels), Eureka (9 vessels), Fort Bragg (9 vessels), Princeton/Half Moon Bay (9 vessels), San Francisco (5 vessels), Monterey (4 vessels), Moss Landing (5 vessels), Avila (3 vessels), and Morro Bay (3 vessels). Only two California communities have less than three vessels, precluding a community level data discussion: Bodega Bay (1 vessel) and Santa Cruz (2 vessels). These communities could be lumped with others for regional groupings and, if appropriate and desired, some of the other communities could be further be lumped to simplify the analysis (e.g., Avila and Morro Bay have been lumped into a single region in earlier analyses).

If permit data rather than vessel data were chosen, a different set of communities fall out, particularly after common ownership is taken into account to further narrow information that can be released without confidentiality restrictions. If four or more entities are taken as the minimum threshold for release, the following communities could be discussed on an individual basis:

- Oregon: Astoria, Charleston, Clackamas, Coos Bay, Garibaldi, Newport and Warrenton.
- California: Eureka, Fort Bragg, Half Moon Bay, and San Francisco.
- Washington: Seattle.

If port landings data are chosen, yet a different set of communities emerge that could be discussed on an individual basis. Ultimately, as noted in Section 3.10, we would be seeking analytic power and utility within individual communities or groups of communities with common attributes to allow for a production of the best available information regarding potential community and social impacts for consideration by decision makers. The decision regarding appropriate aggregations of communities will also be informed by community or regional level information on processing and support service entities as well as data on vessels themselves.

Linking processing related data to communities is likely to prove difficult for at least two reasons. First, geographically linked processing data are scarce. Second, confidentiality concerns are even more pronounced with processing entities than they are with harvest entities, given the smaller overall number and the specific distribution of participants. It is likely that the processing related aspects of the community based discussions will, as a result of these difficulties, be more qualitative than quantitative in nature. Further complicating this analysis is the fact that it is not uncommon for landed catch to be trucked from the point of landing to processing facilities elsewhere, meaning that the attribution of economic activity to particular locations is inherently challenging. Again, however, we will attempt to qualitatively describe patterns of activity where quantitative information is scarce.

The final selection of communities for profiling will follow an analysis of the data and it is anticipated that different types of information will be developed for different geographic footprints, shaped by confidentiality concerns. The outline of the remainder of the technical appendix is as follows:

13.2 Overview of Trawl Community Socioeconomic Profiles

13.3 Background and Methodology

13.4 Community Variability

13.4.1 Location and Historical Ties to the Fishery

A general literature review will be conducted, but several recent efforts have provided more or less standardized information across a wide range of west coast fishing communities that will be of direct use for the current effort. These include:

- West Coast Marine Fishing Community Descriptions. Jennifer Langdon-Pollock, Pacific States Marine Fisheries Commission, Economic Fisheries Information Network, January 2004.
- Fishing Communities (Appendix A, Section 8.0), Proposed Acceptable Biological Catch and Optimum Yield Specifications and Management Measures: 2005-2006 Pacific Coast Groundfish Fishery EIS. Pacific Fishery Management Council, October 2004.
- Draft Supplemental Community Profiling Document: Community Profiles for West Coast and North Pacific Fisheries – Washington, Oregon, California, and other US States. Norman, Sepez, Lazrus, Milne, Package, Russell, Grant, Petersen, Primo, Styles, Tilt, and Vaccaro, Socioeconomics Program NWFSC and Economics and Social Sciences Research Program AFSC, 2006.

Other recent reports have focused on aspects of the fishery in particular locations. These include:

- Socio-economics of the Moss Landing Commercial Fishing Industry: Report to the Monterey County Office of Economic Development. Pomeroy and Dalton, June 2003.
- Market Channels and Value Added to Fish Landed at Monterey Bay Area Ports. Pomeroy and Dalton, California Sea Grant College Program, 2005.

13.4.2 Community Socioeconomic Structures

This section will lay out a typology of communities based (a) the structure of the communities themselves and (b) on nature and degree of engagement in, and dependence upon, the West Coast groundfish trawl fishery.

13.5 Social Impact Experience with IQ or Other Rationalization Programs

13.5.1 Summary Review of Relevant Literature

In addition to a general literature review on community impacts related to IQ and other fishery rationalization related experience, an additional focus will be put on incorporating recent work has been completed by management entity staff directly related to the currently proposed management alternatives. These include:

- Communities and Individual Quota Programs: Discussion on Community Definitions, Community Eligibility Criteria and Allocation Process in Quota Systems, Suzanne Russell, NWFSC, n.d. (circa 2005)
- Individual Fishing Quotas in Multi-species Fisheries: Objectives, Outcomes, Design Elements and Preliminary Thought on the Challenges for the Pacific Groundfish Fishery, Kate Quigley, NOAA Fisheries NW Region, August 26, 2004.
- Practicability Analysis for Amendment 18: Bycatch Mitigation and Standardized Total Catch Reporting Methodologies (Preliminary Discussion Draft). NMFS Northwest Region, October 2005.
- Update on Trawl Individual Quota Process and Community Concerns (includes Appendix: Community Involvement Programs and Community Impact Control Mechanisms Used in ITQ Systems). PFMC Agenda Item H.11, Situation Summary, November 2005.
- Catch-Quota Balancing in Multi-species Individual Fishing Quotas. Sanchirico, Holland, Quigley and Fina, Resources for the Future, November 2005. (This document is not as directly tied to the current fishery management initiative as the previous three, but is still relevant nonetheless.)

These have also been recent documents generated by a number of groups involved as stakeholders in the ongoing fishery management process that are directed toward aspects of community impact assessment. These documents will also be reviewed for perspectives and data to include in the overall background literature review. These documents include:

- Addressing Community Concerns in the Development of Individual Fishing Quota Program Alternatives for the Pacific Groundfish Trawl Sector: A Survey of Community Stakeholders. Environmental Defense, September 6, 2004
- Coastal Fishing Community Considerations in the Context of Trawl IFQs. Ginny Goblirsch, Community Representative, PFMC Trawl IQ Committee, October 18, 2004.
- The Economic Impacts of Food Plant Closure: Analysis of the Pacific Coast Seafood Plant in Warrenton, Oregon. Globalwise, Inc., for Pacific Seafood Group, February 23, 2004.

13.5.2 Region Specific Experience

This section will include a summary of region-specific experience in other IQ or rationalization programs and the outcomes of those programs that may be brought forward as "lessons learned" to be applied to the current alternatives analysis. This information will, for example, include experience in the Pacific Whiting Conservation Cooperative. Further, other recent relevant region-specific management outcome information that may inform prediction of future trawl IQ impacts will be summarized in this section. This will include, for example, the results of the recent buy-back program and the associated changes in patterns of engagement and dependency across communities.

13.5.3 Structure of Proposed Community Options

This section will provide an overview of the proposed options designed to address community impact concerns. These include three main options:

- Community Stability Holdback Option
- Community Involvement Option

• Existing Community Impact Control Mechanism Options

These options have a number of sub-options as well and are listed in outline form below. These sections would provide a general level componential analysis of likely social impact outcomes based on the structure of the options and sub-options themselves.

13.5.3.1 Community Stability Holdback Option

- General
 - Portion of annual QP held back and allocated for proposals submitted by IFQ holders
 - o Proposals evaluated with priority on community benefits
 - Shares held back continue to be trawl shares
- Holdback
 - Up to 20 percent [previously 25 percent] of total annual QP for [non-whiting] shoreside component of trawl fishery (but period may be greater than one year)
 - Sub-options of (A) 20 percent, (B) 10 percent, (C) 5 percent, and (D) 5 percent in year one, increasing by 5 percent each year until the total set aside is 20 percent.
- Committee
 - Appointed by the Council, recommendations approved by Council before forwarding to NMFS
 - Role to make recommendations with the purpose of achieving community development, enhancement, or stabilization goals
 - Composed of representatives of West Coast regions, port districts, processors, and fishermen
 - Staffing by NMFS + Council (option A) or Council (option B)
- Eligibility for Participation
 - IFQ holders [previously joint fishermen/processor proposals]; may work together in collaboratives
 - o IFQ holders may only participate in one proposal
- Allocation Criteria
 - o To be developed, but quantitative in nature for consistent application to proposals
 - Potential criteria may or may not include:
 - Past performance (performance on past commitments)
 - Utilization (indicator of wastage and pollution externalities)
 - Local added value (value of exports divided by landings)
 - Local labor employment (percentage of local employees)
 - Local labor earnings (wages to product value ratio)
 - Public debt related to fisheries investment (fishery infrastructure debt relying on fisheries activity repayment)

- Public investment dedicated to fisheries (total public investments supporting fishing industry)
- Port dependence (proportion of total port revenue derived from fisheries activity)
- Other (to be identified through public comment)

13.5.3.2 Community Involvement Option

- Committee
 - Convened by Council; composed of representatives of West Coast regions, port districts, processors, and fishermen
 - Make recommendations pertaining to IFQ program and its impact to port districts, regions, processors, and fishermen

13.5.3.3 Existing Community Impact Control Mechanism Options

- Allowing communities to hold quota
- Setting limits on quota accumulation
- Allocations of whiting and non-whiting groundfish species for shoreside and at-sea delivery
- Temporarily prohibiting QS transfer after initial allocation (to be analyzed but NOT a part of current alternatives)
- Distribute revoked shares or reclaimed quota to new entrants

13.6 Community Profiles

13.6.1 Community #1

13.6.1.1 Community Demographics

- Total Population, Ethnicity, Age and Sex, Housing
- Occupation, Employment, Income

13.6.1.2 Local Economy and Links to the Trawl Fishery

- Harvesting (fleet characteristics, permits, landings, employment, etc.)
- Processing (buyer/processor characteristics, volumes, patterns of movement between landing and processing, employment, etc.)
- Fishery Support Services (vessel and processor support related activity characterization)
- Other Local Business Activity/Local Economic Base Summary (for baseline of economic dependency analysis)

- 13.6.1.3 Community Revenues (estimated revenues in community revenue context)
- 13.6.1.4 Summary of Recent Community Rationalization Experience (including lessons learned)
- 13.6.1.5 Differential Impacts of Trawl Fishery Management Alternatives (general level discussion)
- 13.6.2 Community #2 (etc.)

14 Appendix C: Components Analysis

The major goal of the Components Analysis and Components Tables is to ensure that the details of each alternative are adequately considered by clearly specifying how the different elements fit together within an alternative; and to identify unknown or unintended potential effects on resources and stakeholders groups. The Components Table and Components Analysis also identify and analyze options that were discussed but not brought forward into the main suite of alternatives.

14.1 Analysis of Components, Elements, and Options

The analysis of the components, elements and options that comprise the Trawl IFQ Program is of critical importance. A thorough analysis of each of the components, elements, options and sub-options can provide the Council with the necessary information to refine their Alternatives, or even to eliminate Alternatives.

The remainder of this section lists the section provides and indication of the section headings proposed for the Components Analysis. In general the components analysis would have a section for each of the components defined in the Components Tables. Within each component section the various elements and options are described, discussed, and analyzed.

14.1.1 Analysis of Elements and Options Contained in Component 1

Component 1

```
Element 1.1
Option 1.1.1
Sub-Option 1.1.1.1
```

14.1.2 Analysis of Elements and Options Contained in Component 2

Component 2

Element 2.1

Option 2.1.1

Sub-Option 2.1.1.1

14.2 Preliminary Analysis of Distributions of Catch History and Potential QS by Species

This section contains a further examination of the question of whether allocations QS for incidental species should utilize historical catches. The Consulting Team has included this preliminary analysis for two reasons: 1) it provides insight in the question of how to allocate QS for incidental species, and 2) it provides an example of the type of analysis that would be included in the components analysis.

In this analysis of preliminary analysis of catch history, the Consulting Team examined PacFIN Fish-Ticket from 1994-2003. We combined catch information with permit holder data from the NMFS NW Region. With the permit data analysts were able to examine fish-ticket catches of two major groups of limited entry trawl permits—permit that were bought back during the 2003 buyback and permits that remained at registered permits after the buyback. This distinction is important because all of the options in the alternatives re-distribute the aggregate catch of "bought-back permits" on an equal shares basis to each of the remaining permits that are assigned to catcher vessels.⁵⁰

Table 14-1 shows the shoreside landings from PacFIN Fish tickets of selected species by from 1994-2003. Two groups of permits are shown landings assigned to permits to bought-out permits, and landings assigned to post-buyback permit owners. If the amount landed by the bought-out permit is relatively high, then redistributing that catch in the allocation of QS can add significant amounts of QS to remaining permit owners. This may be particularly important if QS of incidental catch is allocated based on historical landings. If on the other hand, the amount landed by the bought-out permit is relatively low (see cabezon and butter sole as examples), then the re-distribution will have a much smaller impact.

⁵⁰ Permits assigned to Catcher Processors would not share in this redistribution.

	Bought-out Pe	ermits	Post-Buyback I	Permits	Catch of All Permits
Species	Lbs (1,000s)	Percent	Lbs (1,000s)	Percent	Lbs (1,000s)
Black Rockfish	37	13.49	238	86.51	275
Butter Sole	5	16.38	24	83.62	28
Cabezon	1	4.69	11	95.31	12
California Scorpionfish	4	24.95	13	75.05	17
Canary Rockfish	4,233	50.52	4,145	49.48	8,378
Curlfin Sole	17	25.76	48	74.24	64
Darkblotched Rockfish	289	48.90	302	51.10	591
Dover Sole	92,664	48.29	99,241	51.71	191,905
English Sole	9,498	41.03	13,652	58.97	23,149
Flathead Sole	38	42.46	52	57.54	90
Lingcod	5,867	48.60	6,205	51.40	12,072
Nearshore Rockfish	24	22.99	81	77.01	106
Pacific Cod	6,472	54.84	5,329	45.16	11,801
Pacific Whiting	138,802	8.44	1,505,495	91.56	1,644,296
Petrale Sole	18,352	49.46	18,750	50.54	37,102
Rex Sole	6,443	42.42	8,746	57.58	15,189
Sablefish	31,128	48.11	33,573	51.89	64,701
Sanddabs	6,350	30.46	14,497	69.54	20,847
Shortbelly Rockfish	74	34.93	138	65.07	211
Spiny Dogfish	6,575	71.30	2,647	28.70	9,222
Thornyheads	43,117	48.56	45,678	51.44	88,795
Walleye Pollock	3,054	33.65	6,020	66.35	9,074
Widow Rockfish	30,974	37.05	52,631	62.95	83,605
Yelloweye Rockfish	22	64.51	12	35.49	34

Figure 14-1 provides a preliminary assessment of an allocation of QS based on 1994-2003 landings for Dover sole. The figure is provided as an illustration and should not be considered official. All postbuyback permits were included.⁵¹ In the figure, permits are sorted by landings history from low to high—each small bar represents the catch of a one permit of the 170 remaining after the buyback. The lighter shaded bars represent the equal-share redistribution of landings of bought-out permits. The darker-shaded bars represents landing of remaining permits. A tick-mark horizontal axis is shown for every ten permits. As is readily seen in the figure, the distribution of landings by remaining permits is highly skewed—highliners land significantly higher amounts of Dover sole than most permits. It should be noted however, that while this distribution appears to be highly skewed, the distribution of Dover sole landing are among the least skewed of all groundfish species. The note inside the figure indicate the percentage of total Including re-distributed catches) of the top ten permits—in the case of Dover sole the top-ten permits accounted for 11 percent of the total landings. A critical finding of this figure is that for many permits, the re-distribution of landings from bought-out permits would constitute the majority of their QS.

⁵¹ Actual options may require more recent participation to qualify for QS.

The next five pages show similar figures for other species, including a mix of primary target species, non-constraining incidental catch species, and overfished species. A careful examination of the figures provides insight into the distribution of landings overtime. It should be noted that all of the figures are truncated at the top to protect the confidentiality of the permits with the highest landings.

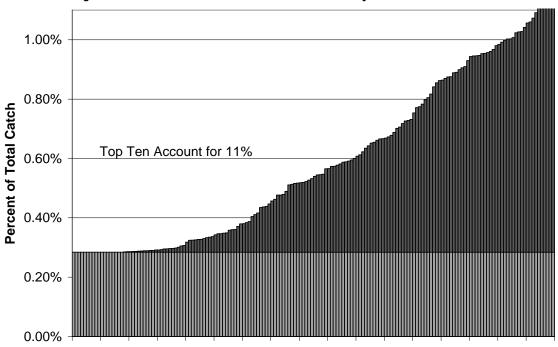


Figure 14-1. Dover Sole Catch Distribution—Post Buyback Permits 1994-2003

Permit Holders (Sorted Low to High)

Note: The set of bars at the bottom of the figures, represent the catch of bought out boats evenly distributed to remaining permits. The darker shaded bars represent the actual catch of remaining permits. Source: PacFIN data originally provided to Shannon Davis in August 2004.

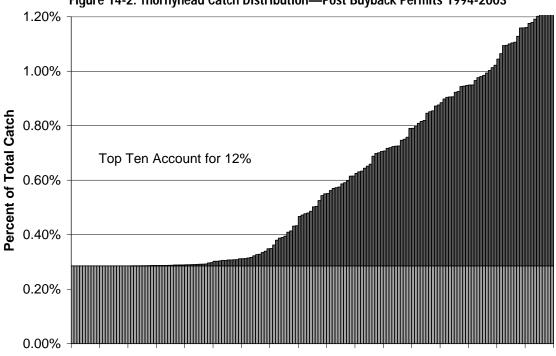


Figure 14-2. Thornyhead Catch Distribution—Post Buyback Permits 1994-2003

Permit Holders (Sorted Low to High)

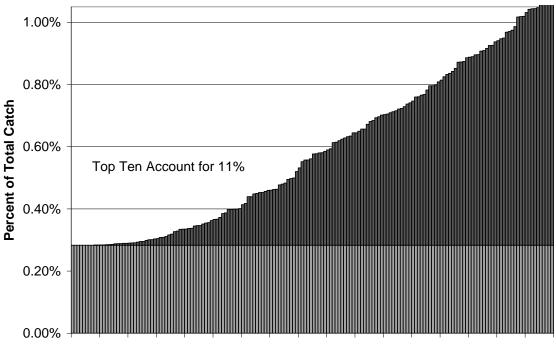


Figure 14-3. Sablefish Catch Distribution—Post Buyback Permits 1994-2003

Permit Holders (Sorted Low to High)

Note: The set of bars at the bottom of the figures, represent the catch of bought out boats evenly distributed to remaining permits. The darker shaded bars represent the actual catch of remaining permits. Source: PacFIN data originally provided to Shannon Davis August 2004.

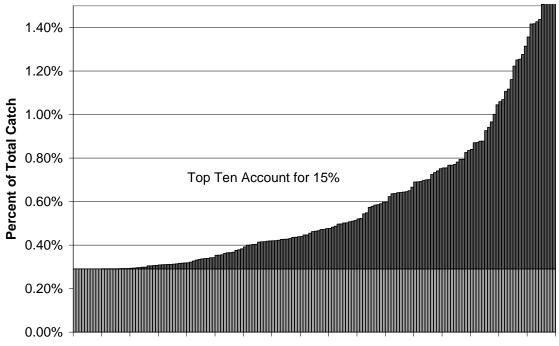


Figure 14-4. Petrale Sole Catch Distribution—Post Buyback Permits 1994-2003

Permit Holders (Sorted Low to High)

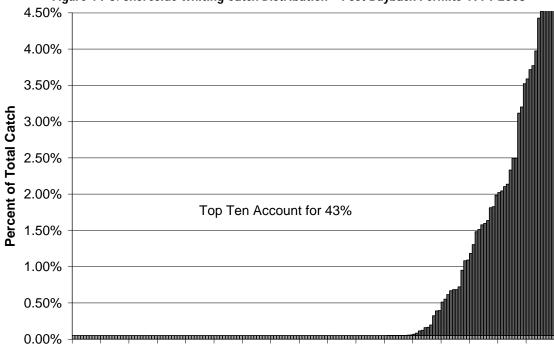


Figure 14-5. Shoreside Whiting Catch Distribution—Post Buyback Permits 1994-2003

Permit Holders (Sorted Low to High)

Note: The set of bars at the bottom of the figures, represent the catch of bought out boats evenly distributed to remaining permits. The darker shaded bars represent the actual catch of remaining permits. Source: PacFIN data originally provided to Shannon Davis August 2004.

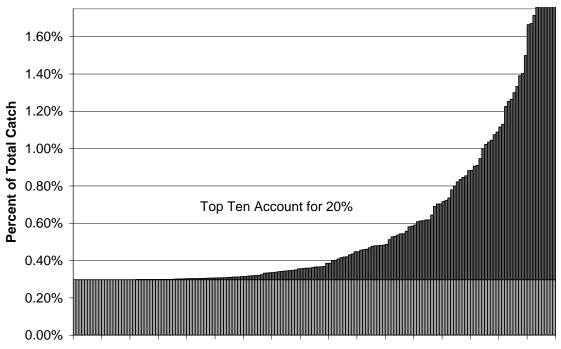


Figure 14-6. Canary Rockfish Catch Distribution—Post Buyback Permits 1994-2003

Permit Holders (Sorted Low to High)

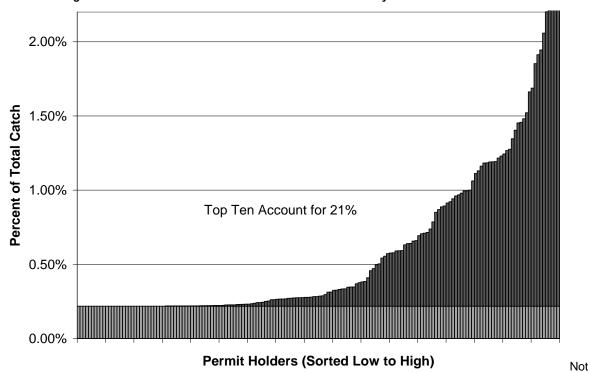


Figure 14-7. Widow Rockfish Catch Distribution—Post Buyback Permits 1994-2003

e: The set of bars at the bottom of the figures, represent the catch of bought out boats evenly distributed to remaining permits. The darker shaded bars represent the actual catch of remaining permits. Source: PacFIN data originally provided to Shannon Davis August 2004.

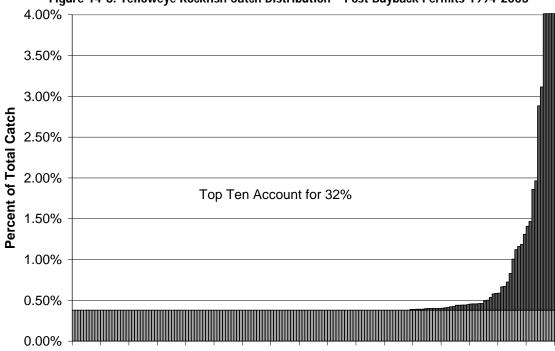


Figure 14-8. Yelloweye Rockfish Catch Distribution—Post Buyback Permits 1994-2003

Permit Holders (Sorted Low to High)

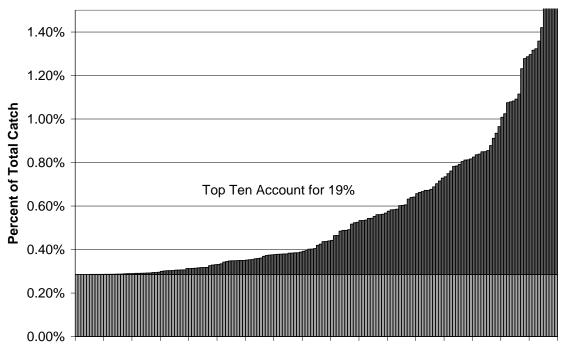


Figure 14-9. Lingcod Catch Distribution—Post Buyback Permits 1994-2003

Permit Holders (Sorted Low to High)

Note: The set of bars at the bottom of the figures, represent the catch of bought out boats evenly distributed to remaining permits. The darker shaded bars represent the actual catch of remaining permits. Source: PacFIN data originally provided to Shannon Davis August 2004.

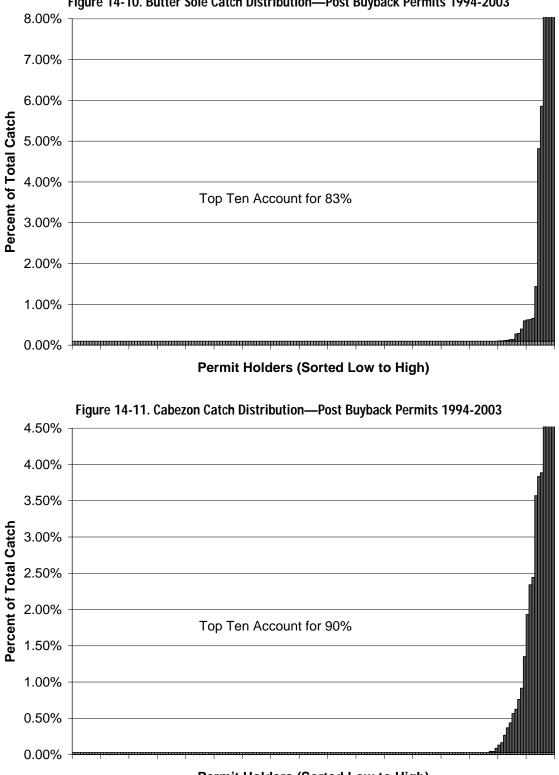


Figure 14-10. Butter Sole Catch Distribution—Post Buyback Permits 1994-2003

Permit Holders (Sorted Low to High)

Note: The set of bars at the bottom of the figures, represent the catch of bought out boats evenly distributed to remaining permits. The darker shaded bars represent the actual catch of remaining permits. Source: PacFIN data originally provided to Shannon Davis August 2004.

As might be expected, the figures reveal that the distribution of landings for Dover sole, thornyheads and sablefish (see Figure 14-1 through Figure 14-3) are very similar, as is the relative importance of the re-distribution of landings from bought-out permits. Figure 14-4 which shows the distribution of Petrale sole exhibits a higher level skewness—the more concave the distribution means that a greater percentage of the total landings were made by highliners.

Figure 14-5 shows the distribution of shoreside landings of Pacific Whiting. This figure indicates that a over 2/3^{rds} of the permits remaining after the buyback do not participate in the whiting fishery. The figure also indicate that the top-10 permits accounted for 43 percent of the total after the redistribution of whiting landings by bought-out permits.

Figure 14-6 through Figure 14-9 show the distribution of landings of four species that are (or have been) declared overfished.⁵² The figures all show significant levels of skewness—in particular the distribution of yelloweye rockfish is very highly skewed. All four of these figures clearly demonstrate the potential benefit of the re-distribution of landings from bought out boats. The equal-share re-distribution may provide sufficient amounts of QS to cover incidental catches without forcing vessels to purchase QS from those that had high levels of landings. Referring back to Table 14-1, the approximately 50 percent of the total landings canary rockfish would be re-distributed, while only 37 percent of the widow rockfish would be re-distributed. Whether or not the re-distributed amounts are actually sufficient to cover incidental catches is an empirical question. The figures also show however, that allocating these species using historical landings may provide a significant windfall to permits that had high levels of catch of these now-constraining species.

⁵² Lingcod is not currently considered overfished, but was considered overfished as late as 2005.

EXCERPT 2 FROM: Stage 1 Document IFQs and Permit Stacking Alternatives in the Limited Entry Trawl Fishery—final draft

CHAPTERS 3, AND 5 THROUGH 11

NORTHERN ECONOMICS, INC. (AUGUST 2006) VERSION MODIFIED BY COUNCIL STAFF

Stage 1 Document

IFQs and Permit Stacking Alternatives in the Limited Entry Trawl Fishery

Final Draft

Stage 1 Document in the Development of an Environmental Impact Statement/ Regulatory Impact Review/ Social Impact Analysis/ Initial Regulatory Flexibility Analysis

Prepared for the

Pacific Fishery Management Council as partial fulfillment of Contract No. PFMC05IQ02

August 2006 (Version Modified by Council Staff)



880 H Street, Suite 210, Anchorage, AK 99501 T: 907.274.5600 F: 907.274.5601 1801 Roeder Ave., Suite 124 Bellingham, WA 98225 T: 360.715.1808 F: 360.715.3588

W: www.northerneconomics.com E: mail@norecon.com

In association with MRAG Americas, Inc. EDAW, Inc. URS, Inc. Dr. Edward Waters Dr. Richard Marasco

PROFESSIONAL CONSULTING SERVICES IN APPLIED ECONOMIC ANALYSIS

Anchorage

880 H St., Suite 210, Anchorage, AK 99501 TEL: 907.274.5600 FAX: 907.274.5601

President & Principal Economist: Patrick Burden, M.S. Vice President & Senior Economist: Marcus L. Hartley, M.S. Senior Consultant, Planning Services: Caren Mathis, MCP, AICP Economists: Leah Cuyno, Ph.D., Jonathan King, M.S. Policy Analyst: Nancy Mundy, Ph.D. Socioeconomic Analyst: Don Schug, Ph.D. Analysts: Michael Fisher, MBA, Cal Kerr, MBA Office Manager: Diane Steele Document Production: Terri McCoy

Bellingham

 1801
 Roeder Ave., Ste. 124, Bellingham, WA 98225

 TEL: 360.715.1808
 FAX: 360.715.3588

Senior Economist: Susan Burke, Ph.D. Economist: Kelly Baxter, M.S. Associate Economist: Hart Hodges, Ph.D.



E-mail: norecon@norecon.com Web: www.northerneconomics.com

Preface

This document is the Stage I Draft of the *Environment Impact Statement (EIS) of IFQs and Permit Stacking Alternatives in the Limited Entry Trawl Fishery* produced under Contract No. PFMC01IQ02 with the Pacific Fishery Management Council.

This version of the document has been completely reorganized from the draft that was provided in April to the Trawl IFQ Workshop. The reorganization decision was in collaboration with the PFMC. The document should be viewed as a work in progress, and as such the Consulting Team has focused its effort on document content rather than on formatting. We apologize for any inconvenience this may cause reviewers, and very much appreciate any editing and proofreading comments.

The document is currently 396 pages long including this front material, and while significant portions of the document contain only section headings, reviewers are encouraged to examine the entire document and to provide comments on the overall structure of the outline. The bulleted list provides an overview of the various chapters along with an indication of content levels.

- Chapter 1 contains introductory text for the EIS. The content is relatively complete.
- Chapter 2 provide summary of the alternatives for analysis. The Council has forwarded a main suite of 5 Alternatives including the No-Action Alternative. In addition there are numerous options that are also included but which are not part of the main suite of alternatives. The Council has not rejected these options and therefore wishes to include them in the EIS. The Components Table, shown in the second half of Chapter 2, organizes the alternatives forwarded by the Council in a step-by-step manner that allows decision-makers and stakeholders to investigate and understand the ramifications of each of the little decisions that must be made when overhauling the management regime. The PFMC and the Consulting Team are in the process of revising earlier versions of the component table, and consequently the full table is unavailable at this time. The full table will be included in the final draft.
- Chapter 3 contains the annotated outline of the past and baseline conditions of potentially affected resource and stakeholder groups.
- Chapter 4 contains an annotated outline of the direct, indirect, and cumulative effects analysis for each potentially affected resource and stakeholder group.
- Chapter 5 contains an outline of the summary of other environmental management Issues
- Chapter 6 describes the consistency of the alternatives with the West Coast Groundfish FMP and MSA national standards and other provisions.
- Chapter 7 contains an outline of the analysis of cross-cutting mandates.
- Chapters 8 11 are reserved for a list of preparers, glossary, list of acronyms, index and list of cited literature.
- Appendix A contains an annotated outline of the RIR/IRFA
- Appendix B is a technical appendix to the social impact assessment. The appendix contains introductory text and an example of the content that would be provided for potentially affected communities.
- Appendix C contains an outline of a components analysis.

Contents

Section	Page

1	Introduction1
(See Exc	cerpt 1 for this chapter)
2	Description of Proposed Alternatives

(See Excerpt 1 for this chapter)

Resource and Stakeholder Profiles	113
Introduction	.113
Historical Conditions	.113
Baseline Conditions	.113
Major Fishery Data Sets Used in Describing Historical and Baseline Conditions	.113
Shoreside Non-whiting Commercial Fishery Data	.114
Landings Data	.114
Discards and Incidental Catch Data	.114
Whiting Commercial Fishery Data	.115
Recreational Catch Data	.115
Economic Data	.115
	Introduction Historical Conditions Baseline Conditions Major Fishery Data Sets Used in Describing Historical and Baseline Conditions Shoreside Non-whiting Commercial Fishery Data Landings Data Discards and Incidental Catch Data Whiting Commercial Fishery Data Recreational Catch Data

3.2.4.1	Ex-vessel Prices	115
3.2.4.2	Ex-processor Prices	
3.2.4.3	Vessel Costs	
3.2.4.4	Processor Costs	116
3.3	List of Potentially Affected Resource and Stakeholder Groups	116
3.4	Limited-entry Trawl Groundfish Catcher Vessels and Permits	117
3.4.1	Classification of Potentially Affected Trawl Catcher Vessels and Permits	117
3.4.2	Condition Indicators for Trawl Catcher Vessels	118
3.4.3	Summary of Past and Present Conditions of Trawl Catcher Vessels	119
3.4.3.1	Number of Active Permit Owners and Vessels	119
3.4.3.2	Total Landings and Ex-vessel Value	
3.4.3.3	Ex-Vessel Value, Landings and Incidental Catch Rates by Target Strategy	
3.4.3.4	Distribution of Landings by Species and Month	
3.4.4	Past and Present Conditions of Specific Trawl Catcher Vessel Classes	143
3.4.4.1	At-sea Whiting Trawl Catcher Vessel Class	143
3.4.4.2	Shoreside Whiting Trawl Catcher Vessels	165
3.4.4.3	Combination Whiting Trawl Catcher Vessels	
3.4.4.4	Large Diversified Trawl Catcher Vessels	
3.4.4.5	Small Diversified Trawl Catcher Vessels	
3.4.4.6	Bought-out Trawl Catcher Vessels and Permits	
3.5	Trawl Catcher Processors	
3.5.1	Potentially Affected Trawl Catcher Processors	
3.5.2	Condition Indicators for Trawl Catcher Processors	
3.6	Processors of Trawl-Caught Groundfish	
3.6.1	Classifications of Potentially Affected Processors	167
3.6.2	Condition Indicators for Processors of Trawl Groundfish	
3.6.3	Summary of Past and Present Conditions of Trawl Groundfish Processors	170
3.6.3.1	Number of Processor Groups, Facilities and Buying Stations	170
3.6.3.2	Relative Dependence on Trawl Groundfish	
3.6.3.3	Total Purchases of Trawl-Caught Groundfish by Species	
3.6.3.4	Distribution of Purchases	
3.6.4	Past and Present Conditions of Trawl Groundfish Processor Classes	
	Large Shoreside Processing Groups	
3.6.4.2	Small Shoreside Processing Groups	
3.6.4.3	Independent Buyers	
3.6.4.4	Motherships	
3.7	Non-Trawl Commercial Harvesters	
3.7.1	Potentially Affected Non-Trawl Commercial Harvesters Condition Indicators for Non-Trawl Commercial Harvesters	
3.7.2	Past and Present Conditions of Non-Trawl Commercial Harvesters	
3.7.3		
3.7.3.1	Limited Entry Fixed Gear Harvesters	
3.7.3.2	Directed Open Access Fixed Gear Harvesters	
3.7.3.3 3.7.3.4	Exempted Trawl Incidental Open Access Harvesters Dungeness Crab Harvesters	
3.7.3.4	Highly Migratory Species Harvesters	
3.7.3.6	Salmon Troll Harvesters	
3.8	Buyers and Processors That Do Not Purchase Trawl Groundfish	

3.8.1	Condition Indicators for Other Buyers and Processors	204
3.8.2	Past and Present Conditions of Other Buyers and Processors	204
3.9	Recreational Harvesters of Groundfish	208
3.9.1	Condition Indicators for Recreational Harvesters of Groundfish	208
3.9.2	Past and Present Conditions of Recreational Harvesters of Groundfish	208
3.10	Communities	
3.10.1	Potentially Affected Communities	
3.10.2	Condition Indicators for Communities	
3.11	Tribes	
3.11.1	Potentially Affected Tribes	
	The Hoh Tribe	
	The Makah Tribe	
	The Quileute Tribe	
	The Quinault Indian Nation	
3.11.2	Condition Indicators for Tribes	213
3.12	Input Suppliers	214
3.12.1	Condition Indicators for Input Suppliers	215
3.12.2	Past and Present Conditions of Input Suppliers	215
3.12.2.1	Fuel Suppliers	215
	Trawl Gear Suppliers	
	Suppliers of Groundfish Observers	
3.12.2.4	Permit Brokerages	
3.13	Wholesalers and Retailers	216
3.13.1	Condition Indicators for Wholesalers and Retailers	216
3.14	Consumers	217
3.14.1	Condition Indicators for Consumers	217
3.15	General Public	217
3.15.1	Condition Indicators for General Public	219
3.16	Management agencies	220
3.16.1	Potentially Affected Management Agencies	
3.16.2	Condition Indicators for Management Agencies	
3.16.3	Data	
3.16.4	Past and Present Conditions of Management Agencies	
	Pacific Fisheries Management Council	
	NOAA Fisheries NW Regional Office	
	NOAA Fisheries SW Regional Office	
	NOAA Fisheries Enforcement	
3.16.4.5	NOAA General Counsel	223
	Pacific States Marine Fishery Commission	
	State of California	
	State of Oregon	
	State of Washington	
) US Coast Guard	
3.17	Groundfish Resources	
3.17.1	Potentially Affected Groundfish Resources	223

3.17.2	Condition Indicators for Groundfish Resources	. 226
3.17.3	Data	. 226
3.17.4	Past and Present Conditions of Overfished Groundfish Species	. 227
3.17.4.1	Bocaccio (Sebastes paucispinis)	. 227
	Cowcod (S. levis)	
3.17.4.3	Canary Rockfish (S. pinniger)	. 230
3.17.4.4	Darkblotched rockfish (S. crameri)	. 230
	Pacific Ocean Perch (S. alutus)	
	Widow Rockfish (S. entomelas)	
	Yelloweye Rockfish (S. ruberrimus)	
3.17.5	Past and Present Conditions of Non-Overfished Groundfish Species	. 230
	Cabezon (Scorpaenichthys marmoratus)	
	Chilipepper (S. goodei)	
	Lingcod (Ophiodon elongates)	
	Pacific Cod (Gadus macrocephalus)	
	Pacific Whiting (Merluccius productus)	
	Shortbelly Rockfish (<i>S. jordani</i>)	
	Yellowtail Rockfish (<i>S. flavidus</i>)	
	Splitnose Rockfish (<i>S. diploproa</i>)	
	Slope Rockfish Complex	
) Arrowtooth Flounder (<i>Atheresthes stomias</i>)	
	Petrale Sole (Eopsetta jordani) English Sole (Decembric vetulus)	
	2 English Sole (Parophrys vetulus)3 Other Flatfish Complex	
	4 DTS Complex	
	5 Spiny dogfish (Squalus acanthias)	
	5 Big Skate (Raja binoculata)	
	 Jegoslato (regu binocellato) Leopard Shark (Triakis semifasciata) 	
3.18	Other Fish Resources	
3.18.1	Potentially Affected Other Fish Resources	
3.18.2	Condition Indicators for Other Fish Resources	
3.18.3	Data	
3.18.4	Past and Present Conditions of Other Affected Fish Resources	
	Pacific halibut (<i>Hippoglossus stenolepis</i>)	
	California halibut (Paralichthys californicus)	
	Pink shrimp (Pandalus jordani).	
	Spot prawn (Pandalus platyceros)	
	Ridgeback prawn (<i>Sicyonia ingentis</i>)	
	Dungeness crab (<i>Cancer magister</i>) Jack mackerel (Trachurus symmetricus)	
	Pacific mackerel (<i>Scomber japonicus</i>)	
	Walleye pollock (Theragra chalcogramma)	
	Common thresher shark (<i>Alopias vulpinus</i>)	
	Eulachon (thaleichthys pacificus)	
3.19	Marine Mammals	
3.19.1	Potentially Affected Marine Mammals	
3.19.2	Condition Indicators for Marine Mammals	
3.19.3	Data	. 238

4	Effects of Alternatives	.261
3.23.3		
3.23.2	Data	
3.23.1.2	Condition Indicators for Trophic Relationships	
	Predators Prey	
3.23.1	Potentially Affected Trophic Relationships	
3.22.4	Trophic Relationships	
3.22.3	Past and Present Conditions of Habitat	
3.22.2	Data	
3.22.1.2	Condition Indicators for Habitat	
	Marine Protected Areas and Areas Closed to Trawling	
	Essential Fish Habitat/Habitat Areas of Particular Concern	
3.22.1	Potentially Affected Habitat	
3.22	Habitat	
	Salmon	
	Sea Turtles	
3.21.3	Past and Present Conditions of Other Protected Resources	
3.21.2	Data	
3.21.2	Condition Indicators for Other Protected Species	
3.21.1	Potentially Affected Other Protected Species	
3.20.4.0	Other Protected Resources	
	Puffins	
	Cormorants	
	Shearwaters	
	California brown pelican Northern Fulmars	
	Albatross	
3.20.4	Past and Present Conditions of Seabirds	
3.20.3	Data	
3.20.2	Condition Indicators for Seabirds	
3.20.1	Potentially Affected Seabirds	
3.20	Seabirds	
	Cetaceans	
	Sea otters	
	Pinnipeds	
3.19.4	Past and Present Effects on Marine Mammals	

(See Excerpt 1 for this chapter)

5	Summary of Other Environmental Management Issues	329
5.1	Short-Term Uses versus Long-Term Productivity	329
5.2	Irreversible Resource Commitments	329
5.3	Energy Requirements and Conservation Potential of the Alternatives	329
5.4	Urban Quality, Historic Resources, and the Design of the Built Environment	329

5.5	Possible Conflicts between the Proposed Action and Other Plans and Policies for the Affected Area	330
5.6	Significant and Unavoidable Adverse Impacts	
5.7	Mitigation	
6	Consistency with the IFQ program, West Coast Groundfish FMP and with MSA National Standards and Requirements	333
6.1	Consistency with ITQ Project Goals, Objectives, Constraints and Guiding Principles	
6.2	Consistency with FMP Goals and Objectives	333
6.3	Consistency with MSA National Standards	335
6.4	Consistency with MSA Requirements for a Limited Access System	335
6.5	Consistency with MSA Requirements for Individual Fishing Quotas	336
6.6	MSA Fishery Impact Statement	336
7	Cross-Cutting Mandates	337
7.1	Other Federal Laws	337
7.1.1	Coastal Zone Management Act	337
7.1.2	Endangered Species Act	337
7.1.3	Marine Mammal Protection Act	338
7.1.4	Migratory Bird Treaty Act	338
7.1.5	Paperwork Reduction Act	338
7.1.6	Regulatory Flexibility Act	339
7.2	Executive Orders	339
7.2.1	EO 12866 (Regulatory Impact Review)	339
7.2.2	EO 12898 (Environmental Justice)	339
7.2.2.1	Public Participation among Minority Populations and Low-Income Populations	
7.2.2.2	Identification of Affected Minority Populations and Low-Income Populations	
7.2.2.3	Effects of the Proposed Actions on Low-Income and Minority Population	
7.2.3	EO 13132 (Federalism)	
7.2.4	EO 13175 (Consultation and Coordination with Indian Tribal Government)	
7.2.5	EO 13186 (Responsibilities of Federal Agencies to Protect Migratory Birds)	342
8	List of Preparers	343
9	Acronyms and Glossary	345
10	Literature Cited and References	349
11	Index	353
12	Appendix A: Regulatory Impact Review/Initial Regulatory Flexibility Analysis	355

Tables

Table 3-1. Preliminary Specification of Trawl Catcher Vessel Classes 118	
Table 3-2. Active Permits by Trawl CV Class, 1994-2005120	
Table 3-3. Ownership Patterns over All Vessel Classes, 1994-2005	
Table 3-4. Ownership Patterns in by Vessel Classes in 2005 121	
Table 3-5. Permit Ownership Tenure by Vessel Classes in 2005	
Table 3-6. Active Permits from all Trawl CV Classes by Species, 1994-2005123	
Table 3-7. Active Permits by Trawl CV Class and Species, 1994-2005124	
Table 3-8. Active Permits by Trawl CV Class and Species, 2005125	
Table 3-9. Total Landings by Trawl CV Class, 1994-2005	
Table 3-10. Total Ex-Vessel Value by Trawl CV Class, 1994-2005126	
Table 3-11. Landings from all Trawl CV Classes by Species and Year, 1994-2005	
Table 3-12. Total Landings as a Percent of Optimum Yield by Species and Year, 1994-2005128	
Table 3-13. Ex-Vessel Value for all Trawl CV Classes by Species and Year, 1994-2005129	
Table 3-14. Total Landings by Trawl CV Class and Species, 1994-2005	
Table 3-15. Landings by Trawl CV Class as a Percent of Total Landings, 1994-2005	
Table 3-16. Landings by Trawl CV Class as a Percent of Total Landings, 2005	
Table 3-17. Ex-vessel Value by Trawl CV Class and Species, 1994-2005133	
Table 3-18. Ex-vessel Value by Trawl CV Class as a Percent of Total Ex-Vessel Value, 1994-2005134	
Table 3-19. Ex-vessel Value by CV Class as a Percent of Total Ex-Vessel Value, 2005	
Table 3-20. Ex-Vessel Value by Target Strategy and Vessel Class, 1994-2005	
Table 3-21. Ex-Vessel Value by Target Strategy and Vessel Class, 2005	
Table 3-22. Target Strategy as a Percent of Ex-Vessel Value by Vessel Class, 1994-2005137	
Table 3-23. Target Strategy by Vessel Class as a Percent of Ex-Vessel Value, 2005 137	
Table 3-24. Estimated Catches of Target Species by Target Strategy and Vessel Class, 2001-2005138	
Table 3-25. Estimated Catches of Target Species by Vessel Class as a Percent of All Classes, 2001-	
2005	
Table 3-26. Estimated Catches of Target Species by Target Strategy and Vessel Class, 2005 139	
Table 3-27. Estimated Catches of Target Species by Vessel Class as a Percent of All Classes, 2005139	
Table 3-28. Estimated Incidental Catch Rates of Overfished Species by Target Strategy, 2001-2005139	
Table 3-29. Trawl Groundfish Landings as a Percent of Volume by Species and Month, 1994-2005140	
Table 3-30. Trawl Groundfish Landings as a Percent of Volume by Species and Month, 2005141	
Table 3-31. Trawl Groundfish Landings as a Percent of Volume by Trawl CV Class and Month, 1994-	
2005	~
Table 3-32. Trawl Groundfish Landings as a Percent of Volume by Trawl CV Class and Month, 2005142	2

Table 3-33. Trawl Groundfish Landings as a Percent of Value by Trawl CV Class and Month, 1994- 2005 142
Table 3-34. Trawl Groundfish Landings as a Percent of Value by Trawl CV Class and Month, 2005 142
Table 3-35. Ownership Patterns in At-sea Whiting Trawl Catcher Vessel Class, 1994-2005
Table 3-36. Permit Ownership Tenure in the At-Sea Whiting Trawl CV Class in 2005
Table 3-37. Number of At-sea Whiting CVs Participating in Selected Fishery, 1994-2004145
Table 3-38. Ex-Vessel Value Generated in Selected Fisheries by At-sea Whiting Catcher Vessels by Species, 1994-2004
Table 3-39. Ex-Vessel Value of Species Harvested by At-sea Whiting Trawl CVs by Season, 2003-2004146
Table 3-40. Number of Operations by Fishery and Season, 2003-2004
Table 3-41. Active Permits in the At-sea Whiting Trawls CV Class by Species, 1994-2005
Table 3-42. Landings of At-sea Whiting Trawl CV by Species, 1994-2005
Table 3-43. Ex-Vessel Value of At-sea Whiting Trawl CV by Species, 1994-2005
Table 3-44. Number of Permits for the At-sea Whiting Trawl CV Class by Target Strategy, 1994-2005151
Table 3-45. Total Landings of At-sea Whiting Trawl CVs by Target Strategy, 1994-2005 151
Table 3-46. Ex-Vessel Value of At-sea Whiting Trawl CVs by Target Strategy, 1994-2005
Table 3-47. Average Trips per Vessel of At-sea Whiting Trawl CVs by Target Strategy, 2000-2005151
Table 3-48. Average Days per Trip by At-sea Whiting Trawl CVs by Target Strategy, 2000-2005 151
Table 3-49. Catch per Day by At-sea Whiting Trawl CVs by Target Strategy and period, 2000-2005152
Table 3-50. Ex-Vessel Value per Day by At-sea Whiting Trawl CVs by Target Strategy and period,
2000-2005
Table 3-51. Average Incidental Catch by Target Strategy, 2001-2005 153
Table 3-52. Incidental Catch Rate per Dollar of Target Species, 2001-2005 154
Table 3-53. Estimated Total Catch of Target Species by Season in Each Target Fishery by Period, 2001-2005
Table 3-54. Average Incidental Catch Rates by Target Strategy and Period, 2001-2005
Table 3-55. Estimated Total Catch of Target Species by Management Area, 2001-2005
Table 3-56. Average Incidental Catch Rates by Management Area, 2001-2005
Table 3-57. Number of Active At-sea Whiting Trawl CV Operation by Management Area, 1994-2005159
Table 3-58. Ex-Vessel Value of Harvest by At-sea Whiting Trawl CVs by Management Area, 1994- 2005
Table 3-59. Number of Processors to which At-sea Whiting TCV Deliver, 1994-2005
Table 3-60. Number of Active At-sea Whiting Trawl Operations by Permit Holders Residence, 1994-2005
Table 3-61. Ex-Vessel Revenue of At-sea Whiting Trawl CVs by Permit Holders' Region of Residence, 1994-2005
Table 3-62. Estimated Number of Crewmembers and Crewmember Months in West Coast GroundfishTrawl Fishery by At-sea Whiting CVs, 1994-2004163
Table 3-63. Payments to Labor by Species Group by At-sea Whiting CVs in West Coast GroundfishTrawl Fishery by Period, 1994-2004164
Table 3-64. Crewmember Months of At-sea Whiting Trawl CVs by Regional Residence of Vessel Owner, 1994-2005
Table 3-65. Payments to Labor of At-sea Whiting Trawl CVs by Regional Residence of Vessel Owner, 1994-2004

Table 3-66. Active Processors and Buyers by Processor Class, 1994-2005
Table 3-67. Total Purchases of All Species (Groundfish and non-Groundfish) of Trawl Groundfish Processors and Buyers by Processor Class, 1994-2005
Table 3-68. Relative Dependency of Active Processors on Limited Entry Trawl Fisheries, 1994-2005172
Table 3-69. Relative Dependency of Active Processors on Limited Entry Trawl Fisheries by Processing
Class, 1994-2005
Table 3-70. Total Purchases of Limited Entry Trawl Groundfish by Processor Class, 1994-2005174
Table 3-71. Total Volume of Processor Purchases of Trawl Caught Groundfish by Species, 1994-2005175
Table 3-72. Total Ex-vessel Value of Processor Purchases of Trawl Caught Groundfish by Species, 1994-2005
Table 3-73. Total Volume of Processor Purchases of Trawl Groundfish by Species, 1994-2005177
Table 3-74. Total Ex-Vessel Value (in 2005\$) of Processor Purchases of Trawl Groundfish by Species, 2005
Table 3-75. Average Ex-Vessel Prices Paid for Trawl Groundfish by Species and Processor Class, 1994-2005
Table 3-76. Average Ex-Vessel Prices Paid for Trawl Groundfish by Species and Processor Class, 2005180
Table 3-77. Number of Trawl Groundfish Landings by Month, 1994-2005
Table 3-78. Number of Trawl Groundfish Landings as a Percent of Total Landing by Month, 1994- 2005 181
Table 3-79. Trawl Groundfish Landings Volume by Month, 1994-2005
Table 3-80. Trawl Groundfish Landings as a Percent of Volume by Month, 2005
Table 3-81. Total Ex-Vessel Value Trawl Groundfish Landings by Month, 1994-2005
Table 3-82. Trawl Groundfish Landings as a Percent of Value by Month, 2005
Table 3-83. Ex-Vessel Prices Paid by Month by Species and Month, 1994-2005
Table 3-84. Active Large Processors and Associated Buyers, 1994-2005
Table 3-85. Active Large Processors and Associated Buyers by Community, 1994-2005
Table 3-86. Active Large Processors and Associated Buyers by 2-Month Period, 1994-2005
Table 3-87. Total Volume of Large Processor Purchases of Trawl Caught Groundfish by Species, 1994-2005 2005
Table 3-88. Ex-Vessel Value of Large Processor Purchases by Species, 1994-2005
Table 3-89. Ex-Vessel Price Paid by Large Shoreside Processors by Species, 1994-2005
Table 3-90. Ex-Vessel Price Paid by Large Shoreside Processors by Species, 1994-2005
Table 3-91. Product Types and Volume of Large Shoreside Processors by Species, 2005
Table 3-92. Wholesale Value of Large Shoreside Processors by Product and Species, 2005
Table 3-93. Relative Dependency of Large Shoreside Processors on Limited Entry Trawl Fisheries,
1994-2005
Table 3-94. Annual Operating Days and Employment Estimates of Large Shoreside Processors, 1994- 2005
Table 3-95. Average Estimated Operating Costs, Wholesale Value of Production and Net Revenues of
Large Shoreside Processors, 1994-2005
Table 3-96. Number of Motherships, 1994-2005 192
Table 3-97. Total Volume of Purchases of Trawl Caught Groundfish by Species, 1994-2005
Table 3-98. Ex-Vessel Value of Mothership Purchases by Species, 1994-2005
Table 3-99. Product Types and Volume Produced by Motherships by Species, 2005
rable 5 77. Freddet Types and volume freddeed by Wolfielsings by Species, 2005

Table 3-100. Wholesale Value of Motherships by Product and Species, 2005	196
Table 3-101. Relative Dependency of Motherships on Limited Entry Trawl Fisheries, 1994-2005	197
Table 3-102. Average Estimated Operating Costs and Net Revenues of Motherships in the West Co	oast
Groundfish Trawl Fishery, 1994-2005	197
Table 3-103. Number of Active Operations in the Limited Entry Fixed Gear Fishery, 1994-2005	199
Table 3-104. Volume of Landings in the Limited Entry Fixed Gear Fishery by Species, 1994-2005 .	199
Table 3-105. Ex-Vessel Value in the Limited Entry Fixed Gear Fishery by Species, 1994-2005	200
Table 3-106. Ex-Vessel Prices in the Limited Entry Fixed Gear Fishery by Species, 1994-2005	201
Table 3-107. Total Ex-Vessel Value of Landings in the Limited Entry Fixed Gear Fishery, 1994-200	5202
Table 3-108. Average Ex-Vessel Value per Operation in the Limited Entry Fixed Gear Fishery, 199-2005.	
Table 3-109. Volume of Landings Limited Entry Fixed Gear Fishery by Management Area, 1994-20	005.203
Table 3-110. Ex-Vessel Value of Landings in the Limited Entry Fixed Gear Fishery by Management Area, 1994-2005.	
Table 3-111. Ex-Vessel Value of Limited Entry Fixed Gear Operations by Community of Residence	
1994-2005	
Table 3-112. Participation of Other Buyers and Processors by Fishery, 1994-2005	205
Table 3-113. Volume of Landings of Other Buyers and Processors by Fishery, 1994-2005	
Table 3-114. Ex-Vessel Value of Other Buyers and Processors by Fishery, 1994-2005	206
Table 3-115. Relative Market Share of Other Buyers and Processors by Fishery, 1994-2005	206
Table 3-116. Participation of Other Buyers and Processors by Fishery and Region, 1994-2005	207
Table 3-117. Participation of Other Buyers and Processors by Fishery and Region, 2005	207
Table 3-118. Ex-Vessel Value of Other Buyers and Processors by Fishery and Region, 1994-2005	207
Table 3-119. Ex-Vessel Value of Other Buyers and Processors by Fishery and Region, 2005	208
Table 3-120. Volume of Landings in the Recreational Groundfish Fishery by Species and Year, 199	94-
2005	
Table 3-121. Volume of Recreation Groundfish Landings by State, 1994-2005.	
Table 3-122. Categories of Possible Economic Values Assigned to a Marine Ecosystem and Associa Species	218
Table 3-123. Latitudinal and Depth Distributions of Groundfish Species (Adults) Managed under the	
Pacific Coast Groundfish Fishery Management Plan	
Table 3-124. Stock Assessments Based on Publication in the SAFE, 1994-2005	225
Table 3-125. Estimated Total Catch Mortality of Selected Groundfish Species from West Coast	
Commercial, Tribal and Recreational Fisheries (mt), 2002	225
Table 3-126. Estimated Total Catch Mortality of Selected Groundfish Species from West Coast	225
Commercial, Tribal and Recreational Fisheries (mt), 2003	225
Table 3-127. Existing Management tools, Management Tools Adopted under the Programmatic Bycatch EIS and Management Tools that would Remain in Place under an IFQ Program	226
Table 3-128. Retained and Discarded Catch of Bocaccio by Fishery, 2000- 2004 (mt)	
Table 3-129. Stock Status Information for Bocaccio Taken from the 2005 Stock Assessment (mt)	
Table 3-129. Stock Status information for Bocaccio Taken nom the 2005 Stock Assessment (inf)	
Table 3-130. Projected Abundance of Bocacelo	
Table 3-131. Bycatch of Facilie Halibut taken by Elimited Entry Haw Vessels, 2000-2003	207
Documented by West Coast Groundfish Observers between September 2001 and October 20	02236

Table 3-133 Interactions between Seabirds and West Coast Groundfish Fisheries Documented by	/
West Coast Groundfish Observers between September 2001 and October 2002	242
Table 3-134. Marine Sanctuaries and other Protected Areas	255
Table 3-135. Other Areas Closed to Trawling	255
Table 3-136. Other Areas Closed to Bottom Contact Gear	255

Figures

Figure 3-1. Histogram of Lengths of Vessels Associated with Permits in the in At-sea Whiting Trawl
Catcher Vessel Class, 2005144
Figure 3-2. Histogram of Years of Participation of Permits in At-sea Whiting Trawl Catcher Vessel
Class, 1994-2005144
Figure 3-3. Histogram of Duration of Permit Ownership by Permit in At-sea Whiting Trawl Catcher
Vessel Class, 1994-2005
Figure 3-4. Ex-Vessel Value of Harvest by At-sea Whiting CVs by Fishery, 1994-2004144
Figure 3-5. Distribution of Landings of Species X by the At-sea Whiting Trawl CV Class150
Figure 3-6. Average Annual Whiting Catch by At-sea Whiting CVs by Lat/Long, 1994-2005160
Figure 3-7. Ex-Vessel Value Paid to At-sea Whiting Trawl CVs by Processor Class, 1994-2005
(Hypothetical Data)
Figure 3-8. Number of Receivers of Trawl Groundfish by State, 1994-2003171
Figure 3-9 Landings of All Species of Large Shoreside Processors by Month, 1994-2005191
Figure 3-10. Landings by Species and Month in the Limited Entry Fixed Gear Fishery, 1994-2005202
Figure 3-11. Buyers and Processors of West-Coast Species, 1994-2003205
Figure 3-12. Landings of Rockfish in the Recreational Fishery by Two-Month Period, 1994-2005210
Figure 3-13. Landings of Other Groundfish in the Recreational Fishery by Two-Month Period, 1994-
2005
Figure 3-14. Geographic Distribution of Rockfish and Allied Species (Lingcod, Cabezon, Kelp
Greenling, and California Scorpionfish)223
Figure 3-15. 40-10 Rule
Figure 3-16. HAPCs Designated in Amendment 19252

3 Resource and Stakeholder Profiles

3.1 Introduction

This chapter provides profiles of affected resource and stakeholder groups. Included are definitions of historical and baseline conditions. The profiles document the current conditions and historical context of resource and stakeholder groups as measured by specified quantitative or qualitative indicators. The profiles describe how resource and stakeholder groups have changed, and how they are changing at the time of the analysis. This description of the affected environment will not only provide the needed baseline to evaluate the environmental consequences of the alternatives, but also will help identify past and present actions contributing to cumulative effects.

Note that in this Stage 1 draft, the profile of each resource and stakeholder group is prefaced with a brief discussion of the potential impacts of a trawl IFQ program on that particular group in order to clarify why certain indicators are included]

3.1.1 Historical Conditions

These are conditions of the resources and stakeholder groups as reflected in the indicator values for previous years. Trends in conditions are identified where possible, and the important cause-and-effect relationships between past actions and the condition of resources and stakeholder groups of concern are described to the extent possible.

3.1.2 Baseline Conditions

This description of baseline conditions reflects the status of potentially affected resource and stakeholder groups as of 2005. To the extent feasible, trends data from the description of historical conditions are used to depict baseline conditions more accurately (i.e., by incorporating variation over time). The cumulative past and present effects of groundfish fishery activity, as well as effects external to the groundfish fishery such as other fishery impacts, human-induced impacts, and climatic events influencing the resource and stakeholder groups, all contribute to the state of the baseline condition. In terms of regulations, the baseline includes all existing regulations as modified by actions that the Council has approved, but which have not yet been implemented by NMFS. Thus, any new regulations implementing the Essential Fish Habitat measures approved in Amendment 19 are assumed to be in effect, as are the sector allocations authorized under Amendment 18.

The baseline conditions provide a benchmark against which the effects of the alternatives are compared in Chapter 4.

3.2 Major Fishery Data Sets Used in Describing Historical and Baseline Conditions

This section briefly describes some of the major data sets available for defining the historical and baseline conditions.

3.2.1 Shoreside Non-whiting Commercial Fishery Data

Several harvest monitoring systems are used in West Coast groundfish management. PacFIN (Pacific Fisheries Information Network) is the commercial monitoring database for shoreside landings. Summaries of logbook entries are also available for catch of limited entry trawl fleet. Discards by the shoreside fleets are sampled by the West Coast Groundfish Observer Program (WCGOP). These three data sources are all incorporated into the bycatch models constructed and maintained by the PFMC Groundfish Management Team (GMT).

3.2.1.1 Landings Data

Commercial landings are recorded on state fish-tickets. Poundage by sorted species category, price, area of catch, vessel identification number, port of landing, buyer and other data elements are recorded on fish-tickets. Landings are sampled in port by state personnel to collect species composition data for aggregated species categories, and other biological data. Species composition ratios are used to disaggregate landings data for certain species categories. Limited entry groundfish trawl vessels are also required to maintain logbooks that record the start location, time, and duration of trawl tows, as well as the total catch by species market category. Data from fish-tickets and logbooks are available at various level of summarization from PacFIN.

3.2.1.2 Discards and Incidental Catch Data

The Groundfish FMP requires all vessels that participate in the groundfish fishery to carry an observer when notified to do so by NMFS or its designated agent. Under the WCGOP, observers monitor and record catch data, including species composition of retained and discarded catch. Observers also collect biological data such as fish length, sex, and weight. The program deploys observers coast wide on permitted trawl and fixed-gear groundfish vessels, as well as on some open-access groundfish vessels. Currently the program samples approximately 25% of limited entry trawl trips and has been expanding coverage of the limited entry fixed-gear and open access sectors.

Estimates derived from the WCGOP reports are used to calibrate incidental catch and discard rates in the bycatch models constructed and maintained by the PFMC Groundfish Management Team (GMT). The first and most developed bycatch model is used for managing of the limited entry trawl fishery. Preliminary bycatch models for the limited entry fixed gear and directed open access fleets have recently been developed.

The trawl bycatch model projects future landings of major trawl target species (excluding Pacific whiting) through use of recent landings data and an array of bimonthly trip limits. Landings projections are then used to estimate total mortality for target species and non-target species of concern through the application of average bycatch ratios. The principal data inputs to the trawl bycatch model are (1) fish tickets (landings), (2) WCGOP bycatch and discard rates, and (3) trawl logbooks (depth association of catch). Logbook data are used to partition observed landings into appropriate depth strata, by summarizing the depth distributions recorded in logbooks for each modeled target species. Bycatch ratios are generally stratified by target fishery; bimonthly period; latitude zone (north of 40°10' N. lat., between 40°10' and 38° N. lat., and south of 38° N. lat.); and depth zone (shoreward of Rockfish Conservation Areas (RCAs), and seaward of RCAs).

3.2.2 Whiting Commercial Fishery Data

The shoreside whiting sector is required to bring 100% of their catch to port for sampling. Landings, logbook data, and state port sampling data for the shoreside whiting sector are reported to PacFIN. (For information on this program see http://hmsc.oregonstate.edu/odfw/reports/hake.html.) The at-sea whiting fishery has 100% on-board observer coverage. Total catch by vessels involved in the at-sea whiting fishery is collected by at-sea observers and summarized and maintained by NorPac. Since total catch in both the at-sea and shoreside whiting sectors is observed, either by at-sea observers or upon landing, bycatch models are not maintained for these sectors.

3.2.3 Recreational Catch Data

RecFIN (Recreational Fishery Information Network) maintains official estimates of West coast recreational fishery catch. Total annual catch estimates by state, species and fishing mode go back to 1980, with varying degrees of completeness and accuracy (and missing data for 1990 through 1992). The NOAA sponsored Marine Recreational Fishery Statistics Survey (MRFSS) was a major component of this data collection, but these data were also augmented with data collected from state funded sampling programs.

In 2003, it was determined that the States of Oregon and Washington would take over the entire recreational data collection program with funds from MRFSS diverted to sampling programs run by the individual states. This regime shift took place in mid-2003. At the beginning of 2004 in California a new expanded California Recreational Fisheries Survey (CRFS) replaced MRFSS. In Oregon and Washington the existing Ocean Boat Survey program was expanded, while in California the new CRFS is a partnership between PSMFC and CDFG. The new program in California is believed to provide estimates of recreational catch that are more precise than provided through MRFSS.

Data from these sources are still compiled into the RecFIN database. The new state-based programs allow monthly estimates of total catch and are timelier for in-season management. (See http://www.psmfc.org/recfin/index.html.)

3.2.4 Economic Data

3.2.4.1 Ex-vessel Prices

The PacFIN system records deliveries by catcher vessels to shoreside buyers, and includes revenue information by species group for each landing. This data can be used to calculate average ex-vessel prices by species, port, area of catch and month. NorPac data records only delivery tonnage for the at-sea whiting sector. Delivery prices for the at-sea sector therefore must be inferred or imputed based on other information, e.g., shoreside prices.

3.2.4.2 Ex-processor Prices

Unfortunately there is no systematic collection of ex-processor prices for seafood products produced on the West Coast. NOAA Fisheries has used an annual processed product survey to collect production and wholesale price information, but these data have not been considered highly useful (Freese, 2006). Other estimates of these values have been included in the Fisheries Economic Assessment Model (FEAM), which is used by the Council to estimate income impacts attributable to West Coast commercial fisheries. However, ex-processor prices in the FEAM tend to be fairly aggregated, and are not differentiated by month or product form (i.e., frozen vs. fresh). The absence of processed product and wholesale price information may limit the types of quantitative analysis to those which may be conducted through information inferred from existing sources.

3.2.4.3 Vessel Costs

There are no current, comprehensive estimates of costs for West Coast commercial harvester vessels available. However, NWFSC is currently conducting a cost and earnings survey of West Coast trawl vessels. It is assumed that results will be available in time for inclusion in the EIS. FEAM does include average cost estimates for several representative vessel types. However estimates used in the most current version of the FEAM are several years old and predate the recent run-up in fuel prices.

3.2.4.4 Processor Costs

There are no current, comprehensive estimates of costs for West Coast processors available. FEAM does include average cost estimates for several representative types of processors. However, estimates used in the most current version of the model are several years old and predate the recent run-up in fuel prices.

3.3 List of Potentially Affected Resource and Stakeholder Groups

Profiles of the following resource and stakeholder groups are provided. The amount of detail in any of the profile depends on the level of interaction with the groundfish trawl fishery. For example profiles of trawl catcher vessels will be extensive, while profiles of recreational harvesters will be highly aggregated. [The Consulting Team does not consider this list final—some groups may be deleted and/or new ones added.]

- Limited-entry Trawl Groundfish Catcher Vessels and Permit Owners/Lessees
- Trawl Catcher Processors and Permit Owners/Lessees
- Processors and Buyers of Trawl Groundfish
- Other Non-Trawl Commercial Harvesters
- Processors and Buyers That do Not Purchase Trawl Groundfish
- Recreational Harvesters⁹
- Communities
- Tribes
- Input Suppliers
- Wholesalers and Retailers of Groundfish
- Consumers of Groundfish
- General Public
- Management Agencies
- Groundfish Resources
- Other Fish Resources

⁹ Recreational harvesters will be profiled in a general way by showing total catch and relative dependence on groundfish.

- Marine Mammals
- Other Protected Resources
- Seabirds
- Habitat
- Trophic Relationships¹⁰

3.4 Limited-entry Trawl Groundfish Catcher Vessels and Permits

The description of limited-entry trawl groundfish catcher vessels and permits contains the following sub-sections:

- Sub-section 3.4.1 describes the classification of potentially affected trawl catcher vessel operations (vessels and permits) and develops classes that will be used in the analysis.
- Sub-section 3.4.2 lists the condition indicators used to describe the historical and current status of trawl catcher vessels and permits.
- Sub-section 3.4.3 summarizes participation of all trawl catcher vessel classes.

For purposes of clarity it should be noted that because the allocation of IFQ will go to owners of permits, the basic unit of the analysis in this section will be the unique combinations of limited-entry trawl permits and the vessels on which they are used. Throughout this section, we use the terms catcher vessels, permits and permit holder and permit owner In general the term catcher vessel implies a catcher vessel with which a limited entry permit is associated. The term permit holder references the owner of a limited entry trawl vessel for which the permit is registered. When the term permit owner is used, the reference is to the individual or other entity that owns the permit that is associated with a given vessel. The permit owner may or may not be the permit holder. Permit (or quota share) controller means an independent entity (not operating under the direction of the permit owner) someone with the discretion to direct how quota share is used, whether that person be a permit owner, lease holder or have some other arrangement with the permit owner that allows the controller to direct its use.

3.4.1 Classification of Potentially Affected Trawl Catcher Vessels and Permits

This section discusses the directly affected groundfish permits, the owners of the permits, as well as the vessels¹¹ and crew members associated with those permits. For purposes of the analysis, limited entry trawl permits and the vessels with which they are associated will be categorized into six classes. By categorizing the fleet into classes that are relatively homogeneous, the analysis will be able to more readily depict differential impacts on portions of the fleet that would not be as apparent if the analysis looked at the trawl catcher vessels and permits as a whole. The preliminary specification of six trawl catcher vessel/permit classes is shown in Table 3-1, together with an initial description of each class.

¹⁰ This analysis uses the term Trophic Relationships to specifically represent predator prey relationships. The resource category "ecosystems" often includes these relationships, but the Consulting Team believes that most of the components of the ecosystem are already represented by other resource and stakeholder categories (habitat, groundfish resources, protected species, etc); therefore, a separate listing for ecosystem would be redundant.

¹¹ In some cases the vessel owner is not the owner of the permit. Such situations will also be discussed within this section.

Vessel/Permit Class	Description
At-sea Whiting Trawl CV (AW-TCV)	Permits for which whiting deliveries to motherships account for 50 percent or more of West Coast revenue. Whiting deliveries to shoreside processors are minimal.
Shoreside Whiting Trawl CV (SW-TCV)	Permits for which whiting deliveries to shoreside processors is 50 percent or more of West Coast revenue. Whiting deliveries to motherships are minimal.
Combination Shoreside-At-sea Whiting Trawl CV (CW-TCV)	Permits for which whiting deliveries account for 50 percent or more of West Coast revenue. More than minimal deliveries to both shoreside and at-sea processors.
Large Diversified Trawl CV (LD-TCV)	Permits associated with larger diversified vessels; Whiting revenue is less than 50 percent of West Coast revenue. Participate in groundfish fisheries most months of the year in both deepwater and near-shore areas.
Small Diversified Trawl CV (SD-TCV)	Permits associated with smaller diversified vessels; Whiting revenue is less than 50 percent of West Coast revenue. Generally fish near shore and not during winter.
Bought-Out Trawl CV (BO-TCV)	This class contains the vessels that where bought out of the fishery in the industry funded buyback in 2003.

Table 3-1. Preliminary Specification of Trawl Catcher Vessel Clas	ses
---	-----

Note: More specific criteria for differentiating between the various vessel classes will be developed during the Stage 2 analysis.

Determination of whether a permit and associated vessel(s) are classified into a particular class will be based on landings associated with each permit during the years 1994-2005. Each permit will be assigned to one and only one class regardless of operational changes the operation utilizing the permit may have made, and regardless of the vessel to which the permit is assigned. The classification process will be completed in two steps:

- 1) If the permit was bought out in the 2003 industry funded buyback it will be classified as a Bought-Out Trawl CV.
- 2) All remaining permits will be assigned to the class into which it falls based on the landings associated with the permit from 1994 2005.

The Consulting Team notes that feedback received during the Trawl IFQ Workshop held in Portland, OR, April 18-20, 2006, indicated that there may be other ways to classify the diversified trawl vessels. For example it might be that these vessels would be better classified in terms of geographic location—vessels operating out of California and Southern Oregon have a narrow shelf width compared to vessels operating out or Northern Oregon or Washington. The final classification scheme for trawl catcher vessels will be determined during the analysis in Phase 2. At that time, a complete assessment of catches and catch patterns will be utilized for classification.

Although the basic unit of analysis is the individual vessel/permit, it is known that some individuals/companies own more than one permit or more than one vessel. It is also known that some permit owners do not own the vessels to which that permit is applied. After the full database is developed during the Stage 2 analysis, additional tables will be included to summarize these exceptions to the single vessel/permit case.

3.4.2 Condition Indicators for Trawl Catcher Vessels

Indicators of the historical and baseline conditions of trawl catcher vessels include but are not necessarily limited to the following:

- Catch by species
- Catch as by species as a percent of optimum yield
- Incidental catch by species by target fisheries
- Discarded catch by species and target fishery
- Distribution of catches by month
- Ex-vessel revenues from groundfish
- Distribution of catches among the trawl fleet and sectors
- Relative dependency on West Coast trawl groundfish
- Relationships with processors
- Operating costs
- Net revenues
- Number of participating trawl catcher vessels
- Number of vessel owners
- Distribution of vessel owners by community
- Number of permit owners
- Distribution of permit owners by community
- Number of trips per year
- Number of fishing days per year
- Number of crew members
- Distribution of crew members by community
- Crew and skipper shares

Some conditions may not be measurable by quantifiable indicators. These include vessel safety, market power vis-à-vis processors, and others.

3.4.3 Summary of Past and Present Conditions of Trawl Catcher Vessels

This section summarizes and compares participation over all trawl catcher vessel classes described in Table 3-1. Detailed descriptions of each vessel class are provided in Sections 3.4.3.4 – 3.4.4.6. This summary highlights the conditions and indicators that are the most important determinants of outcomes under the alternatives—total participation, landings and ex-vessel value by species, landings and ex-vessel value by target strategy, and incidental catches of overfished species by target strategy. The section compares the situation in 2005 (baseline condition) and historical conditions during the 1994-2005 period.

3.4.3.1 Number of Active Permit Owners and Vessels

This section summarizes participation in terms of the number of active limited trawl permits during the historical period and in 2005. The section shows the annual number of active number of permits by year and vessel class; the annual number of active number of permits by year and species; the total number of permits by species and catcher vessel class over the historical period, and the number of active permits by species and catcher vessel class in 2005.

The number of active permits in the West Coast groundfish trawl fishery is an important factor in determining the impacts of the IFQ program. The initial allocation of IFQs will go to permit owners and during the fleet consolidation, the number of active participants is likely to decline.

Table 3-2 shows active permits by trawl CV class for each year from 1995 – 2005.

Table 3-3 and Table 3-4 examine ownership pattern in the Trawl CV fleet as a whole in by class for 2005—in this context ownership patters examine relationships between vessel owners and permit owners, and owners that have multiple vessels and permits. These patterns are described below.¹²

- 1) **1 Permit/1 Vessel/1 Owner:** Permit and vessels are owned by a single individual or company and no other limited entry trawl operation are owned
- 2) **1 Permit/1 Vessel/2 Owners:** The permit owner is different than the vessel owner, and neither owns other limited entry trawl operations.
- 3) Multiple Permits & Vessels all in Class/1 Owner: A single individual or company owns multiple vessels and permits (operations) and all participate in the specific class listed.
- 4) Multiple Permits & Vessels over Multiple Classes/1 Owner: A single individual or company owns multiple operations (vessels and permits) some of which participate in classes other than in the specific class listed.
- 5) Other Permutations of Permit/Vessel Owner Combinations: Other types of ownership patterns not fitting into the groups listed above.

Also included in this section are tables that describe the ownership characteristics of permits and vessels in the class. Table 3-5 shows ownership pattern by the length of tenure as of 2005 over the historical period. Table 3-4 through Table 3-8 show the number of permits with landings of particular species over the historical period in 2005 (the baseline).

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	Total
Vessel Class	Number of Active Permits												
At-sea Whiting TCV (AW-TCV)													
Shoreside Whiting TCV (SW-TCV)													
Combo Whiting TCV (CW-TCV)													
Large Diversified TCV (LD-TCV)													
Small Diversified TCV (SD-TCV)													
Bought Out TCV (BO-TCV)													
All TCV													

Table 3-2. Active Permits by Trawl CV Class, 1994-2005

¹² During the Stage 2 analysis it may become apparent that other types of ownership pattern should be described and included.

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Ownership Type	Number of Vessel/Permits											
1 Permit/1 Vessel/1 Owner												
1 Permit/1 Vessel/2 Owners												
Multiple Permits & Vessels all in Class/1 Owner												
Multiple Permits & Vessels over Multiple Classes/1 Owner												
Other Permutations of Permit/Vessel Owner Combinations												
Ownership Type				Pe	rcent o	f Total F	Revenu	e in Clas	ss .			
1 Permit/1 Vessel/1 Owner												
1 Permit/1 Vessel/2 Owners												
Multiple Permits & Vessels all in Class/1 Owner												
Multiple Permits & Vessels over Multiple Classes/1 Owner												
Other Permutations of Permit/Vessel Owner Combinations												

Table 3-3. Ownership Patterns over All Vessel Classes, 1994-2005

Table 3-4. Ownership Patterns in by Vessel Classes in 2005

	AW-TCV	SW-TCV	CW-TCV	LD-TCV	SD-TCV		
Ownership Type		Percent of Total Revenue in Class					
1 Permit; 1 Vessel; 1 Owner							
1 Permit; 1 Vessel; 2 Owners							
Multiple Permits & Vessels all in Class; 1 Owner							
Multiple Permits & Vessels over Multiple Classes; 1 Owner							
Other Permutations of Permit/Vessel Owner Combinations							
Ownership Type		Percent of T	otal Revenue ir	n Class			
1 Permit; 1 Vessel; 1 Owner							
1 Permit; 1 Vessel; 2 Owners							
Multiple Permits & Vessels all in Class; 1 Owner							
Multiple Permits & Vessels over Multiple Classes; 1 Owner							
Other Permutations of Permit/Vessel Owner Combinations							

Years Since Last Transfer	1	2	3	4	5	6	6	8	9	10	11	12	Total
Vessel Class	Number of Permits												
At-sea Whiting TCV (AW-TCV)													
Inshore Whiting TCV (SW-TCV)													
Combo Whiting TCV (CW-TCV)													
Large Diversified TCV (LD-TCV)													
Small Diversified TCV (SD-TCV)								0					
Bought Out TCV (BO-TCV)						1							
AII TCV													
			Pe	ercent	of 20	05 Ex	-Vess	el Val	ue fo	r All T	CVs		
At-sea Whiting TCV (AW-TCV)													
Inshore Whiting TCV (SW-TCV)													
Combo Whiting TCV (CW-TCV)						1							
Large Diversified TCV (LD-TCV)													
Small Diversified TCV (SD-TCV)													
Bought Out TCV (BO-TCV)			0										
All TCV													
			Perce	ent of	1995	- 2005	5 Ex-V	essel	Value	e for a	II TCV	/s	
At-sea Whiting TCV (AW-TCV)													
Inshore Whiting TCV (SW-TCV)													Ĩ
Combo Whiting TCV (CW-TCV)						<u> </u>							
Large Diversified TCV (LD-TCV)													
Small Diversified TCV (SD-TCV)													
Bought Out TCV (BO-TCV)													
All TCV													

 Table 3-5. Permit Ownership Tenure by Vessel Classes in 2005

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	Total
Species					Nu	mber c	of Activ	ve Perr	nits				
Arrowtooth Flounder													
Bank Rockfish													
Black Rockfish OR-CA													
Black Rockfish WA													
Blackgill Rockfish													
Bocaccio Rockfish													
Canary Rockfish													
Chili/Eureka Rockfish													
Chilipepper Rockfish													
Cowcod													
Darkblotched Rockfish													
Dover Sole													
English Sole													
Lingcod													
Minor Rockfish (N)										0			
Other Flatfish													
Other Rockfish (N)									0	0			
Other Rockfish (S)													
Other Species													
Pacific Cod													
Pacific Ocean Perch													
Pacific Whiting													
Petrale Sole													
Redstripe Rockfish													
Sablefish													
Thornyhead (Lg.)													
Thornyhead (Sh.)													
Sharpchin Rockfish										0			
Shortbelly Rockfish													
Silvergrey Rockfish													
Splitnose Rockfish													
Widow Rockfish													
Yelloweye Rockfish													
Yellowmouth Rockfish													
Yellowtail Rockfish													

Table 3-6. Active Permits from all Trawl CV Classes by Species,	1994-2005
---	-----------

Vessel Class	AW-TCV	SW-TCV	CW-TCV	LD-TCV	SD-TCV	BO-TCV	Total
Species			Number	of Active	Permits		
Arrowtooth Flounder							
Bank Rockfish							
Black Rockfish OR-CA							
Black Rockfish WA							
Blackgill Rockfish							
Bocaccio Rockfish							
Canary Rockfish							
Chili/Eureka Rockfish							
Chilipepper Rockfish							
Cowcod							
Darkblotched Rockfish							
Dover Sole							
English Sole							
Lingcod							
Minor Rockfish (N)							
Other Flatfish							
Other Rockfish (N)							
Other Rockfish (S)							
Other Species							
Pacific Cod							
Pacific Ocean Perch							
Pacific Whiting							
Petrale Sole							
Redstripe Rockfish							
Sablefish							
Thornyhead (Lg.)							
Thornyhead (Sh.)							
Sharpchin Rockfish							
Shorthelly Rockfish							
Silvergrey Rockfish							
Splitnose Rockfish							
Widow Rockfish							
Yelloweye Rockfish							
Yellowmouth Rockfish							
Yellowtail Rockfish							

Table 3-7. Active Permits by Trawl CV Class and Species, 1994-2005

Vessel Class	AW-TCV	SW-TCV	CW-TCV	LD-TCV	SD-TCV	BO-TCV	Total
Species			Number	of Active	Permits		
Arrowtooth Flounder							
Bank Rockfish							
Black Rockfish OR-CA							
Black Rockfish WA							
Blackgill Rockfish							
Bocaccio Rockfish							
Canary Rockfish							
Chili/Eureka Rockfish							
Chilipepper Rockfish							
Cowcod							
Darkblotched Rockfish							
Dover Sole							
English Sole							
Lingcod							
Minor Rockfish (N)							
Other Flatfish							
Other Rockfish (N)							
Other Rockfish (S)							
Other Species							
Pacific Cod							
Pacific Ocean Perch							
Pacific Whiting							
Petrale Sole							
Redstripe Rockfish							
Sablefish							
Thornyhead (Lg.)							
Thornyhead (Sh.)							
Sharpchin Rockfish							
Shorthelly Rockfish							
Silverarev Rockfish							
Splitnose Rockfish							
Widow Rockfish							
Yelloweye Rockfish							
Yellowmouth Rockfish							
Yellowtail Rockfish							

Table 3-8. Active Permits by Trawl CV Class and Species, 2005

3.4.3.2 Total Landings and Ex-vessel Value

This section summarizes landings and ex-vessel values generated by the limited trawl fishery during the historical period (1994-2005) and in 2005.

A trawl IFQ program is likely to affect the amount and distribution of landings and ex-vessel values across vessel classes. In addition, historical landings will form the basis of the initial allocation. To the extent that historical landings patterns associated with the permit match the landings patterns of the permit in 2005, the change relative to 2005 caused by the initial allocation will be minimized. Showing the changes in landing patterns over time by vessel class provides insights into the potential effects of the initial allocation and the consolidation of the fleet that is likely to follow. Additional details on landings and ex-vessel values within vessel classes are shown in Sections 3.4.3.4 – 3.4.4.6. A careful examination of these tables (once completed) would indicate changes in landings patterns of permits over time. For example if activities in shelf fishery peaked in the late 1990's then landings and participation in those species would be higher in those years.

Table 3-9.	lotal Landin	igs by	Irawl CV	Class,	1994-2005	

.

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	Total
Vessel Class		Total Landings (MT)											
At-sea Whiting TCV (AW-TCV)													
Shoreside Whiting TCV (SW-TCV)													
Combo Whiting TCV (CW-TCV)													
Large Diversified TCV (LD-TCV)													
Small Diversified TCV (SD-TCV)													
Bought Out TCV (BO-TCV)													
All TCV													

Table 3-10. Total Ex-Vessel Value by Trawl CV Class, 1994-2005

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	Total
Vessel Class		Total Ex-Vessel Value (\$1,000 in 2005\$)											
At-sea Whiting TCV (AW-TCV)													
Inshore Whiting TCV (SW-TCV)													
Combo Whiting TCV (CW-TCV)													
Large Diversified TCV (LD-TCV)													
Small Diversified TCV (SD-TCV)													
Bought Out TCV (BO-TCV)													
All TCV													

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	Total
Species						Total L	anding	gs (MT)				
Arrowtooth Flounder													
Bank Rockfish													
Black Rockfish OR-CA													
Black Rockfish WA													
Blackgill Rockfish													
Bocaccio Rockfish													
Canary Rockfish	-												
Chili/Eureka Rockfish													
Chilipepper Rockfish													
Cowcod													
Darkblotched Rockfish													
Dover Sole													
English Sole													
Lingcod													
Minor Rockfish (N)													
Other Flatfish													
Other Rockfish (N)													
Other Rockfish (S)													
Other Species													
Pacific Cod													
Pacific Ocean Perch													
Pacific Whiting													
Petrale Sole													
Redstripe Rockfish													
Sablefish													
Thornyhead (Lg.)													
Thornyhead (Sh.)													
Sharpchin Rockfish													
Shortbelly Rockfish													
Silvergrey Rockfish													
Splitnose Rockfish													
Widow Rockfish													
Yelloweye Rockfish													
Yellowmouth Rockfish													
Yellowtail Rockfish													

Table 3-11. Landings from all Trawl CV Classes b	by Species and Year, 1994-2005

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	Total
Species			٦	Fotal L	anding	js as a	Perce	nt of C)ptimu	m Yiel	d		
Arrowtooth Flounder													
Bank Rockfish													
Black Rockfish OR-CA													
Black Rockfish WA													
Blackgill Rockfish													
Bocaccio Rockfish													
Canary Rockfish													
Chili/Eureka Rockfish													
Chilipepper Rockfish													
Cowcod													
Darkblotched Rockfish													
Dover Sole													
English Sole										0			
Lingcod													
Minor Rockfish (N)													
Other Flatfish													
Other Rockfish (N)													
Other Rockfish (S)										0			
Other Species													
Pacific Cod													
Pacific Ocean Perch													
Pacific Whiting													
Petrale Sole					0								
Redstripe Rockfish													
Sablefish													
Thornyhead (Lg.)													
Thornyhead (Sh.)													
Sharpchin Rockfish													
Shortbelly Rockfish													
Silvergrey Rockfish													
Splitnose Rockfish										0			
Widow Rockfish													
Yelloweye Rockfish													
Yellowmouth Rockfish													
Yellowtail Rockfish													

Table 3-12. Total Landings as a Percent of Optimum Yield by Species and Year, 1994-2005

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	Total
Species				Tot	al Ex-\	/essel	Value	(\$1,000) in 20	05\$)			
Arrowtooth Flounder													
Bank Rockfish													
Black Rockfish OR-CA													
Black Rockfish WA													
Blackgill Rockfish								0					2
Bocaccio Rockfish													
Canary Rockfish													
Chili/Eureka Rockfish													
Chilipepper Rockfish													
Cowcod	0												
Darkblotched Rockfish													
Dover Sole													
English Sole		å											
Lingcod													
Minor Rockfish (N)	o	•						o					
Other Flatfish													
Other Rockfish (N)													
Other Rockfish (S)	0	0					0	0					
Other Species													
Pacific Cod								0					
Pacific Ocean Perch													
Pacific Whiting													
Petrale Sole													
Redstripe Rockfish													
Sablefish													
Thornyhead (Lg.)	å	•						å					
Thornyhead (Sh.)													
Sharpchin Rockfish	å							å					
Shortbelly Rockfish													
Silvergrey Rockfish													
Splitnose Rockfish	ō	à						ō		å			
Widow Rockfish	Ī	ĺ						Ì					
Yelloweye Rockfish		••••••											
Yellowmouth Rockfish													
Yellowtail Rockfish													

Table 3-13. Ex-Vessel Value for all Trawl CV Classes by Species and Year, 1994-2005

Vessel Class	AW-TCV	SW-TCV	CW-TCV	LD-TCV	SD-TCV	BO-TCV	Total
Species			Total	Landings	(MT)		
Arrowtooth Flounder							
Bank Rockfish							
Black Rockfish OR-CA							
Black Rockfish WA							
Blackgill Rockfish							
Bocaccio Rockfish							
Canary Rockfish							
Chili/Eureka Rockfish							
Chilipepper Rockfish							
Cowcod							
Darkblotched Rockfish							
Dover Sole							
English Sole							
Lingcod							
Minor Rockfish (N)							
Other Flatfish							
Other Rockfish (N)							
Other Rockfish (S)							
Other Species							
Pacific Cod							
Pacific Ocean Perch							
Pacific Whiting							
Petrale Sole							
Redstripe Rockfish							
Sablefish							
Thornyhead (Lg.)							
Thornyhead (Sh.)							
Sharpchin Rockfish							
Shortbelly Rockfish							
Silvergrey Rockfish							
Splitnose Rockfish							
Widow Rockfish							
Yelloweye Rockfish							
Yellowmouth Rockfish							
Yellowtail Rockfish							

Table 3-14. Total Landings by Trawl CV Class and Species, 1994-2005

Vessel Class	AW-TCV	SW-TCV	CW-TCV	LD-TCV	SD-TCV	BO-TCV	Total
Species			Percent	of Total L	andings		
Arrowtooth Flounder							
Bank Rockfish							
Black Rockfish OR-CA							
Black Rockfish WA							
Blackgill Rockfish							
Bocaccio Rockfish							
Canary Rockfish							
Chili/Eureka Rockfish							
Chilipepper Rockfish							
Cowcod							
Darkblotched Rockfish							
Dover Sole							
English Sole							
Lingcod							
Minor Rockfish (N)							
Other Flatfish							
Other Rockfish (N)							
Other Rockfish (S)							
Other Species							
Pacific Cod							
Pacific Ocean Perch							
Pacific Whiting							
Petrale Sole							
Redstripe Rockfish							
Sablefish							
Thornyhead (Lg.)							
Thornyhead (Sh.)							
Sharpchin Rockfish							
Shortbelly Rockfish							
Silvergrey Rockfish							
Splitnose Rockfish							
Widow Rockfish							
Yelloweye Rockfish							
Yellowmouth Rockfish							
Yellowtail Rockfish							

Table 3-15. Landings by Trawl CV Class as a Percent of Total Landings, 1994-2005

Vessel Class	AW-TCV	SW-TCV	CW-TCV	LD-TCV	SD-TCV	BO-TCV	Total
Species			Percent	of Total L	andings		
Arrowtooth Flounder							
Bank Rockfish							
Black Rockfish OR-CA							
Black Rockfish WA							
Blackgill Rockfish							
Bocaccio Rockfish							
Canary Rockfish							
Chili/Eureka Rockfish							
Chilipepper Rockfish							
Cowcod							
Darkblotched Rockfish							
Dover Sole							
English Sole							
Lingcod							
Minor Rockfish (N)							
Other Flatfish							
Other Rockfish (N)							
Other Rockfish (S)							
Other Species							
Pacific Cod							
Pacific Ocean Perch							
Pacific Whiting							
Petrale Sole							
Redstripe Rockfish							
Sablefish							
Thornyhead (Lg.)							
Thornyhead (Sh.)							
Sharpchin Rockfish							
Shortbelly Rockfish							
Silvergrey Rockfish							
Splitnose Rockfish							
Widow Rockfish							
Yelloweye Rockfish							
Yellowmouth Rockfish							
Yellowtail Rockfish							

Table 3-16. Landings by Trawl CV Class as a Percent of Total Landings, 2005

Vessel Class	AW-TCV	SW-TCV	CW-TCV	LD-TCV	SD-TCV	BO-TCV	Total
Species		E	x-Vessel V	/alue (\$1,0	00 in 2005	\$)	
Arrowtooth Flounder							
Bank Rockfish							
Black Rockfish OR-CA							
Black Rockfish WA							
Blackgill Rockfish							
Bocaccio Rockfish							
Canary Rockfish							
Chili/Eureka Rockfish							
Chilipepper Rockfish							
Cowcod							
Darkblotched Rockfish							
Dover Sole							
English Sole							
Lingcod							
Minor Rockfish (N)							
Other Flatfish							
Other Rockfish (N)							
Other Rockfish (S)							
Other Species							
Pacific Cod							
Pacific Ocean Perch							
Pacific Whiting							
Petrale Sole							
Redstripe Rockfish							
Sablefish							
Thornyhead (Lg.)							
Thornyhead (Sh.)							
Sharpchin Rockfish							
Shortbelly Rockfish							
Silvergrey Rockfish							
Splitnose Rockfish							
Widow Rockfish							
Yelloweye Rockfish							
Yellowmouth Rockfish							
Yellowtail Rockfish							

Table 3-17. Ex-vessel Value by Trawl CV Class and Species, 1994-2005

Vessel Class	AW-TCV	SW-TCV	CW-TCV	LD-TCV	SD-TCV	BO-TCV	Total
Species			Percent of	Total Ex-ve	essel Value		
Arrowtooth Flounder							
Bank Rockfish							•
Black Rockfish OR-CA							
Black Rockfish WA							
Blackgill Rockfish							
Bocaccio Rockfish							
Canary Rockfish							
Chili/Eureka Rockfish							
Chilipepper Rockfish							
Cowcod							
Darkblotched Rockfish							
Dover Sole							
English Sole							
Lingcod							
Minor Rockfish (N)							
Other Flatfish							
Other Rockfish (N)							
Other Rockfish (S)							
Other Species							
Pacific Cod							
Pacific Ocean Perch							
Pacific Whiting							
Petrale Sole							
Redstripe Rockfish							
Sablefish							
Thornyhead (Lg.)							
Thornyhead (Sh.)							
Sharpchin Rockfish							
Shortbelly Rockfish							
Silverarev Rockfish							
Splitnose Rockfish							
Widow Rockfish							
Yelloweye Rockfish							
Yellowmouth Rockfish							
Yellowtail Rockfish							

Table 3-18. Ex-vessel Value by Trawl CV Class as a Percent of Total Ex-Vessel Value, 1994-2005

Vessel Class	AW-TCV	SW-TCV	CW-TCV	LD-TCV	SD-TCV	BO-TCV	Total
Species			Percent of	Total Ex-ve	essel Value		
Arrowtooth Flounder							
Bank Rockfish							
Black Rockfish OR-CA	1						
Black Rockfish WA							
Blackgill Rockfish							
Bocaccio Rockfish							
Canary Rockfish							
Chili/Eureka Rockfish							
Chilipepper Rockfish							
Cowcod							
Darkblotched Rockfish							
Dover Sole							
English Sole							
Lingcod							
Minor Rockfish (N)							
Other Flatfish							
Other Rockfish (N)							
Other Rockfish (S)							
Other Species							
Pacific Cod							
Pacific Ocean Perch							
Pacific Whiting							
Petrale Sole							
Redstripe Rockfish							
Sablefish							
Thornyhead (Lg.)							
Thornyhead (Sh.)							
Sharpchin Rockfish							
Shortbelly Rockfish							
Silvergrey Rockfish							
Splitnose Rockfish							
Widow Rockfish							
Yelloweye Rockfish							
Yellowmouth Rockfish							
Yellowtail Rockfish							

3.4.3.3 Ex-Vessel Value, Landings and Incidental Catch Rates by Target Strategy

This section summarizes fishing of the limited entry trawl fleet by target strategy during the historical period (1994 – 2005) in recent years (2001 – 2005) and in 2005. Target strategies are based on landings by species in individual fish-tickets for shoreside landings. The target strategy for deliveries to motherships is assumed to be Pacific whiting.

Target strategies vary significantly by vessel class—by definition, the three whiting vessel class target Pacific whiting more than any other target, while the diversified vessel classes utilize other strategies more than whiting. Target strategies are important under a trawl IFQ program because incidental catches of overfished species vary by target strategy. For example, if a target strategy has low incidental catch rates of a particular overfished species, vessel classes that utilize that target strategy will have a lower need for IFQs for that species.

These tables are derived using a process similar to that used in the NOAA Fisheries Bycatch Model.

Vessel Class	AW-TCV	SW-TCV	CW-TCV	LD-TCV	SD-TCV	BO-TCV	All Classes			
Target	Ex-Vessel Value (\$1,000 in 2005\$)									
Pacific Whiting										
DTS Complex										
Petrale Sole										
Slope Rockfish										
Other Rockfish										
Arrowtooth Flounder										
Other Flatfish										
Widow/Yellowtail Midwater										
POP										
Yellowtail										
Widow										
Other Targets										
All Targets										

 Table 3-20. Ex-Vessel Value by Target Strategy and Vessel Class, 1994-2005

Table 3-21. Ex-Vessel Value by Target Strategy and Vessel Class, 2005

Vessel Class	AW-TCV	SW-TCV	CW-TCV	LD-TCV	SD-TCV	BO-TCV	All Classes
Target			Ex-Vesse	l Value (\$1,0	000 in 2005	\$)	
Pacific Whiting							
DTS Complex							
Petrale Sole							
Slope Rockfish							
Other Rockfish							
Arrowtooth Flounder							
Other Flatfish							
Widow/Yellowtail Midwater							
POP			-				
Yellowtail							
Widow				2			
Other Targets							
All Targets							

Vessel Class	AW-TCV	SW-TCV	CW-TCV	LD-TCV	SD-TCV	BO-TCV	All Classes
Target			Percer	nt of Ex-Ves	sel Value		
Pacific Whiting							
DTS Complex							
Petrale Sole							
Slope Rockfish							
Other Rockfish							
Arrowtooth Flounder							
Other Flatfish							
Widow/Yellowtail Midwater							
POP							
Yellowtail							
Widow							
Other Targets							
All Targets							

Table 3-22. Target Strategy as a Percent of Ex-Vessel Value by Vessel Class, 1994-2005

Table 3-23. Target Strategy by Vessel Class as a Percent of Ex-Vessel Value, 2005

Vessel Class	AW-TCV	SW-TCV	сพ-тсу	LD-TCV	SD-TCV	BO-TCV	All Classes
Target			Percer	nt of Ex-Ves	sel Value		
Pacific Whiting							
DTS Complex							
Petrale Sole							
Slope Rockfish							
Other Rockfish							
Arrowtooth Flounder							
Other Flatfish							
Widow/Yellowtail Midwater							
POP							
Yellowtail							
Widow							
Other Targets							
All Targets							

Vessel Class	AW-TCV	SW-TCV	CW-TCV	LD-TCV	SD-TCV	BO-TCV	All Classes		
Target	Catches (MT)								
Pacific Whiting									
DTS Complex									
Petrale Sole									
Slope Rockfish									
Other Rockfish									
Arrowtooth Flounder									
Other Flatfish									
Widow/Yellowtail Midwater									
POP									
Yellowtail									
Widow				o					
Other Targets									
All Targets									

Table 3-24. Estimated Catches of Target Species by Target Strategy and Vessel Class, 2001-2005

Table 3-25. Estimated Catches of Target Species by Vessel Class as a Percent of All Classes, 2001-2005

Vessel Class	AW-TCV	SW-TCV	сพ-тсv	LD-TCV	SD-TCV	BO-TCV	All Classes
Target			Perc	cent of All C	Classes		
Pacific Whiting							
DTS Complex							
Petrale Sole							
Slope Rockfish							
Other Rockfish							
Arrowtooth Flounder							
Other Flatfish							
Widow/Yellowtail Midwater							
POP							
Yellowtail							
Widow							
Other Targets							
All Targets							

Vessel Class	AW-TCV	SW-TCV	CW-TCV	LD-TCV	SD-TCV	BO-TCV	All Classes				
Target		Catches (MT)									
Pacific Whiting											
DTS Complex											
Petrale Sole											
Slope Rockfish											
Other Rockfish											
Arrowtooth Flounder											
Other Flatfish											
Other Targets											
All Targets											

Table 3-26.	Estimated	Catches of	Target S	Species I	by Target	t Strategy	and Vess	sel Class, 2005
-------------	-----------	------------	----------	-----------	-----------	------------	----------	-----------------

Table 3-27. Estimated Catches of Target Species by Vessel Class as a Percent of All Classes, 2005

Vessel Class	AW-TCV	SW-TCV	CW-TCV	LD-TCV	SD-TCV	BO-TCV	All Classes
Target			Perc	cent of All C	lasses		
Pacific Whiting							
DTS Complex							
Petrale Sole							
Slope Rockfish							
Other Rockfish							
Arrowtooth Flounder							
Other Flatfish							
Other Targets							
All Targets							

Table 3-28. Estimated Incidental Catch Rates of Overfished Species by Target Strategy, 2001-2005

Overfished Species	Bocaccio	Cowcod	Canary Rockfish	Dark- blotched rockfish	Pacific Ocean Perch	Widow Rockfish	Yelloweye Rockfish
Target	Bocaccio	cowcou		of Target Spec		NOCKIISII	NOCKIISII
Pacific Whiting				J			
DTS Complex							
Petrale Sole							
Slope Rockfish							
Other Rockfish							
Arrowtooth Flounder							
Other Flatfish							
Other Targets							
All Targets							

3.4.3.4 Distribution of Landings by Species and Month

This section summarizes the distribution of landings of trawl catcher vessels by month. This is an important indicator because under a trawl IFQ program vessels will likely want to change their fishing period to optimize catches of target species relative to catches of overfished species. Section 3.6.3.4 in provides a summary of ex-vessel prices paid by month. Tables show catch by month for the historical period (1995 – 2005) and for the baseline (2005).¹³

	Jan	Feb	Mar	Apr	Мау	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Species					Perce	ent of T	otal Vo	olume				
Arrowtooth Flounder												
Bank Rockfish												
Black Rockfish OR-CA												
Black Rockfish WA												
Blackgill Rockfish												
Bocaccio Rockfish												
Canary Rockfish												
Chili/Eureka Rockfish												
Chilipepper Rockfish												
Cowcod												
Darkblotched Rockfish												
Dover Sole												
English Sole												
Lingcod												
Minor Rockfish (N)												
Other Flatfish												
Pacific Cod												
Pacific Ocean Perch												
Pacific Whiting												
Petrale Sole												
Redstripe Rockfish												
Sablefish												
Thornyhead (Lg.)												
Thornyhead (Sh.)												
Sharpchin Rockfish												
Shortbelly Rockfish												
Silvergrey Rockfish												
Splitnose Rockfish												
Widow Rockfish												
Yelloweye Rockfish												
Yellowmouth Rockfish												
Yellowtail Rockfish												

Table 3-29. Trawl Groundfish Landings as a Percent of Volume by Species and Month, 1994-2005

¹³ Analysts completing the Stage 2 document may find that the fishery has changed to an extent that tables showing additional time periods may be merited.

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Species					Perc	ent of T	Total Vo	olume				
Arrowtooth Flounder												
Bank Rockfish												
Black Rockfish OR-CA												
Black Rockfish WA												
Blackgill Rockfish												
Bocaccio Rockfish												
Canary Rockfish												
Chili/Eureka Rockfish												
Chilipepper Rockfish												
Cowcod												
Darkblotched Rockfish												
Dover Sole												
English Sole												
Lingcod												
Minor Rockfish (N)												
Other Flatfish												
Other Rockfish (N)												
Other Rockfish (S)												
Other Species												
Pacific Cod												
Pacific Ocean Perch					-						0	
Pacific Whiting												
Petrale Sole												
Redstripe Rockfish										,		
Sablefish												
Thornyhead (Lg.)												
Thornyhead (Sh.)												
Sharpchin Rockfish					ç.		ų.					
Shortbelly Rockfish												
Silvergrey Rockfish												
Splitnose Rockfish												
Widow Rockfish												
Yelloweye Rockfish												
Yellowmouth Rockfish												
Yellowtail Rockfish												

Table 3-30. Trawl Groundfish Landings as a Percent of Volume by Species and Month, 2005

	Jan	Feb	Mar	Apr	Мау	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Vessel Class		Percent of Total Volume											
AW-TCV													
SW-TCV													
CW-TCV													
LD-TCV													
SD-TCV													
BO-TCV												(
All TCVs													

Table 3-31. Trawl Groundfish Landings as a Percent of Volume by Trawl CV Class and Month, 1994-2005

Table 3-32. Trawl Groundfish Landings as a Percent of Volume by Trawl CV Class and Month, 2005

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Vessel Class		Percent of Total Volume											
AW-TCV													
SW-TCV													
CW-TCV													
LD-TCV													
SD-TCV													
BO-TCV													
All TCVs													

Table 3-33. Trawl Groundfish Landings as a Percent of Value by Trawl CV Class and Month, 1994-2005

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Vessel Class		Percent of Total Value											
AW-TCV													
SW-TCV													
CW-TCV													
LD-TCV													
SD-TCV													
BO-TCV													
All TCVs													

Table 3-34. Trawl Groundfish Landings as a Percent of Value by Trawl CV Class and Month, 2005

	Jan	Feb	Mar	Apr	Мау	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Vessel Class		Percent of Total Value											
AW-TCV													
SW-TCV													
CW-TCV													
LD-TCV													
SD-TCV													
BO-TCV													
All TCVs													

3.4.4 Past and Present Conditions of Specific Trawl Catcher Vessel Classes

3.4.4.1 At-sea Whiting Trawl Catcher Vessel Class

The At-sea Whiting Trawl Catcher Vessel class (AW-TCV) includes all permits that have been primarily engaged in the at-sea whiting fishery over the years from 1994 – 2005. Permits that are defined as being in this class will have generated more than 50 percent of their West Coast groundfish revenue in deliveries of whiting to motherships during the period. The at-sea whiting fishery is distinct from the shoreside whiting fishery in that deliveries are made to motherships by transferring trawl cod-ends at the end of each tow. Because these vessels deliver directly to motherships they do not necessarily need a RSW hold, and may stay out at sea for longer periods than Shoreside Whiting Trawl CVs.

3.4.4.1.1 Class Characteristics and Participation

This section describes the characteristics and participation patterns of the of the At-Sea Whiting TCV class. Included are histograms showing the lengths of vessels associated with permits in the class in 2005; the number of years of participation of permits in the class, and the duration of permits ownership in the class. Under a trawl IFQ program, the number of years a permit was active will directly correlates with the amount of IFQs received relative to average catches in active years. For example, if a permit was active for 6 of the 12 years in the quota share historical period, it is likely that the amount of IFQs for a species allocated to the permit will yield IFQs approximately equal to 50 percent of the permit's average landings during active years, assuming total catch for the species was relatively constant over the historical period.

Also included in this section are tables that describe the ownership characteristics of permits and vessels in the class. Table 3-35 shows the number of operations (a vessel/permit combination) and the percent of revenue by year for various types of ownership patterns. Five specific types of ownership patterns are described.

- 1) **1 Permit/1 Vessel/1 Owner:** Permit and vessels are owned by a single individual or company and no other limited entry trawl operation are owned
- 2) **1 Permit/1 Vessel/2 Owners:** The permit owner is different than the vessel owner, and neither owns other limited entry trawl operations.
- 3) Multiple Permits & Vessels all in Class/1 Owner: A single individual or company owns multiple vessels and permits (operations) and all participate in the At-Sea Whiting TCV Class.
- 4) Multiple Permits & Vessels over Multiple Classes/1 Owner: A single individual or company owns multiple vessels and permits (operations) some of which participate in classes other than the At-Sea Whiting TCV Class.
- 5) Other Permutations of Permit/Vessel Owner Combinations: Other types of ownerships not fitting into the groups listed above.

Table 3-36 shows the length of ownership tenure of permits in the At-Sea Whiting TCV Class. It is believed that the length of ownership tenure may be an important indicator of performance with respect to the initial allocation.

Figure 3-1. Histogram of Lengths of Vessels Associated with Permits in the in At-sea Whiting Trawl Catcher Vessel Class, 2005

Figure 3-2. Histogram of Years of Participation of Permits in At-sea Whiting Trawl Catcher Vessel Class, 1994-2005

Figure 3-3. Histogram of Duration of Permit Ownership by Permit in At-sea Whiting Trawl Catcher Vessel Class, 1994-2005

Table 3-35. Ownership Patterns in At-sea Whiting Trawl Catcher Vessel Class, 1994-2005

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Ownership Type					Nu	mber of	Operatio	ons				
1 Permit/1 Vessel/1 Owner												
1 Permit/1 Vessel/2 Owners												
Multiple Permits & Vessels all in Class/1 Owner												
Multiple Permits & Vessels over Multiple Classes/1 Owner												
Other Permutations of Permit/Vessel Owner Combinations												
Ownership Type					Percent	of Total	Revenue	in Clas	S			
1 Permit/1 Vessel/1 Owner												
1 Permit/1 Vessel/2 Owners												
Multiple Permits & Vessels all in Class/1 Owner												
Multiple Permits & Vessels over Multiple Classes/1 Owner												
Other Permutations of Permit/Vessel Owner Combinations												

Note: For purposes of this table, cases in which more than one permit are aggregated are treated as a single permit.

Table 3-36. Permit Ownership Tenure in the At-Sea Whiting Trawl CV Class in 2005

Years Since Last Permit Transfer	1	2	3	4	5	6	6	8	9	10	11	12	Total
Number of Operations													
Percent of 2005 Revenue													
Percent of 1994 - 2005 Revenue													

3.4.4.1.2 Dependence on West Coast Groundfish Trawl Fishery and Annual Cycle of Operations

Figure 3-4 and Table 3-37 show the relative dependence on limited entry trawl groundfish relative to other West Coast and Alaska fisheries. The table provides a preliminary list of the fisheries that would be included. This list could be modified during the Stage 2 analysis.

Figure 3-4. Ex-Vessel Value of Harvest by At-sea Whiting CVs by Fishery, 1994-2004

	Limited Entry	Limited Entry	Open				
Year	Trawl	Fixed Gear Groundfish	Access Groundfish	Dungeness Crab	Other West Coast	Alaska	Total
	Groundiish				ctivity in Other		Iotai
1994							
1995							
1996							· · · · · · · · · · · · · · · · · · ·
1997							
1998							
1999							
2000							
2001							
2002							
2003							
2004							
2005							

Table 3-37. Number of At-sea W	Vhiting CVs Particin	pating in Selected Fish	erv, 1994-2004
			.,

Table 3-38. Ex-Vessel Value Generated in Selected Fisheries by At-sea Whiting Catcher Vessels by Species, 1994-2004

Year	Limited Entry Trawl Groundfish	Limited Entry Fixed Gear Groundfish	Open Access Groundfish	Dungeness Crab	Other West Coast	Alaska	Total
			Ex-Ves	sel Value by F	ishery		
1995							
1996							
1997					C		
1998							
1999		C	2		c		0 - - -
2000							
2001							0
2002							
2003							
2004							
2005							0

Table 3-39 shows ex-vessel value by month in 2003 and 2004, while Table 3-40 shows participation. With IFQs there may be opportunities for these operations to change their annual round.

Year	Fishery			Ex-Vessel	Value (\$ M	illions)		
Tear	Fishery	Jan-Feb	Mar-Apr	May-Jun	Jul-Aug	Sep-Oct	Nov-Dec	Total
	Limited Entry Trawl							
	Limited Entry Fixed Gear							
	Open Access							
2003	Dungeness Crab							
	Other West Coast							
	Alaska Fisheries							
	Total							
	Limited Entry Trawl							
	Limited Entry Fixed Gear							
2004	Open Access							
2004	Dungeness Crab							
	Other West Coast							
	Alaska Fisheries							
	Total							

Table 3-39. Ex-Vessel Value of Species Harvested by At-sea Whiting Trawl CVs by Season, 2003-2004

Source:

Table 3-40. Number of Operations by Fishery and Season, 2003-2004

Year	Fishery	Number of Operations									
i cai	Tishery	Jan-Feb	Mar-Apr	May-Jun	Jul-Aug	Sep-Oct	Nov-Dec	Total			
	Limited Entry Trawl										
	Limited Entry Fixed Gear										
	Open Access										
2003	Dungeness Crab										
	Other West Coast										
	Alaska Fisheries										
	Total										
	Limited Entry Trawl										
	Limited Entry Fixed Gear										
2004	Open Access										
2004	Dungeness Crab										
	Other West Coast										
	Alaska Fisheries										
	Total										

Source:

3.4.4.1.3 Catch Quantity and Value in West Coast Groundfish Trawl Fishery

This section discusses the harvest amount and value of the At-sea Whiting Trawl CV class in the West Coast groundfish trawl fishery. The following types of information are presented:

- Participation levels by groundfish species
- Participation levels by target strategy

- Incidental catch by target strategy
- Ex-vessel value of deliveries by processor class

Table 3-41 through Table 3-43 show the number of operations (unique vessel/permit combinations), landed tons, and ex-vessel value by species in the At-sea Whiting Trawl CV class from 1994-2005.

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	Total
Species					Ν	umber	of Op	eratior	าร				
Arrowtooth Flounder													
Bank Rockfish													
Black Rockfish OR-CA													
Black Rockfish WA													
Blackgill Rockfish													
Bocaccio Rockfish													
Canary Rockfish													
Chili/Eureka Rockfish													
Chilipepper Rockfish													
Cowcod													
Darkblotched Rockfish													
Dover Sole													
English Sole													
Lingcod													
Minor Rockfish (N)													
Other Flatfish													
Other Rockfish (N)													
Other Rockfish (S)													
Other Species													
Pacific Cod													
Pacific Ocean Perch													
Pacific Whiting													
Petrale Sole													
Redstripe Rockfish													
Sablefish													
Thornyhead (Lg.)													
Thornyhead (Sh.)													
Sharpchin Rockfish													
Shortbelly Rockfish													
Silvergrey Rockfish													
Splitnose Rockfish													
Widow Rockfish													
Yelloweye Rockfish													
Yellowmouth Rockfish													
Yellowtail Rockfish													

 Table 3-41. Active Permits in the At-sea Whiting Trawls CV Class by Species, 1994-2005

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	Total
Species							МТ						
Arrowtooth Flounder													
Bank Rockfish													
Black Rockfish OR-CA													
Black Rockfish WA													
Blackgill Rockfish	: :												
Bocaccio Rockfish													
Canary Rockfish													
Chili/Eureka Rockfish													
Chilipepper Rockfish													
Cowcod													
Darkblotched Rockfish													
Dover Sole													
English Sole									c				
Lingcod													
Minor Rockfish (N)													
Other Flatfish													
Other Rockfish (N)													
Other Rockfish (S)													
Other Species													
Pacific Cod													
Pacific Ocean Perch													
Pacific Whiting													
Petrale Sole													
Redstripe Rockfish													
Sablefish													
Thornyhead (Lg.)									6				
Thornyhead (Sh.)													
Sharpchin Rockfish													
Shortbelly Rockfish									6				
Silvergrey Rockfish													
Splitnose Rockfish									c	0			
Widow Rockfish													
Yelloweye Rockfish									<				
Yellowmouth Rockfish													
Yellowtail Rockfish													

Table 3-42. Landings of At-sea Whiting Trawl CV by Species, 1994-2005

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	Total
Species				Ex	-Vess	el Valu	e (\$ Mi	illions	in 200	5\$)			
Arrowtooth Flounder													
Bank Rockfish													
Black Rockfish OR-CA													
Black Rockfish WA													
Blackgill Rockfish													
Bocaccio Rockfish													
Canary Rockfish													
Chili/Eureka Rockfish													
Chilipepper Rockfish													
Cowcod													
Darkblotched Rockfish													
Dover Sole													
English Sole													
Lingcod													
Minor Rockfish (N)								•					
Other Flatfish													
Other Rockfish (N)													
Other Rockfish (S)								0					C
Other Species													
Pacific Cod													
Pacific Ocean Perch								0					
Pacific Whiting													
Petrale Sole													
Redstripe Rockfish													
Sablefish													
Thornyhead (Lg.)													
Thornyhead (Sh.)													
Sharpchin Rockfish													
Shortbelly Rockfish													
Silvergrey Rockfish													
Splitnose Rockfish								0					
Widow Rockfish													
Yelloweye Rockfish													
Yellowmouth Rockfish													
Yellowtail Rockfish													

Table 3-43. Ex-Vessel Value of At-sea Whiting Trawl CV by Species, 1994-2005

Figure 3-5 shows a hypothetical distribution of catch of species X among permits in the class from 1994-2005 and in 2005. Similar figures will be generated for each groundfish species landed in the limited entry trawl fisheries. The total over all years is shown because it represents the historical distribution of landings among vessels in the class, while the distribution in 2005 is shown because it represents participation in the baseline year. Note that this figure mentions permit owners in error, the figure would in base rankings on individual permits. If the data show a significant number of owners with multiple permits in the class an additional figure could be provided that aggregates over permit owners within the class.

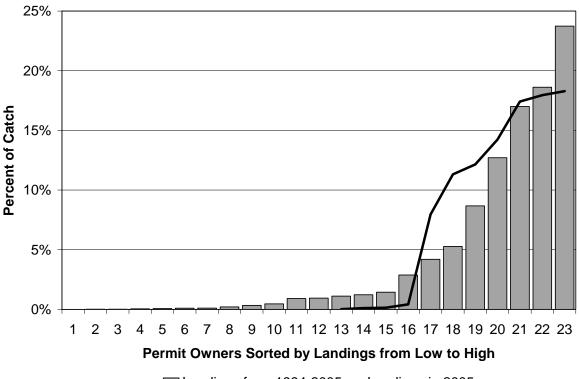


Figure 3-5. Distribution of Landings of Species X by the At-sea Whiting Trawl CV Class

Landings from 1994-2005 — Landings in 2005

Table 3-44 through Table 3-46 present information on participation by target strategy for the At-sea Whiting Trawl CV class from 1994–2005. Target strategies can provide insights into the participation of the At-sea Whiting Trawl CV in seasonal fisheries, as well as insights into potential opportunities for expansion by the class. In addition, examining participation by target strategy may provide the only means to accurately estimate incidental catch. This is because catch of a particular species can only be considered incidental if it is not intentionally caught but rather taken while targeting other species. It should of course be noted that targeting strategies in three whiting vessel classes are largely predetermined—i.e., whiting and little else. To the extent they exist, the analysis will document other targeting strategies that have been utilized by vessels in this class over the years.

Defining a target strategy for a particular trip is difficult. The Consulting Team intends to use the algorithms developed by NMFS for the Trawl Bycatch Model to identify a particular strategy for each trip recorded in the fish ticket database.

Target	Pacific Whiting	DTS Complex:	Petrale Sole	Slope Rockfish	Other Rockfish	Arrowtooth Flounder	Other Flatfish	Other Targets	Total
Year			Numb	er of Opera	tions in ea	ach Target St	rategy		
	Table 3-4	5. Total Land	dings of A	t-sea Whiti	ng Trawl C	Vs by Target S	Strategy,	1994-2005	
Target	Pacific Whiting	DTS Complex:	Petrale Sole	Slope Rockfish	Other Rockfish	Arrowtooth Flounder	Other Flatfish	Other Targets	Total
Year			Тс	tal Landing	gs of Targe	et Species (M	IT)		
	Table 3-46	6. Ex-Vessel	Value of A	t-sea Whiti	ng Trawl C	SVs by Target	Strategy,	1994-2005	
Target	Pacific Whiting	DTS Complex:	Petrale Sole	Slope Rockfish	Other Rockfish	Arrowtooth Flounder	Other Flatfish	Other Targets	Total
Year				Ex-Vessel	Value (\$1,0	000 in 2005\$)			

Table 3-44. Number of Permits for the At-sea Whiting Trawl CV Class by Target Strategy, 1994-2005

Additional information on the targeting strategies of this class is provided in Table 3-47 through Table 3-50.¹⁴ These tables show the intensity of fishing activity during the year. The average number of trips per year and the average length of trip are expected to be affected under a trawl IFQ program. Catch per day is also likely to be an important measure of effectiveness. Additional tables may also be developed to show capacity levels and capacity utilization by target strategy in order to identify potential opportunities for fleet consolidation. Each table will show data for 2000 through 2005 and will show both annual and two-month period data.

Table 3-47. Average Trips per Vessel of At-sea Whitin	g Trawl CVs by Target Strategy, 2000-2005
	J · · · · J · J · · · · · · · · · · · ·

Target	Pacific Whiting	DTS Complex	Petrale Sole	Slope Rockfish		Arrowtooth Flounder	Other Flatfish	Other Targets					
2-Month Period		Number of Trips											
Jan-Feb 2000													
Mar-Apr 2000													

Table 3-48. Average Days per Trip by At-sea Whiting Trawl CVs by Target Strategy, 2000-2005

Target	Pacific Whiting	DTS Complex	Petrale Sole	Slope Rockfish		Arrowtooth Flounder	Other Flatfish	Other Targets				
2-month period	Average Days Per Trip											
Jan-Feb 2000												
Mar-Apr 2000												

¹⁴ In general, vessels in the offshore whiting CV class do not participate in many other target fisheries on the West Coast. However, it is believed that some vessels that are classified as this type of vessel do participate in other West Coast groundfish fisheries. To the extent they do, their efforts will be described here.

Target	Pacific Whiting	DTS Complex	Petrale Sole	Slope Rockfish		Arrowtooth Flounder	Other Flatfish	Other Targets					
2-Month Period		Catch per Day (MT)											
Jan-Feb 2000													
Mar-Apr 2000													

 Table 3-49. Catch per Day by At-sea Whiting Trawl CVs by Target Strategy and period, 2000-2005

Table 3-50. Ex-Vessel Value per Day by At-sea Whiting Trawl CVs by Target Strategy and period, 2000-2005

Target	Pacific Whiting	DTS Complex	Petrale Sole	Slope Rockfish		Arrowtooth Flounder	Other Flatfish	Other Targets					
2-Month Period		Ex-Vessel Value per Day											
Jan-Feb 2000													
Mar-Apr 2000													

3.4.4.1.4 Incidental Catch of At-sea Whiting Trawl CVs in Target Fisheries

One of the primary objectives of a trawl IFQ program is the reduction of incidental catch. By developing tables showing rates of incidental catch under various target strategies, it may be possible to project how effective a trawl IFQ program will be in reducing incidental catch. The Consulting Team believes that incidental catch rates by vessel class can be estimated using observer data over a period of several years. Table 3-51 shows the estimated average incidental catch rate over 2001-2005 for At-sea Whiting Trawl CVs by target strategy. Incidental catch rates are equal to the catch of incidental species as a percent of the total catch of target species. In the case of the DTS complex and Slope Rockfish, the denominator is the total catch of all species in the complex. Table 3-52 shows the incidental catch rate per dollar of target species.

Target	Pacific Whiting	DTS Complex	Petrale Sole	Slope Rockfish	Other Rockfish	Arrowtooth Flounder	Other Flatfish	Other Targets
Incidental Species		Incidental	Catch as	a Percent	of Total Ca	atch of Targe	t Species	
Arrowtooth Flounder								
Bank Rockfish								
Black Rockfish OR-CA								
Black Rockfish WA								
Blackgill Rockfish								
Bocaccio Rockfish								
Canary Rockfish								
Chili/Eureka Rockfish								
Chilipepper Rockfish								
Cowcod								
Darkblotched Rockfish								
Dover Sole								
English Sole								
Lingcod								
Minor Rockfish (N)								
Other Flatfish								
Other Rockfish (N)								
Other Rockfish (S)								
Other Species								
Pacific Cod								
Pacific Ocean Perch								
Pacific Whiting								
Petrale Sole								
Redstripe Rockfish								
Sablefish								
Thornyhead (Lg.)								
Thornyhead (Sh.)								
Sharpchin Rockfish								
Shortbelly Rockfish								
Silvergrey Rockfish								
Splitnose Rockfish								
Widow Rockfish								
Yelloweye Rockfish								
Yellowmouth Rockfish								
Yellowtail Rockfish								

Table 3-51. Average	Incidental Catch by	/ Target Strategy	, 2001-2005

Target	Pacific Whiting	DTS Complex	Petrale Sole	Slope Rockfish	Other Rockfish	Arrowtooth Flounder	Other Flatfish	Other Targets
Incidental Species		Inci	dental Ca	tch Rate Pe	er Dollar o	f Target Spec	cies	
Arrowtooth Flounder								
Bank Rockfish								
Black Rockfish OR-CA								
Black Rockfish WA								
Blackgill Rockfish								
Bocaccio Rockfish								
Canary Rockfish								
Chili/Eureka Rockfish								
Chilipepper Rockfish								
Cowcod								
Darkblotched Rockfish								
Dover Sole								
English Sole								
Lingcod								
Minor Rockfish (N)								
Other Flatfish								
Other Rockfish (N)								
Other Rockfish (S)								
Other Species								
Pacific Cod								
Pacific Ocean Perch								
Pacific Whiting								
Petrale Sole								
Redstripe Rockfish								
Sablefish								
Thornyhead (Lg.)								
Thornyhead (Sh.)								
Sharpchin Rockfish								
Shortbelly Rockfish								
Silvergrey Rockfish								
Splitnose Rockfish								
Widow Rockfish								
Yelloweye Rockfish								
Yellowmouth Rockfish								
Yellowtail Rockfish								

Table 3-52 Incidental Catch Pat	e per Dollar of Target Species, 2001-2005
Table 3-32. Incluental valut Rat	e per Dullar ur larget species, 2001-2005

Table 3-53 shows estimated total catch by target species for the period 2001-2005 by two-month trip limit period. These data represent the denominator in estimates of incidental catch rates for all species in each target strategy shown in Table 3-54. Table 3-54 shows average incidental catch rates by period over the year 2001-2005 for At-sea Whiting Trawl CVs. Additional tables will be developed for the other target strategies. The Consulting Team believes that if the incidental catch rate for a target species is relatively high during a particular period, it is likely that under an IFQ program harvesters will try to shift effort to periods with lower rates. If incidental catch rates do not vary by period, there will be less impetus for temporal shifts.

Target	Pacific Whiting	DTS Complex:	Petrale Sole	Slope Rockfish	Other Rockfish	Arrowtooth Flounder	Other Flatfish	Other Targets	Total
Period				Estimat	ed Total C	atch (MT)			
Jan-Feb									
Mar-Apr									
May-Jun									
Jul-Aug									
Sep-Oct									
Nov-Dec									

Table 3-53. Estimated Total Catch of Target Species by Season in Each Target Fishery by Period, 2001-2005

Target		Pac	ific	Wh	iti	ng			DTS	S C	on	npl	ex:			P	etra	le S	ole			Slo	pe F	200	kfis	h
Period	1	2	3	4	Ę	5	6	1	2	3	4	4	5	6	1	2	3	4	5	6	1	2	3	4	5	6
Incidental Species				Inc	cid	len	tal	Cat	tch	as	a I	Per	cei	nt o	fΤ	ota	Ca	tch	of 1	Гarg	et S	Spe	cies			
Arrowtooth Flounder																										
Bank Rockfish																										
Black Rockfish OR-CA																										
Black Rockfish WA																										
Blackgill Rockfish																										
Bocaccio Rockfish																										
Canary Rockfish																										
Chili/Eureka Rockfish																										
Chilipepper Rockfish																										
Cowcod																										
Darkblotched Rockfish																										
Dover Sole																										
English Sole																										
Lingcod																										
Minor Rockfish (N)																										
Other Flatfish																										
Other Rockfish (N)																										
Other Rockfish (S)																										
Other Species																										
Pacific Cod																										
Pacific Ocean Perch																										
Pacific Whiting																										
Petrale Sole																										
Redstripe Rockfish																										
Sablefish																										
Thornyhead (Lg.)																										
Thornyhead (Sh.)																										
Sharpchin Rockfish																										
Shortbelly Rockfish																										
Silvergrey Rockfish																										
Splitnose Rockfish																										
Widow Rockfish																										
Yelloweye Rockfish																										
Yellowmouth Rockfish																										
Yellowtail Rockfish																										

Table 3-54. Average Incidental Catch Rates by Target Strategy and Period, 2001-2005

Incidental catch rates are also likely to vary by geographic region. If particular areas generally exhibit comparatively lower incidental catch rates, it is likely that under a trawl IFQ program additional effort will be directed to areas with lower rates. Table 3-55 shows estimated total catches of target species by management area from 2001-2005. These data represent the denominator in estimates of incidental catch rates for all species in each target strategy as shown in Table 3-56.

Target	Pacific Whiting	DTS Complex:	Petrale Sole	Slope Rockfish		Arrowtooth Flounder	Other Flatfish	Other Targets	Total
Area				Estimat	ed Total C	atch (MT)			
Vancouver									
Columbia									
Eureka									
Monterey									
Conception									

Table 3-55. Estimated Total Catch of Target Species by Management Area, 2001-2005

Target	Pacific Whiting	DTS Complex:	Petrale Sole	Slope Rockfish			
Area	Vanc. Col. Eur. Mont.	Vanc. Col. Eur. Mont	Vanc. Col. Eur. Mont.	Vanc. Col. Eur. Mont.			
Incidental Species	Incidental Catch o	of Species (Row) as a	percent of Total Catch	of Target Species			
Arrowtooth Flounder]						
Bank Rockfish							
Black Rockfish OR-CA							
Black Rockfish WA							
Blackgill Rockfish							
Bocaccio Rockfish							
Canary Rockfish							
Chili/Eureka Rockfish							
Chilipepper Rockfish							
Cowcod	-						
Darkblotched Rockfish	*						
Dover Sole							
English Sole	-						
Lingcod	*						
Minor Rockfish (N)							
Other Flatfish							
Other Rockfish (N)	*						
Other Rockfish (S)							
Other Species							
Pacific Cod							
Pacific Ocean Perch							
Pacific Whiting							
Petrale Sole	-						
Redstripe Rockfish							
Sablefish	*						
Thornyhead (Lg.)							
Thornyhead (Sh.)							
Sharpchin Rockfish							
Shortbelly Rockfish	*						
Silvergrey Rockfish	*						
Splitnose Rockfish							
Widow Rockfish							
Yelloweye Rockfish							
Yellowmouth Rockfish							
Yellowtail Rockfish							

Table 3-56. Average Incidental Catch Rates by Management Area, 2001-2005

Table 3-57 and Table 3-58 show the number of operations and ex-vessel value of the At-sea Whiting Trawl CV class by management area.

	Vancouver	Columbia	Eureka	Monterey	Conception	Tota
Year			Number of	Operations		
1994						
1995						
1996						
1997						
1998						
1999						
2000						
2001						
2002						
2003						
2004						
2005						

Table 3-58. Ex-Vessel Value of Harvest by At-sea Whiting Tu	Frawl CVs by Management Area, 1994-2005
---	---

	Vancouver	Columbia	Eureka	Monterey	Conception	Total
Year		Ex-	Vessel Value (\$Millions in 200	5 \$)	
1994						
1995						
1996						
1997						
1998						
1999						
2000						
2001						
2002						
2003						
2004						
2005						

The following figures provide additional information on the geographic distribution of average annual catches of primary target species for At-sea Whiting Trawl CVs. These figures will be derived from log book data.

Figure 3-6. Average Annual Whiting Catch by At-sea Whiting CVs by Lat/Long, 1994-2005

3.4.4.1.5 Relationships with Processors

The Consulting Team believes that a trawl IFQ program could change not only the spatial and temporal distribution of catches, but also the distribution of landings of At-sea Whiting Trawl CVs across processing classes as catcher vessels and processors respond to new opportunities. While this may not be a likely outcome for At-sea Whiting Trawl CVs with respect to their whiting harvest, for non-whiting harvests and for some other trawl CV classes, changes in the distribution of landings may occur. Figure 3-7 (shown here with hypothetical data) shows the reliance of At-sea Whiting Trawl CVs on various processors of trawl groundfish from 1994 through 2005.

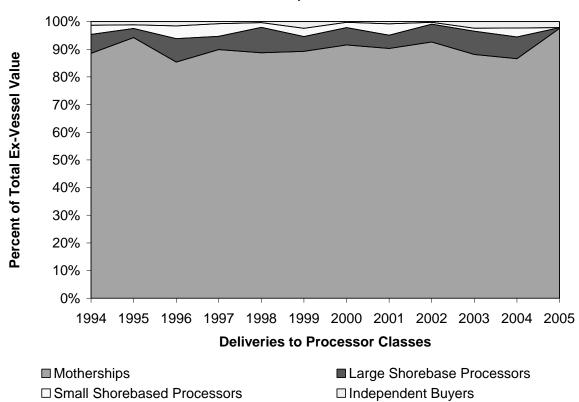


Figure 3-7. Ex-Vessel Value Paid to At-sea Whiting Trawl CVs by Processor Class, 1994-2005 (Hypothetical Data)

Source: Data in figure are hypothetical.

A trawl IFQ program is likely to alter the relationship between harvesters and processors/buyers. One way to measure the stability of these relationships is to examine the number of different processing companies to which catcher vessels deliver their fish. Table 3-59 examines the stability of the relationship between harvesters and processors by year.

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Number of												
Processors	:		Operati	ons Deliv	ering to l	Different I	Processo	rs by Cou	int of Con	npanies		
1												
2												
3												
4												
5+												
Number of Processors		Ex-Ve	ssel Valu	e (\$ Millic	ons in 200)5\$) Deliv	ered to Pr	ocessors	by Coun	t of Comp	anies	
3												
4												
5+												
Number of Processors 1			Percent E	x-Vesse	l Value De	elivered to	Process	ors by Co	ount of Co	ompanies		
2												
3												
4												
5+												

Table 3-59. Number of Processors to which At-sea Whiting TCV Deliver, 1994-2005

3.4.4.1.6 Safety

This section discusses maydays, deaths, and sinking's reported from 1994-2004 for At-sea Whiting Trawl CVs. These data are available from the US Coast Guard, although an inability to associate the data with any particular fishery limits its usefulness. The impetus to fish in poor weather may be reduced under a trawl IFQ program, thereby reducing the number of incident calls received by the US Coast Guard.

3.4.4.1.7 Cost and Net Revenue Estimates

This section describes the costs and net revenues of the At-sea Whiting Trawl CV class. Estimates of fixed and variable costs from an ongoing survey of vessel owners may be available for use in the analysis of a trawl IFQ program.

Cost estimates will be aggregated/divided into several categories that are likely to be affected by a transition to a trawl IFQ program, including:

- Share of gross revenue paid to crew and skipper
- Crew size
- Fuel costs per day
- Other trip costs per day
- Crew and liability insurance
- Vessel insurance
- Moorage
- Vessel and engine maintenance
- Administrative wages and salaries
- Other annual and fixed cost

Given that the survey of trawl vessel owners is currently ongoing, the Consulting Team assumes cost information would be based on estimates from either 2004 or 2005. In order to apply these estimates to historical catch and effort, they could be adjusted for inflation using standard producer price indexes. Fuel costs would be adjusted separately because they have changed more than other costs.

Historical trip, crew, and fixed costs as well as estimates of annual net revenues to vessel owners could be calculated by combining inflation adjusted cost estimates with historical trip data based on targeting strategy as described in Table 3-47 and Table 3-48.

3.4.4.1.8 Regional Residence of Permit Holders (Vessel Owner)

Table 3-60 presents information on the residence of permit holders by region in the At-sea Whiting CV class. Table 3-61 shows the ex-vessel revenue accruing to each region based on the assumption that the permit holder generally hires crewmembers who reside in its region of residence.

Region	N.WA	S.WA	N.OR	S.OR	N.CA	C.CA	S.CA	Total		
Year	Number of Permit Holders									
1994										
1995										
1996			ľ							
1997										
1998							ĺ			
1999			· · · · · · · · · · · · · · · · · · ·							
2000										
2001										
2002			ľ							
2003			1							
2004										
2005			ĺ				1			

 Table 3-60. Number of Active At-sea Whiting Trawl Operations by Permit Holders Residence, 1994-2005

 Table 3-61. Ex-Vessel Revenue of At-sea Whiting Trawl CVs by Permit Holders' Region of Residence, 1994-2005

Region	N.WA	S.WA	N.OR	S.OR	N.CA	C.CA	S.CA	Total			
Year	\$ Millions										
1994											
1995											
1996											
1997											
1998											
1999											
2000											
2001											
2002											
2003											
2004			Ì								
2005											

3.4.4.1.9 Crew Employment and Income

The average vessel in the At-sea Whiting CV class typically carries a crew of X including the skipper.¹⁵ Table 3-62 shows the estimated total number of crew (including skipper and administrative staff) in this class from 1994 through 2004. By assumption, a crewmember month accrues at the rate of 0.25 crewmember months per crewmember per trip.¹⁶ If a vessel with four crewmembers takes 1 trip, then 1 crewmember month is accrued.

Table 3-62. Estimated Number of Crewmembers and Crewmember Months in West Coast Groundfish Trawl
Fishery by At-sea Whiting CVs, 1994-2004

	Number of Crew		Crewmember Months								
Year	Members	Jan-Feb	Mar-Apr	May-Jun	Jul-Aug	Sep-Oct	Nov-Dec	Total			
1994											
1995											
1996											
1997											
1998											
1999											
2000											
2001				-							
2002											
2003						·					
2004											
2005											

Crewmembers typically are paid a share of the gross revenue. A share may be calculated as a portion of gross revenue such as gross revenue less food and fuel expenditures or gross revenue less food, fuel, and landing tax expenditures. This analysis assumes that 40 percent of ex-vessel revenue goes to payments for labor.¹⁷ Table 3-63 presents estimated payments to labor in groundfish. Individual crew shares are about 6 to 10 percent of the gross revenue after expenditures have been subtracted.

Under a trawl IFQ program, IFQ leasing costs may also be treated as operating expenditures which may affect crew shares. Crew share may also change if a trawl IFQ program reduces the number of catcher vessels operating in a region. These issues will be investigated as part of the Stage 2 analysis in the key informant interviews and as part of the fleet consolidation modeling effort described in Chapter 4.

¹⁵ Typical numbers of crewmembers on board will be determined using the NOAA cost survey or will be obtained from key informant interviews

¹⁶ The analysts assume that each crewmember puts in 45 hours per trip including time before and after the vessel is at sea. If a crewmember makes 4 trips in a month then the crewmember is assumed to have put in 175 hours which is equal to the number of hours expected of a full-time employee hourly employee in a more typical employment situation. Verification of these assumptions will take place during the Stage 2 analysis through key informant interviews.

¹⁷ This assumption will be verified with the cost information collected by NMFS and in key informant interviews.

	Jan-Feb	Mar-Apr	May-Jun	Jul-Aug	Sep-Oct	Nov-Dec	Total
Year			\$ N	Aillions in 200	5\$		
1994							
1995							
1996							
1997							
1998							
1999							
2000							
2001							
2002							
2003							
2004							
2005							

Table 3-63. Payments to Labor by Species Group by At-sea Whiting CVs in West Coast Groundfish Trawl Fishery by Period, 1994-2004

Note: These will be estimated based on crew factors and crew share estimates from cost data gathered by NOAA Fisheries, or from key informant interviews.

Neither NMFS nor the States collect information that directly links individual crewmembers to specific operations or activities in the limited entry trawl fleet. Therefore it is not possible with "official data" to determine the places of residence of crewmember. For purposes of the EIS, the analysis will assume that the places of residence of crewmembers within any vessel class are in proportional to the places of residence of permit holders. Thus if 40 percent of the permit holders in the At-sea Whiting CV class are from Newport, Oregon, then the analysis will assume that 40 percent of the crewmembers also come from Newport, Oregon. Using this assumption crewmember months and payments to labor can be distributed out to various regions. Table 3-64 shows the estimated crewmember months by region, and Table 3-65 shows the estimated crewmember months and payments to labor accruing to each region.

Table 3-64. Crewmember Months of At-sea Whiting Trawl CVs by Regional Residence of Vessel Owner, 1994-2005

Region	N.WA	S.WA	N.OR	S.OR	N.CA	C.CA	S.CA	Total					
Year		Number of Crewmember Months											
1994													
1995													
1996			1										
1997			1										
1998													
1999													
2000			1										
2001			1										
2002			1										
2003													
2004			Î										
2005			1										

Region	N.WA	S.WA	N.OR	S.OR	N.CA	C.CA	S.CA	Total				
Year		Number of Crewmember Months										
1994												
1995												
1996												
1997												
1998												
1999												
2000												
2001												
2002												
2003												
2004												
2005												

Table 3-65. Payments to Labor of At-sea Whiting Trawl CVs by Regional Residence of Vessel Owner, 1994-2004

3.4.4.2 Shoreside Whiting Trawl Catcher Vessels

The Shoreside Whiting Trawl Catcher Vessel class (SW-TCV) consists of permits whose deliveries of whiting account for 50 percent or more of West Coast revenue. Whiting deliveries to motherships are minimal.

This section will contain a set of tables and figures similar to those provided for the At-sea Whiting Trawl CV class.

3.4.4.3 Combination Whiting Trawl Catcher Vessels

The Combination Whiting Trawl Catcher Vessel class (CW-TCV) consists of permits whose deliveries of whiting account for 50 percent or more of West Coast revenue. These permits make significant deliveries to both shoreside and at-sea processors.

This section will contain a set of tables and figures similar to those provided for the At-sea Whiting Trawl CV class.

3.4.4.4 Large Diversified Trawl Catcher Vessels

The Large Diversified Trawl Catcher Vessel class (LD-TCV) consists of permits whose revenue from Whiting is less than 50 percent of their West Coast revenue. These permits fish year-round in both deepwater and near-shore fisheries.

This section will contain a set of tables and figures similar to those provided for the At-sea Whiting Trawl CV class.

As noted in Section 3.4.1, the final classification of the diversified groundfish trawl permits may change after the initial analysis of catch and participation data. Other possible classification criteria may include typical fishing patterns or geographic locations.

3.4.4.5 Small Diversified Trawl Catcher Vessels

The Small Diversified Trawl Catcher Vessel class (SD-TCV) consists of permits whose revenue from Whiting is less than 50 percent of their West Coast revenue. These permits generally fish near shore and not during winter.

This section will contain a set of tables and figures similar to those provided for the At-sea Whiting Trawl CV class.

3.4.4.6 Bought-out Trawl Catcher Vessels and Permits

The Bought-Out Shoreside Trawl Catcher Vessel class (BO-TCV) consists of vessels and permits that were bought out of the fishery in the industry-funded buyback in 2003. While these vessels and permits would not be directly affected by a trawl IFQ program—they are no longer in the West Coast groundfish trawl fishery and, therefore, ineligible to participate or receive IFQs—the allocation formula of an IFQ program would distribute the catch of the permits associated with these vessels on an equal-share basis to permit owners that are eligible to receive IFQs. Therefore the catches of these permits are an important indicator of IFQ allocations. In addition, these permits and vessels delivered significant quantities of groundfish to various processor classes. After these vessels left the fishery in 2003, some buyers and processors had to seek out new suppliers of groundfish. By providing a summary of these permits and their activities, the EIS is able to provide a more complete description of the West Coast groundfish trawl fishery.

This section will contain a set of tables and figures similar to those provided for the At-sea Whiting Trawl CV class.

3.5 Trawl Catcher Processors

3.5.1 Potentially Affected Trawl Catcher Processors

The trawl catcher processors that could be potentially affected participate primarily in the at-sea whiting fishery and currently operate under the Pacific Whiting Conservation Cooperative.

3.5.2 Condition Indicators for Trawl Catcher Processors

Indicators of the historical and baseline conditions of trawl catcher processors include but are not necessarily limited to the following:

- Catch by species
- Incidental catch by species
- Discarded catch by species
- Distribution of catches by month
- Relative dependency on West Coast trawl groundfish
- Wholesale value of production
- Operating costs
- Net revenues

- Number of participating trawl catcher processors
- Number of holding trawl permits used for catcher processors
- Number of trips per year
- Number of fishing days per year
- Number of harvesting crew members
- Number of processing crew members
- Harvesting crew and skipper shares
- Product types and amounts by species
- Product recovery rates

Some conditions such as vessel safety may not be measurable by quantifiable indicators.

This section will contain a set of tables and figures similar to those provided for trawl catcher vessel classes. To the extent that information is available, additional tables will document processed product and wholesale value generated by trawl catcher processors.

3.6 **Processors of Trawl-Caught Groundfish**

Processors would be directly affected by a new management regime if the regime changes the way they currently operate or changes future opportunities. Processors that process groundfish caught with trawl gear would be directly affected by a trawl IFQ program, and could be allocated IFQs under options forwarded by the Council.

3.6.1 Classifications of Potentially Affected Processors

There are two major categories of processors of trawl groundfish—motherships and shoreside processors. In this analysis motherships are treated as a distinct class of processors, while shoreside processors are further subdivided based largely on the requirements of the options to allocate IFQs to processors. Many of the IFQ programs included in the main suite of alternatives would allocate IFQs to processors—companies that cut and package fish or handle live fish—but would not allocate IFQs to buyers that simply transfer unprocessed fish (unless it is live fish) to "processors". Therefore, the processor classification system must differentiate between buyers and processors. The issue is further complicated by the fact that "processors" are not specifically identified in state fish-tickets—the only reliable source of historical shoreside landings data for both harvesters and processors.¹⁸

For shoreside deliveries, fish-tickets contain a field for the first receiver. In the PacFIN repository of state fish tickets, this field is labeled "processor". However, the states require the field to be completed by the "first receiver" of the fish from the catching vessel. In many cases the receiver is not an entity that processes raw fish—some are agents of processors, while others are independent buyers. Furthermore, there does not appear to be a way to determine—short of first-hand knowledge—which receivers are processors, agents of processors, independent buyers that sell to multiple processors, or independent buyers that sell fish directly to the wholesale or retail market.

¹⁸ The problem of identification of processors does not apply to motherships because motherships are uniquely identified in the NORPAC At-Sea database.

Fortunately, some initial studies identify many of these linkages,¹⁹ and members of the processing industry appear willing and able to assist in the classification process.

An additional difficulty arises from the consolidation that has occurred among processors and buyers in recent years. While it is well known, for example, that the Pacific Seafood Group has experienced considerable growth over the last 25 years,²⁰ other processors are also expanding through consolidation and acquisition—Bornstein Seafoods, for example, lists ten buying stations and processing sites on the West Coast on its Web site.²¹ Because a relatively small number of firms own or control the majority of groundfish that are delivered to shore, treating individual processing facilities as independent entities would likely result in a misrepresentation of the impacts of a trawl IFQ program. The fact that there are few owners involved also creates data confidentiality issues.

Assuming that sufficient information regarding linkages between buyers and processors is available, the following definitions will be used to classify shoreside processors:

- Receivers of groundfish refer to entities that are listed in the fish-ticket data.
- Processors mean those entities that typically cut and package unprocessed fish for resale.²² Processors may or may not be receivers of groundfish.
- Secondary Processors are those processors that cut and package fish that has already been processed.
- Buyers are entities that receive groundfish but do not process groundfish.
 - Associated buyers are those buyers that are linked by ownership, contract or employment to a processor or an entity that owns processors.
 - o Independent buyers are those buyers that are not linked to a particular processor.

The Consulting Team is still investigating the most appropriate way to classify shoreside processors, but it tentatively proposes the following classification scheme:

- 1) Identify, to the extent feasible,²³ connections between receivers and primary processing facilities. If a receiver (or multiple receivers) and a particular processing facility (or multiple processing facilities) have a consistent link, they would be identified as a single "processing group". Each independent buyer would be identified as such. All other receivers would be associated with a processing group, either by themselves or with other buyers and processors. For example, all buyers and processors associated with the Pacific Seafood Group would be assigned to a single processing group. All facilities would be assigned based on current relationships.
- 2) Divide processing groups into two subsets—large and small. For example, large processing units might be defined as those processing groups that account for more than one percent of total ex-vessel trawl groundfish purchases in any year. All receivers that are associated with a

¹⁹ An e-mail communication dated March 20, 2005 from Shannon Davis to Jim Seger indicated that Mr. Davis had obtained information about company affiliations for much of the shoreside buying and processing industry.

²⁰ According to the Pacific Seafood Web site (http://www.pacseafood.com/welcome.html), "since 1983 Pacific Group has expanded from one processing and one distribution facility to over 20 operating units."

²¹ http://www.bornstein.com/Locations.html

²² This section assumes that a definition of "processing" will be developed that unambiguously identifies processors eligible to receive QS. The current definitions included in the alternatives forwarded for analysis do not appear to meet this standard.

²³ Identification of processing groups would be done using secondary data and through the use of key informant interviews.

group that is defined as large would be considered large for purposes of the EIS analysis regardless of the amount of groundfish the individual facility purchased.

3) Group independent buyers into a single class.

This classification scheme would result in the following four processing classes of trawl-caught groundfish (including motherships):²⁴

- Large Shoreside Processing Groups (LSPG)—processing groups (processing facilities and associated buyers) that have accounted for more than X percent²⁵ of the ex-vessel value of shoreside processing of trawl groundfish in any given year.
- Small Shoreside Processing Groups (SSPG)—processing groups (processing facilities and associated buyers) that have never accounted for more than X percent²⁵ of the ex-vessel value of shoreside processing of trawl groundfish in any given year.
- Independent Buyers (IB)—receivers of groundfish that do not appear to meet the definition of a "processor" and do not appear to be associated with any processors through contractual or ownership linkages.²⁶
- Motherships (MS)—processing vessels that have participated as processor in the mothership allocation of Pacific whiting. They are identified in the NORPAC At-Sea data sets.

Earlier drafts of this document, as well the presentation made to the Trawl IQ Workshop on April 18, 2006, indicated that processing classes could include a geographic component, e.g., Large Washington Processors or Small California Processors. Upon further consideration, the Consulting Team concluded that if IFQ allocations to processors are included in the preferred alternative, the processing classes documented in the EIS should reflect the types of entities that would receive shares. Rather than depicting processors as independent facilities, the analysis should recognize that the majority of processing is undertaken by multi-facility companies with locations distributed throughout the West Coast. Notwithstanding this consideration, the profiles of shoreside processing classes in this chapter show the geographic distribution of processing facilities and buying stations.

3.6.2 Condition Indicators for Processors of Trawl Groundfish

Indicators of the historical and baseline conditions of processors of trawl groundfish, including motherships and shoreside processors, include but are not necessarily limited to the following:

- Number of processors groups, facilities and buying stations
- Total purchases of trawl-caught groundfish by species
- Ex-Vessel Prices Paid
- Distribution of purchases by month for trawl groundfish and other catch
- Processor categorization by seasonality and months of operation
- Relative dependency of West Coast trawl groundfish
- Relationships with harvesters

²⁴ It may also be useful to classify shoreside processors according to the number of their locations. The reason for this classification is that single-location processors (those with facilities only in one port) are less likely to move their buying activities to another port.

²⁵ This percentage would be fixed after processing group linkages are determined and data using the processing group definitions are examined

²⁶ Classification as an "independent buyer" would not necessarily be "proof" that the receiver is ineligible to receive QS. Actual eligibility would be determined during the QS application process once a trawl IFQ program was implemented. Nevertheless, the EIS analysis would make a reasonable effort to verify the classification.

- Distribution of facilities and buying stations by community
- Wholesale value of production
- Operating costs
- Net revenues
- Product types and amounts by species
- Product recovery rates by product and species
- Operating days per year
- Number of processing crew

3.6.3 Summary of Past and Present Conditions of Trawl Groundfish Processors

This section provides a summary of participation of all processors of trawl groundfish in the West Coast fisheries. Detailed descriptions of each processing class are provided in Sections 3.6.4 - 3.6.4.4. This summary emphasizes total participation and purchases of groundfish in terms of volume and exvessel value by species. The section includes comparisons between the situation in 2005 (baseline condition) and conditions in the historical period (1994-2005).

3.6.3.1 Number of Processor Groups, Facilities and Buying Stations

Table 3-66 summarizes the participation of trawl groundfish processors groups by processor class. For shoreside processors the table indicates the number of processor groups as well as the number of processing facilities and associated buyers.

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Processor Class				Ν	umber	of Grou	ups or F	acilitie	s			
Large Shoreside Processing Groups (LSPG)												
Processing Facilities												
Associated Buyers												
Small Shoreside Processing Groups (LSPG)												
Processing Facilities												
Associated Buyers												
Independent Buyers												
Motherships												

Table 3-66. Active Processors and Buyers by Processor Class, 1994-2005

Note: The sum of processing facilities and associated buyers will equal the total number of receivers.

Figure 3-8 shows the number of receivers of trawl groundfish by state. This includes all buyers, but may not include all processors if there are processors that are not also receivers. The figure is included to provide a perspective of the potential magnitude of the groundfish trawl processing sector.

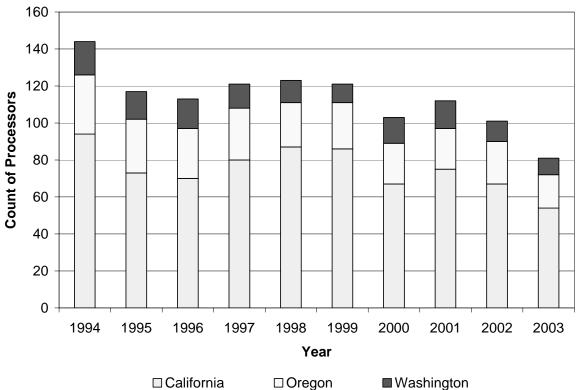


Figure 3-8. Number of Receivers of Trawl Groundfish by State, 1994-2003²⁷

Source: Data provided to the Consulting Team by Shannon Davis in October 2005.

 Table 3-67. Total Purchases of All Species (Groundfish and non-Groundfish) of Trawl Groundfish

 Processors and Buyers by Processor Class, 1994-2005

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Processor Class				Total E	x-Vess	el Valu	e (\$Mill	ions in	2005\$)			
Large Shoreside Processing Groups (LSPG)												
Processing Facilities												
Associated Buyers												
Small Shoreside Processing Groups (LSPG)												
Processing Facilities												
Associated Buyers												
Independent Buyers												
Motherships												

Note: Includes purchases of Alaska groundfish made by Motherships.

²⁷ Actual data in the EIS would use 1994-2005.

3.6.3.2 Relative Dependence on Trawl Groundfish

This section describes the relative dependence of Trawl Groundfish Processors on limited entry trawl fisheries compared to their dependence on other fisheries. Table 3-68 shows the relative dependence on limited entry trawl fisheries of all processors of limited entry trawl groundfish.

Tahla 3-68 Palativa Danandanc	y of Active Processors on Limited Entr	v Trawl Fisharias 1001-2005
Table 3-00. Relative Dependence	y of Active Processors on Linnieu Entr	y 11 awi risheries, 1994-2000

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
					Ex-Vesse	el Value (\$ Millions	s in 25 \$)				
LE Trawl Groundfish												
LE Fixed Gear Groundfish												
Open Access Groundfish												
Dungeness Crab												
Coastal Pelagics												
Salmon												
Other Fisheries												
All Fisheries												
					Perce	ent of Ex	-vessel V	/alue				
LE Trawl Groundfish												
LE Fixed Gear Groundfish												
Open Access Groundfish												
Dungeness Crab												
Coastal Pelagics												
Salmon												
Other Fisheries												
All Fisheries												
Note: "Other Fisheries" also include fisheries in											bove, b	ut

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
					Perce	ent of Ex	-Vessel \	/alue				
Large Shoreside Processi	ng Group	s (LSPG))									
LE Trawl Groundfish												
LE Fixed Gear Groundfish												
Open Access Groundfish												
Dungeness Crab												
Coastal Pelagics												
Salmon												
Other Fisheries												
Small Shoreside Processi	ng Group	s (LSPG)										
LE Trawl Groundfish												
LE Fixed Gear Groundfish												
Open Access Groundfish												
Dungeness Crab												
Coastal Pelagics												
Salmon												
Other Fisheries												
Independent Buyers												
LE Trawl Groundfish												
LE Fixed Gear Groundfish												
Open Access Groundfish												
Dungeness Crab												
Coastal Pelagics							,					
Salmon												
Other Fisheries												
Motherships												
LE Trawl Groundfish												
LE Fixed Gear Groundfish												
Open Access Groundfish												
Dungeness Crab												
Coastal Pelagics												
Salmon												
Other Fisheries												<u> </u>

Table 3-69. Relative Dependency of Active Processors on Limited Entry Trawl Fisheries by Processing Class, 1994-2005

Note: "Other Fisheries" includes not only those fisheries along the Pacific Coast that are not listed above, but also include fisheries in Alaska in which the trawl groundfish facilities have direct participation.

3.6.3.3 Total Purchases of Trawl-Caught Groundfish by Species

This section documents the total volume and ex-vessel value of trawl-caught groundfish purchases. Tables show volumes and values by species and year for all processors, and volumes and value by species for the historical period and 2005 by processing class.

Table 3-70. Total Purchases of Limited Entry Trawl Groundfish by Processor Class, 1994-2005

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Processor Class				Total E	x-Vess	el Valu	e (\$Mill	ions in	2005\$)			
Large Shoreside Processing Groups (LSPG)												
Processing Facilities												
Associated Buyers												
Small Shoreside Processing Groups (LSPG)												
Processing Facilities												
Associated Buyers												
Independent Buyers												
Motherships												

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	Total
Species					Traw	Ground	dfish Pu	rchases	5 (MT)				
Arrowtooth Flounder													
Bank Rockfish													
Black Rockfish OR-CA													
Black Rockfish WA													
Blackgill Rockfish													
Bocaccio Rockfish													
Canary Rockfish													
Chili/Eureka Rockfish													
Chilipepper Rockfish													
Cowcod													
Darkblotched Rockfish													
Dover Sole													
English Sole													
Lingcod													
Minor Rockfish (N)													
Other Flatfish													
Other Rockfish (N)													
Other Rockfish (S)													
Other Species													
Pacific Cod													
Pacific Ocean Perch													
Pacific Whiting													
Petrale Sole													
Redstripe Rockfish													
Sablefish													
Thornyhead (Lg.)													
Thornyhead (Sh.)													
Sharpchin Rockfish													
Shortbelly Rockfish													
Silvergrey Rockfish													
Splitnose Rockfish													
Widow Rockfish													
Yelloweye Rockfish													
Yellowmouth Rockfish													
Yellowtail Rockfish													

Table 3-71. Total Volume of Processor Purchases of Trawl Caught Groundfish by Species, 1994-2005

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	Total
Species		Ex	vesse	l Value	of Tra	wl Gro	undfish	Purch	ases (\$	\$1,000	in 2005	5\$)	
Arrowtooth Flounder													
Bank Rockfish													
Black Rockfish OR-CA													
Black Rockfish WA													
Blackgill Rockfish													
Bocaccio Rockfish													
Canary Rockfish													
Chili/Eureka Rockfish													
Chilipepper Rockfish													
Cowcod													
Darkblotched Rockfish	-												
Dover Sole													
English Sole													
Lingcod													2
Minor Rockfish (N)													
Other Flatfish													
Other Rockfish (N)													
Other Rockfish (S)													
Other Species													
Pacific Cod													
Pacific Ocean Perch													
Pacific Whiting													
Petrale Sole													
Redstripe Rockfish													
Sablefish													
Thornyhead (Lg.)													
Thornyhead (Sh.)													
Sharpchin Rockfish						0			ç	0			
Shortbelly Rockfish													
Silvergrey Rockfish													
Splitnose Rockfish													
Widow Rockfish													
Yelloweye Rockfish													
Yellowmouth Rockfish													
Yellowtail Rockfish													

Table 3-72. Total Ex-vessel Value of Processor Purchases of Trawl Caught Groundfish by Species, 1994-2005

Processor Class	LS	PG	SS	PG	I	В	N	IS	All Cl	asses
Species	(MT)	Percent	(MT)	Percent	(MT)	Percent	(MT)	Percent	(MT)	Percent
Arrowtooth Flounder										
Bank Rockfish										
Black Rockfish OR-CA										
Black Rockfish WA										
Blackgill Rockfish										
Bocaccio Rockfish										
Canary Rockfish										
Chili/Eureka Rockfish										
Chilipepper Rockfish										
Cowcod										
Darkblotched Rockfish										
Dover Sole										
English Sole										
Lingcod										
Minor Rockfish (N)										
Other Flatfish										
Other Rockfish (N)										
Other Rockfish (S)										
Other Species										
Pacific Cod										
Pacific Ocean Perch										
Pacific Whiting										
Petrale Sole										
Redstripe Rockfish										
Sablefish										
Thornyhead (Lg.)										ļ
Thornyhead (Sh.)										
Sharpchin Rockfish										
Shortbelly Rockfish										
Silvergrey Rockfish										
Splitnose Rockfish										
Widow Rockfish										
Yelloweve Rockfish										
Yellowmouth Rockfish										
Yellowtail Rockfish										

Table 3-73. Total Volume of Processo	r Purchases of Traw	I Groundfish by Species	1994-2005
	i i ai chacoc ci man	i er oananon wy opooroo	1771 2000

Processor Class	sor Class LSPG		SS	SPG		IB	<u> </u>	IS	All C	asses
Species	\$1,000	Percent	(MT)	Percent	(MT)	Percent	(MT)	Percent	(MT)	Percent
Arrowtooth Flounder										
Bank Rockfish										
Black Rockfish OR-CA										
Black Rockfish WA										
Blackgill Rockfish										
Bocaccio Rockfish										
Canary Rockfish										
Chili/Eureka Rockfish										
Chilipepper Rockfish										
Cowcod										
Darkblotched Rockfish										
Dover Sole										
English Sole										
Lingcod										
Minor Rockfish (N)										
Other Flatfish										
Other Rockfish (N)										
Other Rockfish (S)										
Other Species										
Pacific Cod										
Pacific Ocean Perch										
Pacific Whiting										
Petrale Sole										
Redstripe Rockfish										
Sablefish										
Thornyhead (Lg.)										
Thornyhead (Sh.)										
Sharpchin Rockfish										
Shortbelly Rockfish										
Silvergrey Rockfish										
Splitnose Rockfish										
Widow Rockfish										
Yelloweye Rockfish										
Yellowmouth Rockfish										
Yellowtail Rockfish										

Table 3-74. Total Ex-Vessel Value (in 2005\$) of Processor Purchases of Trawl Groundfish by Species, 2005

Processor Class	LSPG	SSPG	IB	MS	All Classes
Species		Average Ex-ves	sel Prices Paid (\$	۶/pound in 2005\$)
Arrowtooth Flounder					
Bank Rockfish					
Black Rockfish OR-CA					
Black Rockfish WA					
Blackgill Rockfish					
Bocaccio Rockfish					
Canary Rockfish					
Chili/Eureka Rockfish					
Chilipepper Rockfish					
Cowcod					
Darkblotched Rockfish					
Dover Sole					
English Sole					
Lingcod					
Minor Rockfish (N)					
Other Flatfish					
Other Rockfish (N)					
Other Rockfish (S)					
Other Species					
Pacific Cod					
Pacific Ocean Perch					
Pacific Whiting					
Petrale Sole					
Redstripe Rockfish					
Sablefish					
Thornyhead (Lg.)					
Thornyhead (Sh.)					
Sharpchin Rockfish					
Shortbelly Rockfish					
Silvergrey Rockfish					
Splitnose Rockfish					
Widow Rockfish					
Yelloweye Rockfish					
Yellowmouth Rockfish					
Yellowtail Rockfish					

Table 3-75. Average Ex-Vessel Prices Paid for Trawl Groundfish by Species and Processor Class, 1994-2005

Processor Class	LSPG	SSPG	IB	MS	All Classes
Species		Average Ex-ves	sel Prices Paid (\$	6/pound in 2005\$))
Arrowtooth Flounder					
Bank Rockfish					
Black Rockfish OR-CA					
Black Rockfish WA					
Blackgill Rockfish					
Bocaccio Rockfish					
Canary Rockfish					
Chili/Eureka Rockfish					
Chilipepper Rockfish					
Cowcod					
Darkblotched Rockfish					
Dover Sole					
English Sole					
Lingcod					
Minor Rockfish (N)					
Other Flatfish					
Other Rockfish (N)					
Other Rockfish (S)					
Other Species					
Pacific Cod					
Pacific Ocean Perch					
Pacific Whiting					
Petrale Sole					
Redstripe Rockfish					
Sablefish					
Thornyhead (Lg.)					
Thornyhead (Sh.)					
Sharpchin Rockfish					
Shortbelly Rockfish					
Silvergrey Rockfish					
Splitnose Rockfish					
Widow Rockfish					
Yelloweye Rockfish					
Yellowmouth Rockfish					
Yellowtail Rockfish					

Table 3-76. Average Ex-Vessel Prices Paid for Trawl Groundfish by Species and Processor Class, 2005

3.6.3.4 Distribution of Purchases

This section summarizes the distribution of trawl groundfish purchases by month over the historical period and in 2005 and summarizes ex-vessel prices paid by month. The distribution of purchases by month is a key indicator because under an IFQ program harvesters and processors will likely change their fishing patterns and purchasing patterns to minimize incidental catch of overfished species.

 Table 3-77. Number of Trawl Groundfish Landings by Month, 1994-2005

	Jan	Feb	Mar	Apr	Мау	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Processor Class		Number of Landings											
LSPG													
SSPG													
IB													
MS													
All Processors													

Note: Number of landing counts the number of fish-tickets in each month.

Table 3-78. Number of Trawl Groundfish Landing	s as a Percent of Total Landing I	by Month. 1994-2005
Tuble e 70. Tullber er trauf er en unanstr Eunan	s as a rerective of rotal Earlang	Sy month, 1771 2000

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec		
Processor Class		Number of Landings as a Percent of Total Landings												
LSPG														
SSPG														
IB														
MS														
All Processors														

Note: Number of landing counts the number of fish-tickets in each month.

	Jan	Feb	Mar	Apr	Мау	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Processor Class		Volume of Purchases (MT)											
LSPG													
SSPG													
IB													
MS													
All Processors													

Table 3-79. Trawl Groundfish Landings Volume by Month, 1994-2005

	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Processor Class	Volu	me of l	Purcha	ses by	Species	s as Pe	rcent o	f Total	Purcha	ises of	the Spe	ecies
LSPG												
SSPG												
IB												
MS												
All Processors												

northern@conomics inc.

	Jan	Feb	Mar	Apr	Мау	Jun	Jul	Aug	Sep	Oct	Nov	Dec	
Processor Class		Ex-Vessel Value of Purchases (\$Million in 2005\$)											
LSPG													
SSPG													
IB													
MS										0			
All Processors													

Table 3-81. Total Ex-Vessel Value Trawl Groundfish Landings by Month, 1994-2005

	Jan	Feb	Mar	Apr	Мау	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Processor Class	Val	ue of P	urchas	es by S	pecies	as per	cent of	Total F	Purchas	ses of tl	ne Spec	cies
LSPG												
SSPG												
IB												
MS												
All Processors												

	Jan	Feb	Mar	Apr	Мау	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Species				Ex-	Vessel	Price (\$/poun	d in 200	D5\$)			
Arrowtooth Flounder												
Bank Rockfish												
Black Rockfish OR-CA												
Black Rockfish WA												
Blackgill Rockfish												
Bocaccio Rockfish												
Canary Rockfish												
Chili/Eureka Rockfish												
Chilipepper Rockfish												
Cowcod												
Darkblotched Rockfish												
Dover Sole												
English Sole												
Lingcod												
Minor Rockfish (N)												
Other Flatfish												
Other Rockfish (N)												
Other Rockfish (S)												
Other Species												
Pacific Cod												
Pacific Ocean Perch												
Pacific Whiting												
Petrale Sole												
Redstripe Rockfish												
Sablefish												
Thornyhead (Lg.)												
Thornyhead (Sh.)												
Sharpchin Rockfish												
Shortbelly Rockfish												
Silvergrey Rockfish												
Splitnose Rockfish												
Widow Rockfish							····	y	·····			
Yelloweye Rockfish												
Yellowmouth Rockfish												
Yellowtail Rockfish											·····	

3.6.4 Past and Present Conditions of Trawl Groundfish Processor Classes

3.6.4.1 Large Shoreside Processing Groups

Large Shoreside Processing Groups (LSPG) include those processing groups (processing facilities and associated buyers) that have accounted for more than X percent of the ex-vessel value of shoreside processing of trawl groundfish in any given year.

The tables below provide an example of the types of information that will be presented for each processor class.

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Category						ssing Fa				5		
Processing Groups												
Processing Facilities												
Associated Buyers												

Table 3-84. Active Large Processors and Associated Buyers, 1994-2005

Note: The number of processing facilities and associated buyers will sum to the number of all receivers.

Table 3-85. Active Large Processors and Associated Bu	yers by Community, 1994-2005
---	------------------------------

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Community				Number	of Proces	ssing Fac	cilities/As	sociated	Buyers			
Community 1						-			-			
Community 2												

Table 3-86. Active Large Processors and Associated Buyers by 2-Month Period, 1994-2005

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Community				Number	of Proce	ssing Fac	ilities/As	sociated	Buyers			
Jan – Feb						-			-			
Mar – Apr												
May – Jun												
Jul – Aug												
Sep – Oct												
Nov – Dec												

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Species					Volum	ne of Pu	irchase	s (MT)				
Arrowtooth Flounder												
Bank Rockfish												
Black Rockfish OR-CA												
Black Rockfish WA												
Blackgill Rockfish												
Bocaccio Rockfish												
Canary Rockfish												
Chili/Eureka Rockfish												
Chilipepper Rockfish												
Cowcod												
Darkblotched Rockfish												
Dover Sole												
English Sole												
Lingcod												
Minor Rockfish (N)												
Other Flatfish												
Other Rockfish (N)												,
Other Rockfish (S)												
Other Species												
Pacific Cod												
Pacific Ocean Perch												
Pacific Whiting												
Petrale Sole												
Redstripe Rockfish												
Sablefish												
Thornyhead (Lg.)												
Thornyhead (Sh.)												
Sharpchin Rockfish												
Shortbelly Rockfish												
Silvergrey Rockfish												
Splitnose Rockfish												
Widow Rockfish												
Yelloweve Rockfish												
Yellowmouth Rockfish												
Yellowtail Rockfish												,

Table 3-87. Total Volume of Large Processor Purchases of Trawl Caught Groundfish by Species, 1994-2005

Species Ex-Versel Value (\$ Millions in 2005) Arrowooth Flounder Image: Anomaly and the section of the sect		1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Bank Rockfish Image: state s	Species				Ex-\	/essel `	Value (S	6 Millior	ns in 20	05\$)			
Black Rockfish OR-CA Image: State	Arrowtooth Flounder												
Black Rockfish OR-CA Image: state	Bank Rockfish												
Biackgill Rockfish Image: state st													
Blackgill Rockfish Image: state st	Black Rockfish WA												
Bocaccio Rockfish Image: Control of the sector of the	Blackgill Rockfish												
Chil/Eureka Rockfish Image: Chil/Eureka Rockfish Image: Chil/Eureka Rockfish Chillpepper Rockfish Image: Chil/Eureka Rockfish Image: Chil/Eureka Rockfish Darkblotched Rockfish Image: Chil/Eureka Rockfish Image: Chil/Eureka Rockfish Dover Sole Image: Chil/Eureka Rockfish Image: Chil/Eureka Rockfish Dover Sole Image: Chil/Eureka Rockfish Image: Chil/Eureka Rockfish English Sole Image: Chil/Eureka Rockfish Image: Chil/Eureka Rockfish Lingcod Image: Chil/Eureka Rockfish Image: Chil/Eureka Rockfish Minor Rockfish (N) Image: Chil/Eureka Rockfish Image: Chil/Eureka Rockfish Other Flaftish Image: Chil/Eureka Rockfish Image: Chil/Eureka Rockfish Other Rockfish (N) Image: Chil/Eureka Rockfish Image: Chil/Eureka Rockfish Other Rockfish (N) Image: Chil/Eureka Rockfish Image: Chil/Eureka Rockfish Other Rockfish (S) Image: Chil/Eureka Rockfish Image: Chil/Eureka Rockfish Pacific Cod Image: Chil/Eureka Rockfish Image: Chil/Eur													
Chil/Eureka Rockfish Image: Chil/Eureka Rockfish Image: Chil/Eureka Rockfish Chillpepper Rockfish Image: Chil/Eureka Rockfish Image: Chil/Eureka Rockfish Darkblotched Rockfish Image: Chil/Eureka Rockfish Image: Chil/Eureka Rockfish Dover Sole Image: Chil/Eureka Rockfish Image: Chil/Eureka Rockfish Dover Sole Image: Chil/Eureka Rockfish Image: Chil/Eureka Rockfish English Sole Image: Chil/Eureka Rockfish Image: Chil/Eureka Rockfish Lingcod Image: Chil/Eureka Rockfish Image: Chil/Eureka Rockfish Minor Rockfish (N) Image: Chil/Eureka Rockfish Image: Chil/Eureka Rockfish Other Flaftish Image: Chil/Eureka Rockfish Image: Chil/Eureka Rockfish Other Rockfish (N) Image: Chil/Eureka Rockfish Image: Chil/Eureka Rockfish Other Rockfish (N) Image: Chil/Eureka Rockfish Image: Chil/Eureka Rockfish Other Rockfish (S) Image: Chil/Eureka Rockfish Image: Chil/Eureka Rockfish Pacific Cod Image: Chil/Eureka Rockfish Image: Chil/Eur	Canary Rockfish												
Chilipepper Rockfish Image: Constraint of the sector	Chili/Eureka Rockfish												
Darkblotched Rockfish Image: Constraint of the sector													
Darkblotched Rockfish Dover Sole English Sole English Sole Lingcod Minor Rockfish (N) Other Flatfish Other Rockfish (S) Other Rockfish (S) Other Species Pacific Cod Pacific Cod Pacific Cod Pacific Cod Pacific Rockfish Sablefish Thornyhead (Lg.) Thornyhead (Sh.) Shrbelly Rockfish Silvergrey Rockfish Silvergrey Rockfish Vidow Rockfish Vidow Rockfish Pallowye Rockfish </td <td></td> <td>0</td> <td></td>		0											
Dover SoleImage: sole	Darkblotched Rockfish												
LingcodImage: state sta													
LingcodImage: state sta	English Sole						•••••						
Other FlatfishImage: Constraint of the sector o													
Other FlatfishImage: Constraint of the sector o	Minor Rockfish (N)												
Other Rockfish (N)Image: Constraint of the section of th	Other Flatfish												
Other Rockfish (S) Image: Section of the secti													
Other SpeciesImage: Constraint of the sector of							0						
Pacific Cod Image: Cod in the constraint of th													
Pacific Ocean Perch Image: Comparison of the c	Pacific Cod												
Pacific Whiting Image: Constraint of the second seco	Pacific Ocean Perch												
Petrale SoleImage: Constraint of the sector of													
Redstripe Rockfish Image: Sablefish Sablefish Image: Sablefish Thornyhead (Lg.) Image: Sablefish Thornyhead (Sh.) Image: Sablefish Sharpchin Rockfish Image: Sablefish Sharpchin Rockfish Image: Sablefish Shortbelly Rockfish Image: Sablefish Silvergrey Rockfish Image: Sablefish Splitnose Rockfish Image: Sablefish Yelloweye Rockfish Image: Sablefish Yellowmouth Rockfish Image: Sablefish	Petrale Sole	0					0						
SablefishImage: Constraint of the sector of the													
Thornyhead (Sh.) Image: Constraint of the sector of													
Thornyhead (Sh.) Image: Constraint of the sector of	Thornyhead (Lg.)						•						
Shortbelly Rockfish Silvergrey Rockfish Splitnose Rockfish Widow Rockfish Yelloweye Rockfish Yellowmouth Rockfish													
Silvergrey Rockfish Image: Constraint of the sector of	Sharpchin Rockfish												
Silvergrey Rockfish Splitnose Rockfish Widow Rockfish Yelloweye Rockfish Yellowmouth Rockfish	Shortbelly Rockfish												
Splitnose Rockfish Image: Constraint of the second secon	Silvergrey Rockfish						1						
Widow Rockfish													
Yelloweye Rockfish Yellowmouth Rockfish	Widow Rockfish												
Yellowmouth Rockfish	Yelloweve Rockfish												
Yellowtail Rockfish													
	Yellowtail Rockfish	1											

Table 3-88. Ex-Vessel Value of Large Processor Purchases by Species, 1994-2005

	Jan	Feb	Mar	Apr	Мау	Jun	Jul	Aug	Sep	Oct	Nov	Dec
Species				Ex-	Vessel	Prices	(\$/poun	d in 200	05\$)			
Arrowtooth Flounder												
Bank Rockfish										-		
Black Rockfish OR-CA												
Black Rockfish WA												
Blackgill Rockfish												
Bocaccio Rockfish												
Canary Rockfish												
Chili/Eureka Rockfish												
Chilipepper Rockfish												
Cowcod												
Darkblotched Rockfish												
Dover Sole												
English Sole												
Lingcod												
Minor Rockfish (N)												
Other Flatfish												
Other Rockfish (N)												
Other Rockfish (S)												
Other Species												
Pacific Cod												
Pacific Ocean Perch												
Pacific Whiting												
Petrale Sole												
Redstripe Rockfish												
Sablefish												
Thornyhead (Lg.)												
Thornyhead (Sh.)												
Sharpchin Rockfish												
Shortbelly Rockfish												
Silvergrey Rockfish												
Splitnose Rockfish												
Widow Rockfish												
Yelloweye Rockfish												
Yellowmouth Rockfish												
Yellowtail Rockfish												

Table 3-89. Ex-Vessel Price Paid by Large Shoreside Processors by Species, 1994-2005

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Species				Ex-	Vessel	Prices	(\$/poun	d in 20	05\$)			
Arrowtooth Flounder												
Bank Rockfish												
Black Rockfish OR-CA												
Black Rockfish WA												
Blackgill Rockfish	-											
Bocaccio Rockfish												
Canary Rockfish												
Chili/Eureka Rockfish												
Chilipepper Rockfish												
Cowcod												
Darkblotched Rockfish												
Dover Sole												
English Sole												
Lingcod												
Minor Rockfish (N)												
Other Flatfish												
Other Rockfish (N)												
Other Rockfish (S)	-											
Other Species												
Pacific Cod												
Pacific Ocean Perch												
Pacific Whiting												
Petrale Sole												
Redstripe Rockfish												
Sablefish												
Thornyhead (Lg.)												
Thornyhead (Sh.)												
Sharpchin Rockfish												
Shortbelly Rockfish												
Silvergrey Rockfish												
Splitnose Rockfish				-								
Widow Rockfish												
Yelloweye Rockfish												
Yellowmouth Rockfish												
Yellowtail Rockfish	1											

Table 3-90. Ex-Vessel Price Paid by Large Shoreside Processors by Species, 1994-2005

	Fresh Fillet	Frozen Fillet	Frozen H&G	Frozen Headed	Surimi	Other	Total
Species			Pi	roduct Weight (MT))		
Arrowtooth Flounder							
Bank Rockfish							
Black Rockfish OR-CA							
Black Rockfish WA							
Blackgill Rockfish							
Bocaccio Rockfish							
Canary Rockfish							
Chili/Eureka Rockfish							
Chilipepper Rockfish							
Cowcod							
Darkblotched Rockfish							
Dover Sole							
English Sole							
Lingcod							
Minor Rockfish (N)							
Other Flatfish							
Other Rockfish (N)							
Other Rockfish (S)							
Other Species							
Pacific Cod							
Pacific Ocean Perch							
Pacific Whiting							
Petrale Sole							
Redstripe Rockfish							
Sablefish							
Thornyhead (Lg.)							
Thornyhead (Sh.)							
Sharpchin Rockfish							
Shortbelly Rockfish							
Silvergrey Rockfish							
Splitnose Rockfish							
Widow Rockfish							
Yelloweye Rockfish							
Yellowmouth Rockfish							
Yellowtail Rockfish							
Total of All Species							

Table 3-91. Product Types and Volume of Large Shoreside Processors by Species, 2005

Note: These data will be estimated based on key informant interviews and total landings by species. It is likely only 2005 information will be presented because product data are not regularly collected. We also note that information of this type may not be attainable for all classes of processors.

Creater	Fresh Fillet	Frozen Fillet	Frozen H&G	Frozen Headed	Surimi	Other	Total
Species			wnoiesa	le Value (\$!,0000 ir I	1 2005\$) 	1	•
Arrowtooth Flounder							
Bank Rockfish							
Black Rockfish OR-CA							
Black Rockfish WA							
Blackgill Rockfish							
Bocaccio Rockfish							
Canary Rockfish							
Chili/Eureka Rockfish							
Chilipepper Rockfish							ç
Cowcod							
Darkblotched Rockfish							
Dover Sole							
English Sole							
Lingcod							
Minor Rockfish (N)							
Other Flatfish							
Other Rockfish (N)							
Other Rockfish (S)							
Other Species							
Pacific Cod							
Pacific Ocean Perch							•
Pacific Whiting							
Petrale Sole				••••••			
Redstripe Rockfish							
Sablefish							
Thornyhead (Lg.)							
Thornyhead (Sh.)							
Sharpchin Rockfish Shortbelly Rockfish							
Silvergrey Rockfish							
Splitnose Rockfish							
Widow Rockfish							
Yelloweye Rockfish							
Yellowmouth Rockfish							
Yellowtail Rockfish							
Total of All Species							

Table 3-92. Wholesale Value of Large Shoreside Processors by Product and Species, 2005

Note: These data will be estimated based on key informant interviews and total landings by species. It is likely only 2005 information will be presented because product data are not regularly collected. We also note that information of this type may not be attainable for all classes of processors.

Figure 3-9 Landings of All Species of Large Shoreside Processors by Month, 1994-2005

This figure would be a line chart (one line) showing the volume of landings of all species by month from 1994-2005. Similar charts would be included showing landings volumes by individual species.

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
					Ex-Vesse	el Value (\$ Millions	s in 25 \$)				
LE Trawl Groundfish												
LE Fixed Gear Groundfish												
Open Access Groundfish												
Dungeness Crab												
Coastal Pelagics												
Salmon												
Other Fisheries												
All Fisheries												
					Perce	ent of Ex	-vessel V	/alue				
LE Trawl Groundfish												
LE Fixed Gear Groundfish												
Open Access Groundfish												
Dungeness Crab												
Coastal Pelagics												
Salmon												
Other Fisheries												
All Fisheries												

Table 3-94. Annual Operating Days and Employment Estimates of Large Shoreside Processors, 1994-2005

Category	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Operating Days												
Number of Facilities												
No. of Ownership Entities												
Employment Estimate												

Table 3-95. Average Estimated Operating Costs, Wholesale Value of Production and Net Revenues of Large Shoreside Processors, 1994-2005

Category	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Payments to Labor												
Total Operating Costs												
Wholesale Value												
Net Revenues												

3.6.4.2 Small Shoreside Processing Groups

Small Shoreside Processing Groups (SSPG) include those processing groups (processing facilities and associated buyers) that have never accounted for more than X percent of the ex-vessel value of shoreside processing of trawl groundfish in any given year.

This section will contain a set of tables and figures similar to those provided for the Large Shoreside Processing Groups.

3.6.4.3 Independent Buyers

Independent buyers include those receivers of groundfish that do not meet the definition of "processor" and are not associated with any processors through contractual or ownership linkages.

This section will contain a set of tables and figures similar to those provided for the Large Shoreside Processing Groups. Because independent buyers do not actually process groundfish, process product information will not be included.

3.6.4.4 Motherships

This section provides a profile of motherships associated with the West Coast groundfish trawl fishery. In addition, processed products and wholesale values are discussed. Sources for some of the information referenced in this section have not yet been identified; consequently, the EIS analysis may have to create and administer instruments for acquiring or estimating the data.

The tables below provide an example of the types of information presented in this section.

1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005

•											
•										-	
	-										

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Species					Volum	ne of Pu	irchase	s (MT)				
Arrowtooth Flounder												
Bank Rockfish												
Black Rockfish OR-CA												
Black Rockfish WA												
Blackgill Rockfish												
Bocaccio Rockfish												
Canary Rockfish												
Chili/Eureka Rockfish												
Chilipepper Rockfish												
Cowcod												
Darkblotched Rockfish												
Dover Sole												
English Sole												
Lingcod												
Minor Rockfish (N)												
Other Flatfish												
Other Rockfish (N)												
Other Rockfish (S)												
Other Species												
Pacific Cod												
Pacific Ocean Perch												
Pacific Whiting												
Petrale Sole												
Redstripe Rockfish												
Sablefish												
Thornyhead (Lg.)												
Thornyhead (Sh.)												
Sharpchin Rockfish												
Shortbelly Rockfish												
Silvergrey Rockfish												
Splitnose Rockfish												
Widow Rockfish												
Yelloweye Rockfish												
Yellowmouth Rockfish												
Yellowtail Rockfish												

Table 3-97, Total Volume of Purchases of Tr	awl Caught Groundfish by Species, 1994-2005
	awi baagin bi banansii by species, 1774 2005

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Species				Ex-\	/essel	Value (S	§ Millior	ns in 20	05\$)			
Arrowtooth Flounder												
Bank Rockfish	0							0				
Black Rockfish OR-CA												(
Black Rockfish WA												
Blackgill Rockfish	0					0		0				
Bocaccio Rockfish												
Canary Rockfish												
Chili/Eureka Rockfish												(
Chilipepper Rockfish												
Cowcod	o							••••••				
Darkblotched Rockfish												
Dover Sole	1											
English Sole												
Lingcod												
Minor Rockfish (N)	•							•				
Other Flatfish												
Other Rockfish (N)												
Other Rockfish (S)	0					0		0				
Other Species												
Pacific Cod												
Pacific Ocean Perch												
Pacific Whiting												
Petrale Sole	0											,
Redstripe Rockfish												
Sablefish												
Thornyhead (Lg.)												
Thornyhead (Sh.)												
Sharpchin Rockfish												,
Shortbelly Rockfish												[
Silvergrey Rockfish												
Splitnose Rockfish												
Widow Rockfish	I											
Yelloweye Rockfish	2											
Yellowmouth Rockfish												
Yellowtail Rockfish												

Table 3-98. Ex-Vessel Value of Mothership Purchases by Species, 1994-2005

	Fresh Fillet	Frozen Fillet	Frozen H&G	Frozen Headed	Surimi	Other	Total
Species			Pi	roduct Weight (MT))		
Arrowtooth Flounder							
Bank Rockfish					ç		
Black Rockfish OR-CA							
Black Rockfish WA							
Blackgill Rockfish							
Bocaccio Rockfish							
Canary Rockfish							
Chili/Eureka Rockfish							
Chilipepper Rockfish							
Cowcod							
Darkblotched Rockfish							
Dover Sole							
English Sole							
Lingcod							
Minor Rockfish (N)							
Other Flatfish							
Other Rockfish (N)							
Other Rockfish (S)							
Other Species							
Pacific Cod							
Pacific Ocean Perch							
Pacific Whiting							
Petrale Sole							
Redstripe Rockfish							
Sablefish							
Thornyhead (Lg.)							
Thornyhead (Sh.)							
Sharpchin Rockfish							
Shortbelly Rockfish							
Silvergrey Rockfish							
Splitnose Rockfish							
Widow Rockfish							
Yelloweye Rockfish							
Yellowmouth Rockfish							
Yellowtail Rockfish							
Total of All Species							

Table 3-99. Product Types and Volume Produced by Motherships by Species, 2005

Note: These data will be estimated based on key informant interviews and total landings by species. It is likely only 2005 information will be presented because product data are not regularly collected. Since motherships participate primarily in the whiting fishery, the table may be rearranged.

	Fresh Fillet	Frozen Fillet		Frozen Headed	Surimi	Other	Total
Species			Wholesa	le Value (\$!,0000 in I	2005\$)	1	
Arrowtooth Flounder							
Bank Rockfish							
Black Rockfish OR-CA							
Black Rockfish WA							
Blackgill Rockfish							
Bocaccio Rockfish							
Canary Rockfish							
Chili/Eureka Rockfish							
Chilipepper Rockfish							
Cowcod							
Darkblotched Rockfish							
Dover Sole							
English Sole							
Lingcod							
Minor Rockfish (N)							
Other Flatfish							
Other Rockfish (N)							
Other Rockfish (S)							
Other Species							
Pacific Cod							
Pacific Ocean Perch							
Pacific Whiting							
Petrale Sole							
Redstripe Rockfish							
Sablefish							
Thornyhead (Lg.)							
Thornyhead (Sh.)							
Sharpchin Rockfish							
Shortbelly Rockfish							
Silvergrey Rockfish							
Splitnose Rockfish							
Widow Rockfish							
Yelloweye Rockfish							
Yellowmouth Rockfish				9			0
Yellowtail Rockfish							
Total of All Species							

Table 3-100. Wholesale Value of Motherships by Product and Species, 2005

Note: These data will be estimated based on key informant interviews and total landings by species. It is likely only 2005 information will be presented because product data are not regularly collected. Since motherships participate primarily in the whiting fishery, the table may be rearranged.

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
					Ex-Vesse	l Value (\$ Millions	in 25 \$)				
LE Trawl Groundfish												
Other West Coast												
Alaska Fisheries												
All Fisheries												
					Perce	ent of Ex-	-vessel V	alue				
LE Trawl Groundfish												
Other West Coast												
Alaska Fisheries												
All Fisheries												

Table 3-101. Relative Dependency of Motherships on Limited Entry Trawl Fisheries, 1994-2005

Note: Information for Alaska fisheries will be obtained from NOAA Fisheries Alaska Regional Office.

Table 3-102. Average Estimated Operating Costs and Net Revenues of Motherships in the West CoastGroundfish Trawl Fishery, 1994-2005

Category	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	Total
Number of operating days													
Number of crew													
Payments to labor (2005 \$)													
Operating Costs (2005 \$)													
Wholesale Value (2005 \$)													
Net Revenues (2005 \$)													

Note: Cost and revenue information may only be available for 2005.

3.7 Non-Trawl Commercial Harvesters

While non-trawl vessels and their owners and crew would not be directly affected by a trawl IFQ program, they may be indirectly affected in several ways. The most obvious indirect effects are the economic impacts of spillovers resulting from fleet consolidation. A trawl IFQ program is likely to lead to fleet consolidation. Those that leave the fishery and are able to keep their vessels may expand their effort in other fisheries to which they access. For example, a limited entry trawl permit owner that also holds a limited entry fixed gear permit may choose to sell the initial allocation of IFQs and use the money to expand effort in the limited entry fixed gear fishery for nonsablefish species. If the total OY available for the limited entry fixed gear fishery is set, this additional investment could have a negative impact on existing participants in the limited entry fixed gear fishery. In addition, a trawl IFQ program may allow trawl QP to be utilized in the fixed gear fisheries by fixed gear vessels that acquire surplus trawl permits or by trawl vessels switching to increase their use of fixed gear.

Non-trawl fisheries will also be affected indirectly because the management action taken with respect to the trawl fleet is likely to influence future actions taken with respect to non-trawl vessels. The analysis of the non-trawl segment of the fish harvesting component will require further specification of non-trawl categories, e.g., limited entry longline vessels, non-licensed vessels, dive fisheries, etc. Vessel categories previously employed in Council models of the fishery will form the basis of this specification.²⁸

3.7.1 Potentially Affected Non-Trawl Commercial Harvesters

Several classes of non-trawl commercial harvesters are included in the analysis based primarily on the non-trawl fisheries in which vessels with trawl permits currently operate or may potentially operate under a trawl IFQ program. While final specification of the potentially affected non-trawl harvesters will be made in Phase 2, the following represents an initial list of these indirectly affected harvesters.

- Limited entry fixed gear harvesters
- Directed open access fixed gear harvesters
- Exempted trawl incidental open access harvesters
- Dungeness crab harvesters
- Coastal pelagic species harvesters
- Salmon troll harvesters
- Highly migratory species harvesters

3.7.2 Condition Indicators for Non-Trawl Commercial Harvesters

Indicators of the historical and baseline conditions of non-trawl commercial harvesters are similar to those described for trawl catcher vessels, but because these vessels are likely to be only indirectly affected, the number of indicators has been reduced to the following:

- Number of active operations
- Landings, ex-vessel revenues and ex-vessel prices by species
- Distribution of landings by month
- Geographic distribution of effort
- Distribution of ex-vessel revenue by vessel owner residence
- Deliveries to trawl groundfish processors and non-trawl groundfish processors (no trawl landings).

3.7.3 Past and Present Conditions of Non-Trawl Commercial Harvester Classes

3.7.3.1 Limited Entry Fixed Gear Harvesters

3.7.3.1.1 Participation and Landings

Table 3-103 shows the number of active operations in the limited entry fixed gear fishery. An operation is defined by unique vessel/permit combinations. It should be noted that in the limited entry fixed gear fishery, permit stacking is used to increase the potential harvest of an operation. Therefore there may be several permits associated with a particular vessel. It is presumed however that in each instance of stacked permits, there is a "dominant permit" that is regularly associated with the vessel. Numbers of latent permits are also included.

²⁸ Radtke and Davis (2003) define 12 non-trawl fish harvesting vessels types in the Fishery Economic Assessment Model (FEAM)

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
					Number	of Opera	ations or	Permits				
Active FG only Operations												
Active FG & Trawl Operations												
Latent Permits												
All Permits												

Table 3-103. Number of Active Operations in the Limited Entry Fixed Gear Fishery, 1994-2005

Table 3-104. Volume of Landings in the Limited Entry Fixed Gear Fishery by Species, 1994-2005

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	Total
Species						Total L	.anding	gs (MT)				
Arrowtooth Flounder													
Bank Rockfish													
Black Rockfish OR-CA													
Black Rockfish WA													
Blackgill Rockfish													
Bocaccio Rockfish													
Canary Rockfish													
Chili/Eureka Rockfish													
Chilipepper Rockfish													
Cowcod													
Darkblotched Rockfish													
Dover Sole													
English Sole													
Lingcod													
Minor Rockfish (N)													
Other Flatfish													
Pacific Cod													
Pacific Ocean Perch													
Pacific Whiting													
Petrale Sole													
Redstripe Rockfish													
Sablefish													
Thornyhead (Lg.)													
Thornyhead (Sh.)													
Sharpchin Rockfish													
Shortbelly Rockfish													
Silvergrey Rockfish													
Splitnose Rockfish													
Widow Rockfish													
Yelloweye Rockfish													
Yellowmouth Rockfish													
Yellowtail Rockfish													

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	Total
Species				Tot	al Ex-V	essel	Value	(\$1,00) in 20	05\$)			
Arrowtooth Flounder													
Bank Rockfish													
Black Rockfish OR-CA													
Black Rockfish WA													
Blackgill Rockfish													
Bocaccio Rockfish													
Canary Rockfish													
Chili/Eureka Rockfish													
Chilipepper Rockfish													
Cowcod													
Darkblotched Rockfish													
Dover Sole													
English Sole													
Lingcod													
Minor Rockfish (N)													
Other Flatfish													
Other Rockfish (N)													
Other Rockfish (S)													
Other Species													
Pacific Cod													
Pacific Ocean Perch													
Pacific Whiting													
Petrale Sole													
Redstripe Rockfish													
Sablefish													
Thornyhead (Lg.)													
Thornyhead (Sh.)													
Sharpchin Rockfish									ç	0	0		
Shortbelly Rockfish													
Silvergrey Rockfish													
Splitnose Rockfish										[ľ
Widow Rockfish													
Yelloweye Rockfish													
Yellowmouth Rockfish													
Yellowtail Rockfish													

Table 3-105. Ex-Vessel Value in the Limited Entry Fixed Gear Fishery by Species, 1994-2005

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	Total
Species				E	x-Vess	sel Pric	e (\$/p	ound i	n 2005	\$)			
Arrowtooth Flounder													
Bank Rockfish													
Black Rockfish OR-CA													
Black Rockfish WA													
Blackgill Rockfish													
Bocaccio Rockfish													
Canary Rockfish													
Chili/Eureka Rockfish													
Chilipepper Rockfish													
Cowcod													
Darkblotched Rockfish													
Dover Sole													
English Sole													
Lingcod													
Minor Rockfish (N)													
Other Flatfish													
Other Rockfish (N)													
Other Rockfish (S)													
Other Species													
Pacific Cod													
Pacific Ocean Perch													
Pacific Whiting													
Petrale Sole													
Redstripe Rockfish													
Sablefish													
Thornyhead (Lg.)													
Thornyhead (Sh.)													
Sharpchin Rockfish													
Shortbelly Rockfish													
Silvergrey Rockfish													
Splitnose Rockfish													
Widow Rockfish													
Yelloweye Rockfish													
Yellowmouth Rockfish													
Yellowtail Rockfish													

Table 3-106. Ex-Vessel Prices in the Limited Entry Fixed Gear Fishery by Species, 1994-2005

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
				Тс	tal Ex-Ve	essel Val	ue (\$1,00	0 in 200	5\$)			
FG only Operations												
FG & Trawl Operations												
All Operations												

Table 3-107. Total Ex-Vessel Value of Landings in the Limited Entry Fixed Gear Fishery, 1994-2005

Table 3-108. Average Ex-Vessel Value per Operation in the Limited Entry Fixed Gear Fishery, 1994-2005

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
			Av	erage E	x-Vessel	Value p	er Vesse	el (\$1,00	0 in 200	5\$)		
FG only Operation												
FG & Trawl Operations												
All Operations												

3.7.3.1.2 Distribution of Landings

Figure 3-10 shows landings by month of major fixed gear species from 1994-2005. On average, over 90 percent of the revenue in the fixed gear fishery is represented in the figures. The temporal distribution of fishing effort will be an important indicator in the ability of trawl IFQ holders to split time between the fixed gear and trawl fisheries. If the timings of the fisheries coincide, the probability that vessels will participate in both fisheries diminishes.

Figure 3-10. Landings by Species and Month in the Limited Entry Fixed Gear Fishery, 1994-2005

3.7.3.1.3 Geographic Distribution of Fishing Effort

This section discusses the geographic distribution of effort in the limited entry fixed gear fishery. It is anticipated that the extent that the geographic distribution of effort in fixed gear fishery overlaps with the geographic distribution of effort in the trawl fishery, the greater the likelihood that the alternatives will affect the limited entry fixed gear fishery.

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	Total
Species						Volume	of Landi	ngs (MT)					
Vancouver													
Columbia													
Eureka													
Monterey													
Conception													

Table 3-109. Volume of Landings Limited Entry Fixed Gear Fishery by Management Area, 1994-2005.

Table 3-110. Ex-Vessel Value of Landings in the Limited Entry Fixed Gear Fishery by Management Area,1994-2005.

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	Total
Species					Ex-	Vessel V	alue (\$1,0	000 in 20	05\$)				
Vancouver													
Columbia													
Eureka													
Monterey													
Conception													

3.7.3.1.4 Distribution of Ex-vessel Revenue by Residence of Vessel Owners

A description of the distribution of ex-vessel revenue by the community of residence of limited entry fixed gear operations allows community impacts to be identified.

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005
Community					Ex-Vess	el Value	(\$1,000 iı	า 2005\$)				
Community 1												
Community 2												
Community XXX												

3.7.3.2 Directed Open Access Fixed Gear Harvesters

This section will describe the directed open access fixed gear harvesting sector. The format of this section and the information provided will be similar to the section for limited entry fixed gear fleet.

3.7.3.3 Exempted Trawl Incidental Open Access Harvesters

This section will describe the exempted trawl open access harvesting sector. The format of this section and the information provided will be similar to the section for limited entry fixed gear fleet

3.7.3.4 Dungeness Crab Harvesters

This section will describe the Dungeness crab harvesting sector. The format of this section will be similar to the section for limited entry fixed gear fleet except that the information presented will be limited to vessel count, location of landings, and season of landings.

3.7.3.5 Highly Migratory Species Harvesters

This section will describe the highly migratory species harvesting sector. The format of this section will be similar to the section for limited entry fixed gear fleet except that the information presented will be limited to vessel count, location of landings, and season of landings.

3.7.3.6 Salmon Troll Harvesters

This section will describe the commercial salmon troll harvesting sector. The format of this section will be similar to the section for limited entry fixed gear fleet except that the information presented will be limited to vessel count, location of landings, and season of landings.

3.8 Buyers and Processors That Do Not Purchase Trawl Groundfish

This section describes buyers and processors that do not purchase trawl groundfish (hereafter referred to as Other Buyers and Processors). Because Other Buyers and Processors are not involved in the West Coast groundfish trawl fishery they will not be directly affected by a trawl IFQ program. However, these buyers and processors would be indirectly affected if a trawl IFQ program restricts their ability to enter the trawl-caught groundfish processing market in the future.²⁹ They would also be affected if higher profits for processors of trawl groundfish encourage these processors to increase their level of activity in non-trawl groundfish fisheries or non-groundfish fisheries.

3.8.1 Condition Indicators for Other Buyers and Processors

Indicators of the historical and baseline conditions of Other Buyers and Processors include but are not necessarily limited to the following:

- Number of affected buyers and facilities
- Total purchases by fishery
- Geographic distribution of participation

3.8.2 Past and Present Conditions of Other Buyers and Processors

Figure 3-11 shows the total number of receivers of West Coast harvests. Other Buyers and Processors (labeled as BPnoTG in the figure) are those receivers that did not purchase trawl groundfish, while trawl receivers (labeled as BPwTG in the figure) include all receivers that purchased trawl groundfish. The number of BPnoTG ranged from 1,172 in 1996 to 1,334 in 2002. The number of BPwTG ranged from 150 in 1994 to 81 in 2003.

²⁹ Because entry into the trawl fishery by harvesting vessels is already limited, non-trawl vessels are generally only indirectly affected by the alternatives.

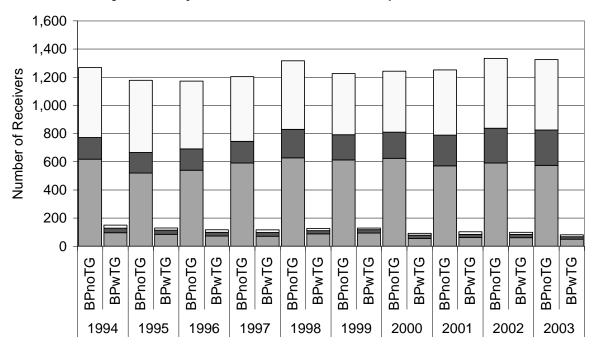


Figure 3-11. Buyers and Processors of West-Coast Species, 1994-2003

□ California ■ Oregon □ Washington

Note: BPnoTG are buyers and processors that do not purchase trawl groundfish; TGwBP are trawl groundfish buyers and processors.

Although Other Buyers and Processors are discussed as a single group, the information provided shows the geographic distribution of participation. Table 3-112 through Table 3-119 summarize the historical and baseline conditions of Other Buyers and Processors in terms of various indicators.

Year	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	Total
Fishery						Ņ	umber						
Groundfish													
Coastal pelagic													
Crab/lobster													
Halibut													
Highly migratory													
Other													
Salmon													
Sea urchins													
Shrimp													
Total													

Table 3-112. Participation of Other Buyers and Processors by Fishery, 1994-2005

Year	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	Total
Fishery						Land	ings (MT)					
Groundfish													
Coastal pelagic													
Crab/lobster													
Halibut													
Highly migratory													
Other													
Salmon													
Sea urchins													
Shrimp													
Total													

Table 3-113. Volume of Landings of Other Buyers and Processors by Fishery, 1994-2005

Table 3-114. Ex-Vessel Value of Other Buyers and Processors by Fishery, 1994-2005

Year	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	Total
Fishery	Ex-Vessel Value (\$1,000 in 2005\$)												
Groundfish													
Coastal pelagic													
Crab/lobster													
Halibut													
Highly migratory													
Other													
Salmon													
Sea urchins													
Shrimp													
Total													

Table 3-115. Relative Market Share of Other Buyers and Processors by Fishery, 1994-2005

Year	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	Total
Fishery	Ex-Vessel Value as a Percent of Total Value												
Groundfish								L					
Coastal pelagic													
Crab/lobster				ļ									
Halibut													
Highly migratory													
Other													
Salmon													
Sea urchins				ļ		ļ		ļ		ļ			
Shrimp													
Total													

Note: This table uses total ex-vessel value in the fishery as an indicator of market share. The total market is defined as the value of purchases of both BPnoTG P and trawl groundfish processors in a given year.

Region	No. WA	So. WA	No. OR	So. OR	No. CA	So. CA	Total
Fishery				Number			
Groundfish							
Coastal pelagic							
Crab/lobster							
Halibut							
Highly migratory							
Other							
Salmon							
Sea urchins							
Shrimp							
Total							

Table 3-116. Participation of Other Buyers and Processors by Fishery and Region, 1994-2005

Table 3-117. Participation of Other Buyers and Processors by Fishery and Region, 2005

Region	No. WA	So. WA	No. OR	So. OR	No. CA	So. CA	Total						
Fishery		Number											
Groundfish													
Coastal pelagic													
Coastal pelagic Crab/lobster													
Halibut													
Highly migratory													
Other													
Salmon													
Sea urchins													
Shrimp													
Total													

Table 3-118. Ex-Vessel Value of Other Buyers and Processors by Fishery and Region, 1994-2005

Region	No. WA	So. WA	No. OR	So. OR	No. CA	So. CA	Total						
Fishery	Ex-Vessel Value (\$1,000 in 2005\$)												
Groundfish													
Coastal pelagic													
Crab/lobster													
Halibut													
Highly migratory													
Other													
Salmon													
Sea urchins													
Shrimp													
Total													

Region	No. WA	So. WA	No. OR	So. OR	No. CA	So. CA	Total						
Fishery		Ex-Vessel Value (\$1,000 in 2005\$)											
Groundfish													
Coastal pelagic													
Crab/lobster													
Halibut													
Highly migratory													
Other													
Salmon													
Sea urchins													
Shrimp													
Total													

Table 3-119. Ex-Vessel Value of Other Buyers and Processors by Fishery and Region, 2005

3.9 Recreational Harvesters of Groundfish

Recreational harvesters of groundfish may be indirectly affected by a trawl IFQ program. Perhaps the most significant way in which recreational harvesters could be affected is through the fishery management process. If trawl groundfish harvesters and processors become more profitable under a trawl IFQ program, their level of participation and influence in Council and NMFS management processes may increase. This additional participation could ultimately result in increased constraints on the growth potential of the recreation fisheries. In addition, the possibility that trawl harvesters will be more flexible in their harvesting pattern under a trawl IFQ program may affect the number of trawl vessels on the grounds at any given time.

3.9.1 Condition Indicators for Recreational Harvesters of Groundfish

Based on the availability of data on the recreational fishery for groundfish, the indicators of the historical and baseline conditions of recreational harvesters will include the following:

- Volume of recreational groundfish landings by species and year
- Geographic distribution of recreational groundfish landings
- Number of recreational groundfish targeted trips by geographic area

3.9.2 Past and Present Conditions of Recreational Harvesters of Groundfish

Table 3-120 shows the volume of landings in the recreational groundfish fishery by species and year. The table indicates data for 1994-2005, but the availability of data may limit the actual amount of information shown. In addition, some groundfish species are not harvested in recreational fisheries. The table will only include those species that are regularly harvested in the groundfish recreational fishery.

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	Total
Species					Vo	lume o	of Land	lings (l	MT)				
Arrowtooth Flounder													
Bank Rockfish													
Black Rockfish OR-CA													
Black Rockfish WA													
Blackgill Rockfish													
Bocaccio Rockfish													
Canary Rockfish													
Chili/Eureka Rockfish													
Chilipepper Rockfish													
Cowcod													
Darkblotched Rockfish													
Dover Sole													
English Sole													
Lingcod													
Minor Rockfish (N)													
Other Flatfish													
Other Rockfish (N)													
Other Rockfish (S)													
Other Species													
Pacific Cod													
Pacific Ocean Perch													
Pacific Whiting													
Petrale Sole													
Redstripe Rockfish													
Sablefish													
Thornyhead (Lg.)													
Thornyhead (Sh.)													
Sharpchin Rockfish													
Shortbelly Rockfish													
Silvergrey Rockfish													
Splitnose Rockfish													
Widow Rockfish													
Yelloweye Rockfish													
Yellowmouth Rockfish													
Yellowtail Rockfish													

Table 3-120. Volume of Landings in the Recreational Groundfish Fishery by Species and Year, 1994-2005

Figure 3-12 and Figure 3-13 shows recreational groundfish landings by month from 1994-2005. Additional figures may be developed depending on the number and volume of species in the recreational catch data.

Figure 3-12. Landings of Rockfish in the Recreational Fishery by Two-Month Period, 1994-2005

Figure 3-13. Landings of Other Groundfish in the Recreational Fishery by Two-Month Period, 1994-2005

Table 3-121 shows the volume of recreational groundfish landings by state from 1994-2005. It is uncertain whether catch data for a more detailed geographic level are available.

Table 3-121. Volume of Recreation Groundfish Landings by State, 1994-2005.

	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	Total
Species		Volume of Landings (MT)											
Washington													
Oregon													
Northern California													
Southern California													

3.10 Communities

This section will summarize the community profiles presented in Appendix B: Social Impact Assessment Technical Appendix and will place relevant fishery activity in a community setting. While the community profiles in Appendix B provide a range of descriptive and context information, the profiles in this section are brief (1-2 pages each) and summarize different types of relevant community fisheries engagement information, such as the number of participating vessels by sector, landings, and total revenue, among others, along with information that will provide a quick gauge of fishery dependency by community, including relevant fishery diversity information as well as economic diversity information at the community level.

3.10.1 Potentially Affected Communities

Individual industry sectors outlined in previous sections are distributed across a range of communities. Some communities have marked concentrations of vessel ownership or are homeport to clusters of vessels; some communities are the location of processing effort; and some communities have concentrations of fishery support service businesses and employment. Individual communities may be host to single or multiple sector activities with varying degrees of intensity of activity, may have a greater or lesser degree of engagement in the fishery through employment of residents, and may have a greater or lesser degree of dependency on the fishery as a result of numerous factors, including such fundamental community attributes as relative size and diversity of private sector-driven economic base and/or sources of public revenues. Communities may be directly and/or indirectly affected by the Action Alternatives in a variety of ways.

As described in more detail in Appendix B, the choice of specific communities and regions to be profiled in this section will be driven by data availability (e.g., information on where relevant trawl vessels are located, port landing data, or the like) and by data confidentiality considerations. Looking

at trawl vessel distribution as an example, within the state of Washington a couple of different groupings are possible. Only two communities, Port Angeles (with four vessels) and Westport (with seven vessels) have three or more vessels each, allowing community-level data discussions. Only two other Washington communities are listed as having any relevant catcher vessels. Blaine has an additional two vessels, so information from those vessels could be lumped with those from Port Angeles into a Northern Puget Sound area that could then be described as a region if the desired outcome was to include all vessel information from that region. Similarly, information from the only other Washington vessel located in Ilwaco/Chinook could be lumped with those from Westport to provide an all-inclusive Coastal Washington South and Central regional discussion, following the groupings utilized in previous groundfish EIS analyses. The advantage of staying with communityspecific data is the ability to ultimately better describe impacts (and variations of impacts) at the community level, while the advantage of utilizing regions is to allow for an analysis that accommodates all available information.

Continuing the vessel-based example, Oregon trawl vessel communities that could be described on an individual community basis include Astoria (32 vessels), Newport (20 vessels), Coos Bay (16 vessels), and Brookings (6 vessels). Florence, with one vessel, could be lumped with Coos Bay, and similarly Tillamook, with two vessels, could be lumped with Astoria for a more regional coverage and for the sake of completeness.

Within California, a total of nine communities feature three or more trawl vessels that would, in turn, allow for community level discussions. These are Crescent City (three vessels), Eureka (nine vessels), Fort Bragg (nine vessels), Princeton/Half Moon Bay (nine vessels), San Francisco (five vessels), Monterey (four vessels), Moss Landing (five vessels), Avila (three vessels), and Morro Bay (three vessels). Only two California communities have less than three vessels, precluding a community level data discussion: Bodega Bay (one vessel) and Santa Cruz (two vessels). These communities could be lumped with others for regional groupings and, if appropriate and desired, some of the other communities could be further be lumped to simplify the analysis (e.g., Avila and Morro Bay have been lumped into a single region in earlier analyses).

Different patterns of community confidentiality restrictions emerge when other data sets or groupings are utilized, such as landings by ports or distribution of permits (as opposed to vessels), as noted in Appendix B. Further, when common ownership is taken into consideration, analytic flexibility declines as confidentiality restrictions expand. Ultimately, we would be seeking analytic power and utility within individual communities or groups of communities with common attributes to allow for a production of the best available information regarding potential community and social impacts for consideration by decision makers. The decision regarding appropriate aggregations of communities will also be informed by community or regional level information on processing and support service entities as well as data on vessels or permit holders or landings themselves. It is likely that after the detailed data runs are produced, classes of communities or a typology of communities will be constructed to reduce analytic complexity while capturing the range of likely social impacts. Individual community variability characterization will be retained, to the extent possible, in the detailed information presented in Appendix B. It will also be important in this section to summarize the community level distribution changes that have occurred since the implementation of the buyback program in order to set the stage for subsequent cumulative impact analysis.

3.10.2 Condition Indicators for Communities

Indicators of the historical and baseline conditions of communities include but are not necessarily limited to the following:

- Community distribution of vessel and permit ownership
- Community distribution of landings and vessel activity
- Community distribution of processing related activity
- Community distribution of fishery related employment by sector
- Community distribution of fishery related income
- Community distribution of fishery related public revenues
- Community distribution of fishery related support service demand (qualitative)

The historical and baseline conditions of communities will also be summarized with respect to the overall engagement and dependency of trawl related fishing communities based on the above indicators.

3.11 Tribes

Tribes are proposed as a separate potentially affected stakeholder group from communities. Tribal groundfish fisheries are regulated by the participating tribes themselves, with the type of overall allocations varying by groundfish species or species group. In the case of sablefish, for example, tribal allocations account for 10 percent of the northern area OY, while whiting tribal allocations are based on a formula subject to a sliding scale adjustment. Other groundfish are allocated on biannual basis in a process that includes Council coordination. In short, while not necessarily directly affected by federal and state management measures, tribal entities are directly involved in the Council process and craft their groundfish management measures in cooperation with federal and state managers. Further, tribes and tribal related entities may be direct participants in the non-tribal fisheries subject to management under the proposed alternatives (as may any other entity) and it is known that at least some tribes are involved with fisheries support service business ventures that rely to at least some degree on potentially affected non-tribal fishing entities.

3.11.1 Potentially Affected Tribes

Four Indian tribes in Western Washington exercise treaty rights to harvest groundfish and other marine species in the Pacific Ocean off the Northwest Coast: the Hoh, Makah, and Quileute Tribes and the Quinault Indian Nation. Each has reservation lands, but their fishing is not confined to the reservation. Each of these tribes has usual and accustomed fishing areas (U & A) that extend into the groundfish fishery management area.

3.11.1.1 The Hoh Tribe

The 443-acre Hoh reservation is located in Jefferson County, on the Pacific Coast of northern Washington. The reservation lies within the boundaries of the Olympic National Park, and in the area of the Hoh River drainage system. The Hoh River empties into the Pacific and serves as the reservation's northern boundary. The Hoh U&A within the FMA is between 47°54'18 N (Quillayute River) and 47°21'00 N (Quinault River) and east of 125°44'00 W. Currently, Hoh tribal members harvest shellfish, smelt, sturgeon, sablefish, rockfish, Dungeness crab, salmon (spring, summer, and fall chinook, and fall coho), steelhead, trout, and halibut within their U & A.

3.11.1.2 The Makah Tribe

The 27,950-acre Makah reservation is located on the northwestern tip of Washington's Olympic Peninsula in Clallam County. It includes Cape Flattery and Koitlah Point. Vancouver Island, Canada is across the Strait of San Juan de Fuca. The reservation lies 70 miles west of Port Angeles, and 17 miles from the nearest neighboring community, Sekiu. Unlike many other tribes in the US, the Makah Tribe still holds title to a substantial portion of their ancestral land base, engendering a high degree of continuity in both place-oriented identity and subsistence practice (Sepez 2000). The Makah U&A includes Washington state statistical area 4B and that portion of the FMA north of 48°02'15 N (Norwegian Memorial) and east of 125°44'00 W. Currently, Makah tribal members harvest halibut, whiting, rockfish, lingcod, sablefish, flatfish, salmon, steelhead, sturgeon, shellfish, other groundfish, and gray whales within their U&A. Makah members currently operate groundfish trawlers and a whiting mothership.

3.11.1.3 The Quileute Tribe

The 694-acre Quileute reservation is located entirely in Clallam County, Washington, on the south banks of the Quillayute River along the Pacific Ocean. It is surrounded on three sides by the Olympic National Park, and the fourth side of the Reservation is on the Pacific Ocean—First Beach. The headquarters for the Tribe is in La Push, and most Quileute live in Clallam County; however, some enrolled members live in other counties of the state (e.g., adjacent Jefferson to the south) and even outside Washington. The Quileute Tribe has regulated its marine and freshwater fishery for many years. The Quileute today commercially harvest groundfish (including halibut, sablefish, lingcod, and rockfish), Dungeness crab, tuna, smelt, salmon, and steelhead from the marine environment. Seals, sea lions, bivalves (California and blue mussels, razor clams, littlenecks, and butter clams), and other invertebrates are harvested ceremonially and for subsistence. In fresh water, they harvest smelt, salmon, trout, and steelhead commercially as well as for ceremony and subsistence. Salmonids include chinook, coho, sockeye, steelhead, sea trout, and cutthroat trout.

3.11.1.4 The Quinault Indian Nation

The 208,150 acre Quinault Reservation is located in Grays Harbor and Jefferson Counties on the western shore of the Olympic Peninsula. The western boundary of the triangular reservation is the Pacific Ocean coastline, stretching about 26 miles. The Quinault Indian Nation has regulated its river fisheries since 1916, both for a commercial and sports fishery. It has regulated its off-reservation river fisheries and ocean fisheries since 1974. As a self-regulating tribe, the Tribe also regulates the fishery and all other activities on Lake Quinault and its Reservation beaches. Along with the rivers and streams that run through the Quinault Reservation, Lake Quinault is entirely within the Reservation. Reservation beaches and Lake Quinault are closed to non-members except by permission of the Quinault government. The Tribe has on occasion closed its waters to all fishing and prohibited certain types of gear in order to conserve fish runs.

3.11.2 Condition Indicators for Tribes

Indicators of the historical and baseline conditions of tribes include but are not necessarily limited to the following:

- Coastal distribution of fishing activity
- Distribution of ex-vessel revenue derived from groundfish and other fishing activities

3.12 Input Suppliers

Businesses that supply inputs to groundfish trawl harvesters may be indirectly affected by a trawl IFQ program if the program causes behavioral changes in trawl groundfish harvesting operations.³⁰ However, the indirect effects on input suppliers may be lower than those observed in other IFQ programs for two reasons. First, the current management regime has already essentially eliminated the race for fish in the West Coast groundfish trawl fishery,³¹ and second, input suppliers would likely be much more affected by a change in trawl harvest level than by a trawl IFQ program. Notwithstanding these caveats, the implementation of IFQ programs in other fisheries have had significant effects on input suppliers, and therefore this stakeholder group is included.

Estimating impacts on input suppliers is complicated by the fact that many of the vessels and processors in the trawl groundfish sectors are not wholly dependent on the West Coast groundfish trawl fishery. For example, many (if not most) of the vessels that participate in the whiting fishery also participate in the Alaska pollock fishery. Therefore, while a vessel may exit the West Coast groundfish trawl fishery it may remain active in other fisheries and continue to purchase a similar level of fixed or annual inputs. For example, moorage expenditures would only be affected if a vessel that leaves the West Coast groundfish trawl fishery severs all ties with the West Coast. Similarly, if a vessel that fishes in both the limited entry trawl fishery and the limited entry fixed fishery were to exit the trawl fishery, the fixed costs of maintaining the vessels and engine would continue, but the costs of buying input specifically gear to the trawl fishery would be eliminated. Therefore, it is assumed here that the only inputs that would be affected by a trawl IFQ program are those related to a vessel's level of fishing production in the limited entry trawl fishery.³²

The initial list³³ of variable inputs of trawl vessels likely to be affected by the alternatives includes fuel, food, trawl gear, and observers.³⁴ For example, fuel expenditures are among the largest expense categories for fishing vessels. Under a trawl IFQ program, fish harvesters are expected to be better able to optimize their fishing activities over the course of the year, thereby decreasing fuel expenditures. As a result, marine fuel suppliers are likely to see a change in the demand for their product. Trawl gear suppliers are likely to be indirectly affected by a trawl IFQ program. If there is considerable consolidation of the fleet, fewer trawl gear sets would be needed. On the other hand, consolidation would also mean that the gear on the vessels remaining in the fishery will see greater use during the year.

Although crew labor is generally considered a variable input, it is discussed in the above descriptions of potentially affected vessels. While fixed inputs are assumed to be unaffected by a trawl IFQ program, it is likely that a program would create demand for the services of permit and IFQ brokers who try and match buyers with sellers, or those interested in trading quota. When a match is found the brokers typically collect either a service charge or commission from the participants.

³⁰ The Consulting Team does not anticipate that a trawl IFQ program would have a measurable effect on the demand for inputs by trawl groundfish processors.

³¹ A race for fish typically creates an economic advantage for input suppliers.

³² In other words the analysts assume the vessels that leave the limited entry trawl fishery, continued to be owned and operated in fisheries or activities other then the limited entry trawl fishery.

³³ It could be argued that other inputs would be affected by a trawl IFQ program. This initial list could be augmented if it is determined that the use of other inputs may change significantly.

³⁴ Observers are included in this section because firms that provide observers are properly considered input suppliers. Inclusion of observers in this section does not imply that vessels would or would not be required to pay for observer coverage.

3.12.1 Condition Indicators for Input Suppliers

Indicators of the historical and baseline conditions of input suppliers include but are not necessarily limited to the following:

- Estimated fuel sales to trawl groundfish harvesters and processors and the geographic distribution of major marine fuel supply businesses relative to ports of landing.
- Estimated food sales to trawl groundfish harvesters and the geographic distribution of major food supply businesses.
- Estimated annual sales of trawl gear in the West Coast groundfish trawl fishery and the geographic distribution of major trawl gear suppliers.
- Observer expenses, observer counts, and geographic distribution of observer supply businesses.
- Number of permit transactions and the geographic distribution of permit brokerages.

The lack of expenditure data may limit the ability of the analysis to fully describe the conditions of input suppliers.

3.12.2 Past and Present Conditions of Input Suppliers

This section describes the historical and baseline conditions of input suppliers as they relate to the trawl groundfish harvesting and processing sectors. A separate sub-section will be devoted to each of the input supply sectors described in Section 3.12.1.

The primary sources of data will be the information from NMFS Vessel expenditure survey that is currently in progress, coupled with information in data on county business patterns, in data collected by labor departments in each State, and on IMPLAN data sets.

3.12.2.1 Fuel Suppliers

This section estimates fuel sales by volume and value in recent years. The primary source of information is the NMFS vessel expenditure survey that is currently in progress.

This section also utilizes landings data from PacFIN to describe the geographic distribution of fuel sales based on the assumption that fishing vessel operators purchase the majority of their fuel in the community in which fish are landed.

3.12.2.2 Trawl Gear Suppliers

This section documents past and present conditions of trawl gear suppliers including estimates of sales by year to West-Coast groundfish trawlers and the geographic location of trawl gear suppliers.

3.12.2.3 Suppliers of Groundfish Observers

Currently, most observers are contracted workers of specialized businesses that coordinate with NMFS to supply observers as needed. This section describes the past and present conditions of observer supply companies, including the number of observer days by year in the West Coast groundfish trawl fishery, number of observers used per year, amount paid to observer companies and the geographic location of observer companies.

3.12.2.4 Permit Brokerages

Currently, there are specialized businesses that broker fishing permits. This section describes the past and present conditions of permit brokerages, including the number and geographic location of these businesses.

3.13 Wholesalers and Retailers

Wholesale and retail suppliers of groundfish would be indirectly affected by a trawl IFQ program to the extent that there are changes in groundfish product variety and groundfish product flows generated by trawl groundfish processors.

The transition to an IFQ program in other fisheries has typically created significant changes in the timing of harvests and types of products generated. These impacts are less likely in the West Coast groundfish trawl fishery because the fishery does not currently experience a derby-style race for fish. Cumulative trip limits spread harvests out over time, thereby generally preventing market gluts.

The transition to an IFQ program in other fisheries has typically created significant changes in the timing of harvests and types of products generated. Usually, fisheries transition from a short duration derby to a fishery in which landings are spread out over a longer period. These impacts are less likely in the West Coast groundfish trawl fishery because the fishery does not currently experience a derby-style race for fish. Cumulative trip limits spread harvests out over time, thereby generally preventing market gluts. Relative to the current management system, implementation of an IFQ program may cause harvest to be more, rather than less, concentrated over time.

It is possible that a trawl IFQ program would create incentives to decrease the period over which the harvest of a particular species take place, and therefore would lead to greater variances in product flow. For example, in an effort to maximize harvests of petrale sole while staying within overfished species constraints, harvesters and processor may choose to limit petrale sole harvest to periods when incidental catch rates are lowest. This type of behavioral change would affect wholesalers and retailers.

It is also possible that wholesalers and retailers, that are also trawl groundfish buyers and processors, may have be able to increase their relative market share because that may experience greater certainty of supplies and increasing profits.

An additional possible impact on wholesale and retail distributors could result from QS allocation options that allocate harvesting quota shares to processors. In general, the options would not provide allocations to independent buyers of groundfish, some of which may be important sources of groundfish for certain wholesalers and retailers. By not receiving shares of the fishery, the ability of independent buyers to buy fish and supply wholesalers and retailers that are currently dependent upon them may be constrained.

3.13.1 Condition Indicators for Wholesalers and Retailers

There are far fewer wholesale businesses that deal with trawl groundfish than retail outlets. Therefore, different indicators are developed for the two groups.

Indicators of the historical and baseline conditions of wholesale businesses include but are not necessarily limited to the following:

• Delineation of wholesale businesses dealing with trawl groundfish

- Estimated market share of major wholesale businesses dealing with trawl groundfish
- Relative dependence of major wholesale businesses on trawl groundfish

Indicators of the historical and baseline conditions of retail businesses include but are not necessarily limited to the following:

• Types and number of retail businesses selling trawl groundfish

Data documenting the activities of wholesalers and retailers with respect to trawl groundfish are unavailable. Therefore, the description of the past and present conditions of wholesalers and retailers of trawl groundfish is largely qualitative, and relies largely on a few key informant interviews.

3.14 Consumers

This section describes the past and present conditions of the retail market for the major species groups harvested in the West Coast groundfish trawl fishery.³⁵ Consumers of West Coast trawl groundfish may be indirectly affected by a trawl IFQ program if the prices, quality or availability of groundfish products change. As indicated in Section 3.13, cumulative trip limits in the West Coast groundfish trawl fishery already spread out harvests and allow processors to provide a wide variety of products to meet consumer demand. Therefore, the impacts of a trawl IFQ program on the market for trawl groundfish may be minimal. Relative to the current program the impacts of a trawl IFQ program on the market for trawl groundfish may be to increase the seasonality of harvest.

3.14.1 Condition Indicators for Consumers

Ideally, indicators of the historical and baseline conditions of the market for trawl groundfish include but are not necessarily limited to the following:

- Product type and volume by species group
- Retail product prices by species group

However, data documenting the market for West Coast trawl groundfish do not appear to be readily available. The Stage 2 analysis will review available data that specifically relates to trawl groundfish. Depending on data availability the description of the past and present conditions of this market may be largely qualitative, and would probably rely on a key informant interviews.

3.15 General Public

Marine and coastal ecosystems are among the most productive natural systems on earth and provide a wide range of benefits to humans (National Research Council 2001; Wilson et. al. 2005). Full accounting of the values derived from these systems is rapidly gaining the attention of federal, state and local regulatory agencies in the United States (National Research Council 2004).

Economists have developed a widely used taxonomy of ecosystem values, although definitions of specific benefits may vary (National Research Council 2004). Typically, economists divide the total value of an environmental asset into use values and non-use values. Use values involve either in situ contact with the environmental asset in question or personal consumption of products or services

³⁵ Data on product types and product amounts generated in the West Coast groundfish trawl fishery are limited compared to the Alaska groundfish fishery.

derived from the asset. Use values include consumptive use values, non-consumptive use values, and indirect use values (Table 3-122).

Economic Value	Description
	Use value
Consumptive direct use value	Value derived from extractive activities
Non-consumptive direct use value	Value gained through activities such as observing a species or ecosystem
Indirect use value	Value of the ecological functions and services of a species or ecosystem that indirectly provides support and protection to people, economic activity, and property
	Non-use value
Bequest value	Value derived from the knowledge that a species or ecosystem will be preserved for future generations
Existence value	Value emanating from the satisfaction of knowing that a particular species or ecosystem survives in a natural state

Table 3-122. Categories of Possible Economic Values Assigned to a Marine Ecosystem and Associated Species

Sources: Adapted from National Research Council (2004)

Consumptive, direct use values can be further subdivided into commercial value if the purpose of the extractive activity is to sell products to others or recreational and subsistence value if the purpose is recreational enjoyment or subsistence and no remuneration is involved. Activities that are engaged in for recreational or subsistence purposes typically are not produced and traded in the private market economy, but exceptions do exist, including charter fishing and cruise activities.

Non-consumptive direct use activities derived from marine and coastal ecosystems such as tourism, diving, bird and whale watching, and appreciating the aesthetics of wild areas are also valuable to humans. These benefits may or may not be traded in markets, an example of the former being ecotourism activities.

Considering the high productivity of the US Pacific Coast, it is likely that certain significant changes or disturbances in this ecosystem would have a significant impact on human welfare. Marine and coastal ecosystems provide natural goods and services such as flood control, carbon storage; atmospheric gas regulation, particularly by the ocean's enormously productive phytoplankton; nutrient cycling; and transformation, detoxification, and sequestration of pollutants and societal wastes. The use values derived from these services are considered indirect, since they are derived from the support and protection of activities that have directly measurable values (e.g., commercial fishing, waste treatment) (National Research Council 2004). A large part of the contributions to human welfare by these ecosystem services are pure public goods (Costanza et al. 1997). In short, they accrue directly to people without passing through the market economy, and in many cases people are not even aware of them.

Non-use values, also referred to as passive-use values, do not involve personal consumption of derived products nor *in situ* contact. They are generated from people's inter-generational altruistic concerns (i.e., bequest value) or from the utility people receive from knowing that a particular asset exists or is being preserved (i.e., existence value). For example, some people may derive pleasure

from the knowledge that wildlife exists in the area and would be willing to pay to preserve the structure and integrity of these biological communities even if they never directly "experience" them. Existence value may be highly sensitive to the amount of information acquired, i.e., small changes in information or knowledge about an ecosystem or associated species may produce large shifts in existence value for that ecosystem or species. It follows, therefore, that improvements in communication technology may lead to significant increases in existence value. Given the scale of the services and rich biodiversity of the US Pacific Coast as well as the highly-publicized human-induced stress on this marine system, it is probable that a significant component of the overall benefit of the US Pacific Coast may be from existence (non-use) value.

Economists have taken the decomposition of the basic components of value in a species or ecosystem a step further by incorporating uncertainty into an individual's choice. For example, individuals may be willing to pay a premium for retaining an option for future use of a good or service, although they may not currently use it. This so-called 'option value' exists under conditions of uncertainty about the future demand for an environmental asset. An extension of option value known as quasi-option value represents the value derived from postponing a decision about preserving a species or ecosystem in order to gain more knowledge in the future. Less intuitive goods and services derived from marine ecosystems have been recognized only as knowledge of these ecosystems has evolved (National Research Council 2004). Some of these include maintenance of biodiversity, and contributing to biogeochemical cycles and global climate. In addition, new information about medicine, genetics, or other areas of scientific research may result from future study of marine ecosystems and associated species.

In general, the value of an ecosystem good or service will vary with its level of provision (National Research Council 2004). For example, one might feel that access to certain marine ecosystem services, such as fisheries production, has decreased over time as a result of human pressures on natural habitat. Peoples' marginal valuations of these services will increase as their perceived scarcity becomes greater.

3.15.1 Condition Indicators for General Public

A comprehensive economic evaluation exercise would seek to quantify all the benefits of potentially affected marine ecosystems and associated species. On the one hand, the benefits of activities that produce goods and services exchanged in markets are relatively easy to estimate, as the goods and services generated have 'observable' prices. Examples include the seafood produced in the commercial fisheries discussed in this analysis. On the other hand, many of the goods and services derived from marine ecosystems are not exchanged through markets and therefore do not receive market prices. These are referred to by economists as "non-market" goods and services. Examples include recreational fishing experiences as well as less intuitive benefits of ecosystems such as climate regulation and nutrient storage and cycling.

The values of many non-market ecosystem goods and services can be estimated only with statedpreference methods such as contingent valuation, and this is the application in which these methods have been soundly criticized on conceptual and empirical grounds (National Research Council 2004). Moreover, the difficulty of valuing changes in these goods or services is compounded by the underlying complexity of natural ecosystems, which creates a barrier to quantifying the links from ecosystem structure and functions to the goods and services that humans value (National Research Council 2004).

In short, complete estimation of the monetary value of the full range of benefits that marine ecosystems and associated species provide to humans is a challenging task requiring data and models

not available and not practicable to develop based on the current state of understanding of these systems. Additionally, complete estimation of the full range of benefits is not helpful to the analysis unless a trawl IFQ program is expected to have a substantial effect on a particular ecosystem benefit. New data will not be collected on individuals' non-consumptive and non-use values for potentially affected marine ecosystems. Changes to the system that may impact ecosystem benefits will be identified. The direction and degree of change of selected indicators defined in other sections of the analysis will be used as proxy metrics for indicators of the non-consumptive and non-use benefits that the general public derives from potentially affected marine ecosystems. In general, it is assumed that positive changes in the status of marine ecosystem and associated species positively affect the flow of non-consumptive and non-use benefits. The proxy metrics for historical and baseline non-consumptive and non-use values include but are not necessarily limited to the following:

- Amount of groundfish bycatch (i.e., the waste associated with fish that are caught and discarded)
- Condition of groundfish species
- Condition of potentially affected marine mammals, seabirds, other protected species, habitat, and predator-prey relationships

3.16 Management agencies

3.16.1 Potentially Affected Management Agencies

Under the Magnuson-Stevens Act, NMFS manages the groundfish fishery in the EEZ using advice provided by the Councils. The states retain jurisdiction to manage fisheries in state waters. Some states regulate vessels registered under the laws of that state in federal waters and others regulate the activities of those vessels only if they land in the state. In either case the state's laws and regulations are consistent with the FMP and applicable federal law.

In practice, the states and federal government manage the groundfish fishery consistently and cooperatively. For the groundfish fishery, the states, the responsible federal agencies coordinate closely through the Pacific Fishery Management Council. Each state has a representative of its fishery agency as a voting member on the Council. NMFS has a voting member on the Council, and the US Coast Guard, US Fish and Wildlife Service, and the Pacific States Marine Fisheries Commission have non-voting members on the Council. The states and NMFS also have representatives on the Council Committees that help develop management measures.

Management and enforcement responsibilities include the following: 1) data collection, research, and analysis to prepare stock assessments, 2) the annual groundfish specifications process through which catch limits are established, 3) the ongoing Council and NMFS process of amending FMPs and regulations to implement fishery management measures, 4) monitoring of fishing activities to estimate the total catch of each species and to ensure compliance with fishery laws and regulations, 5) action to adjust management regulations to keep catch within specified limits, and 6) actions taken by state enforcement agencies, NOAA Office of Law Enforcement, the US Coast Guard (USCG), and NOAA General Counsel NW to identify, educate, and in some cases, penalize people who violate the laws and regulations governing the groundfish fisheries.

Agencies that have roles in the management of West Coast groundfish stocks are:

• Pacific Fisheries Management Council

220

- NOAA Fisheries NW Regional Office
- NOAA Fisheries SW Regional Office
- NOAA Office of Law Enforcement
- NOAA General Counsel NW
- Pacific States Marine Fishery Commission
- State of California
- State of Oregon
- State of Washington
- US Coast Guard

3.16.2 Condition Indicators for Management Agencies

Managing fisheries in a cost-effective manner while balancing risks to the resource with socioeconomic benefits is often the objective of public agencies charged with fishery management and enforcement. Therefore, the criteria or indicators used in evaluating the historical and baseline conditions of management agencies include but are not necessarily limited to the following:

- Management costs (e.g., administrative costs and costs associated with catch monitoring)
- Enforcement feasibility
- Risk to resources
- Reliability of fishery data

3.16.3 Data

Agency records, as well as, various federal and state reports will be used in the analysis of the effects of the alternatives under consideration. Staff of the NMFS will also be a source of information.

3.16.4 Past and Present Conditions of Management Agencies

The format below for describing historical and baseline conditions will be repeated for all potentially affected management agencies.

3.16.4.1 Pacific Fisheries Management Council

The Pacific Coast Groundfish Fishery Management Plan was approved by the US Secretary of Commerce on January 4, 1982 and implemented on October 5, 1982. The plan has undergone numerous amendments since that time. The plan, as amended, establishes a framework authorizing the range and types of measures that may be used to manage groundfish fisheries, enumerates eighteen objectives that management measures must satisfy, and describes more specific criteria for determining the level of harvest that will provide the greatest overall benefit to the nation. Fisheries subject to management measures include limited entry trawl fisheries, limited entry fixed gear (pot and longline) fisheries, the recreational charter fishery, and a variety of other fisheries catching groundfish, either as target species or as incidental catch.

The Council process for setting groundfish harvest levels and other specifications depends on periodic assessment of the status of groundfish stocks, rebuilding analyses of those stocks that are overfished and managed under rebuilding constraints, and reports from an established assessment review body or a Stock Assessment Review Panel (STAR). As appropriate, the SSC recommends the best available science for groundfish management decision making. The Council's Scientific and Statistical Committee (SSC) reviews new assessments, rebuilding analyses, and STAR Panel reports. It then recommends the data and analyses that should be used to set groundfish harvest levels and other specifications for the following biennial management period.

Prior to implementation of the FMP, management of domestic groundfish fisheries was under the jurisdiction of the states of Washington, Oregon and California. Management and lack of uniformity became difficult problems that stimulated the formation of the Pacific States Marine Fishery Commission (PSMFC) in 1947. PSMFC had no regulatory power but acted as a coordinating entity with authority to submit specific recommendations to states for their adoption. The 1977 Fishery Conservation and Management Act (later amended and renamed the Magnuson-Stevens Fishery Conservation and Management Act or Magnuson-Stevens Act (MSA)) established eight regional fishery management Councils, including the Pacific Council. Between 1977 and the implementation of the FMP, state agencies worked with the Council to address conservation issues. In 1981, managers proposed a rebuilding program for Pacific Ocean perch.

Management of foreign fishing operations began in February 1967, when the US and USSR signed the first bilateral fishery agreement affecting trawl fisheries off Washington, Oregon and California. Later bilateral agreements were signed with Japan and Poland. These agreements were negotiated to reduce the impact of foreign fishing on important West Coast stocks, primarily rockfish, Pacific whiting and sablefish.

Joint-venture fishing, where domestic vessels catch the fish to be processed aboard foreign vessels, began in 1979, with Pacific whiting the primary target species. By 1989, this activity entirely supplanted directed foreign fishing. Joint-venture fisheries in turn were supplanted by wholly domestic operations shortly thereafter.

Since the Groundfish FMP was implemented in 1982, the Council has amended it numerous times in response to changes in the fishery and reauthorizations of the MSA.

The current groundfish management program relies heavily on trip limits to control fishing effort, with maintaining commercial production over the year a major goal. Usage of the term "trip limit" has evolved over the past 20 years. It referred initially to the amount of fish a commercial vessel could catch and retain on a single fishing trip. Over time, it was modified to include trip frequency limits and ultimately the amount of groundfish that could be caught and retained during a specified period of time, typically one or two months. A critical feature of status quo trip limits is that they do not directly limit the amount of catch, but rather only the amount of groundfish that can be retained and delivered for sale. Commercial vessels are allowed to discard unusable fish and any fish in excess of a specified limit.

- 3.16.4.2 NOAA Fisheries NW Regional Office
- 3.16.4.3 NOAA Fisheries SW Regional Office
- 3.16.4.4 NOAA Fisheries Enforcement
- 3.16.4.5 NOAA General Counsel
- 3.16.4.6 Pacific States Marine Fishery Commission
- 3.16.4.7 State of California
- 3.16.4.8 State of Oregon
- 3.16.4.9 State of Washington
- 3.16.4.10 US Coast Guard

3.17 Groundfish Resources

3.17.1 Potentially Affected Groundfish Resources

Groundfish fisheries regulated under the Groundfish FMP occur on the continental shelf and upper slope off Washington, Oregon and California (Figure 3-14). The continental shelf is narrow, varying in width from less than a mile off the Monterey Peninsula in California to as much as 37 miles over Heceta Bank off southern Oregon. The total shelf area (0 to 100 fathoms) is about 30,000 square miles. By comparison, the area of the central and eastern Bering Sea shelf is an order of magnitude larger, extending approximately 200 miles from shore. The relatively limited continental shelf and upper slope habitat off the West Coast recently produced average groundfish yields of 268,085 mt within the US EEZ in comparison to recent average groundfish yields in the Eastern Bering Sea and Aleutian Islands of 1,775,600 mt within the US EEZ (NMFS 1999). Nevertheless, productivity in West Coast waters is high and groundfish resources in the region sustain major fisheries.

Figure 3-14. Geographic Distribution of Rockfish and Allied Species (Lingcod, Cabezon, Kelp Greenling, and California Scorpionfish)

Source: 2005-2006 Groundfish Spec's EIS, Appendix A, p. A-88

There are over 80 species of groundfish managed under the Groundfish FMP. Over 60 species of rockfish, 7 roundfish species, 12 flatfish species, assorted sharks, skates and a few miscellaneous

bottom-dwelling marine fish species. Fish managed under the groundfish FMP, as well as, their distribution are listed in Table 3-123. Management of these groundfish species is based on principles contained in the MSA, Groundfish FMP, and MSA National Standards Guidelines.

Table 3-123. Latitudinal and Depth Distributions of Groundfish Species (Adults) Managed under the Pacific Coast Groundfish Fishery Management Plan

		Latitu	dinal Distribution	Depth	Distribution (fm)
Common name	Scientific name	Overall	Highest Density	Overall	Highest Density
Rockfish Species					
Roundfish Species					
Shark and Skate Species					
Other Species					

The commercial trawl fishery is prosecuted over a wide range of depths, from 20 fathoms for English sole and sanddabs to as deep as 700 fathoms for Dover sole and sablefish. Fishing also may occur on smooth mud/sand substrates, rocky reefs, pinnacles and canyons.

Mandates incorporated in the MSA as a result of passage of the SFA in1996 included abundancebased standards for declaring a stock overfished. These standards were subsequently incorporated in the Groundfish FMP with adoption of Amendments 11, 12 and 16. The abundance-based reference points for managing West Coast groundfish species are relative to an estimate of "virgin" or unexploited biomass of the stock, which is denoted as B₀ and is defined as the average equilibrium abundance of a stock's spawning biomass before it is affected by fishing-related mortality. The MSA and NSG employ the Maximum Sustainable Yield (MSY) concept to frame management objectives. MSY represents a theoretical maximum surplus production from a population of constant size. The NSG define it as, "the largest long-term average catch or yield that can be taken from a stock or stock. complex under prevailing ecological and environmental conditions." Thus, for a given population, and set of ecological conditions, there is a biomass that produces MSY (denoted as B_{MSY}), which is less than the equilibrium size in the absence of fishing (B_n) . The harvest rate used to specify harvest levels designed to achieve or sustain B_{MSY} is referred to as the Maximum Fishing Mortality Threshold (MFMT, denoted as F_{MSY}). There are two harvest specification reference points defined in the Groundfish FMP, a total catch OY and an ABC. The OY is typically the management target and is usually less than the ABC, based on precautionary adjustments or the need to rebuild stocks to B_{MSY}. The ABC, which is the maximum allowable harvest, is calculated by applying an estimated or proxy F_{MSY} harvest rate to the estimated abundance of the exploitable stock.

The Council-specified proxy MSY abundance for most West Coast groundfish species is 40% of B_0 (denoted as B_{40}). The Council-specified threshold for declaring a stock overfished is when the stock's spawning biomass declines to less than 25% of B_0 (denoted as B_{25}). The MSA and NSG refer to this threshold as the Minimum Stock Size Threshold or MSST. A rebuilding plan that specifies how total fishing-related mortality is constrained to achieve an MSY abundance level, within the legally allowed time, is required by the MSA and Groundfish FMP when a stock is declared overfished.

Stocks estimated to be above the overfishing threshold, yet below an abundance level that supports MSY, are considered to be in the "precautionary zone." The Council has specified a precautionary reduction in harvest rates for such stocks to increase abundance to B_{40} . The methodology for determining this precautionary reduction is described in the Groundfish FMP and is referred to as the 40-10 adjustment (Figure 3-15). As the stock declines below B_{40} , the total catch, OY, is reduced from the ABC until, at 10% of B_0 , the OY is set to zero. However, in practice the 40-10 adjustment only

applies to stocks above B_{25} (MSST) because once a stock falls below this level, an adopted rebuilding plan replaces it. Most stocks with an estimated abundance greater than B_{40} are managed by setting harvest to the ABC. The California Department of Fish and Game (CDFG) uses a precautionary policy analogous to the Council's 40-10 adjustment specified in their nearshore FMP. Called the 60-20 adjustment, the precautionary reduction of OY from the ABC would begin at 60% of B_{0} , until, at 20% of B_{0} , the OY is set to zero.

Figure 3-15. 40-10 Rule

Source: PFMC, 2004, Appendix A, p. A-78

A significant number of stocks managed under the Groundfish FMP have never been assessed. Stocks assessed over the last 12 years, 1994 through 2005, are listed in Table 3-124. The fishery in 2002 and 2003 was characterized by significant under harvest of available catch (including discards) for many species (Table 3-125 and Table 3-126).

	Year First												
Species	Assessed	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005

Source: PFMC, 2004, Appendix A, p.A-39, Table 1-1

Table 3-125. Estimated Total Catch Mortality of Selected Groundfish Species from West Coast Commercial, Tribal and Recreational Fisheries (mt), 2002

	Landings and Mortality			Tar	gets	Discards
Species	Estimated Total Catch	Est. commercial fishery discard mort.	Actual Landings	Total Catch ABC	Total catch OY	

Source: Groundfish Trawl Individual Quota Analytical Team October 2004 Report, Appendix 6, p. H-48

Table 3-126. Estimated Total Catch Mortality of Selected Groundfish Species from West Coast Commercial, Tribal and Recreational Fisheries (mt), 2003

	Landings and Mortality			Tar	gets	Discards
Species	Estimated Total Catch	Est. commercial fishery discard mort.	Actual Landings	Total Catch ABC	Total catch OY	

Source: Groundfish Trawl Individual Quota Analytical Team October 2004 Report, Appendix 6, p.H-49

Table 3-127. Existing Management tools, Management Tools Adopted under the Programmatic Bycatch EIS and Management Tools that would Remain in Place under an IFQ Program

	Existing Management Tools (Status Quo	IFQ
--	---------------------------------------	-----

Source: Groundfish Trawl Individual Quota Analytical Team October 2004 Report, Appendix 6, p.H-49

3.17.2 Condition Indicators for Groundfish Resources

Indicators of the historical and baseline conditions of groundfish species in terms of fishery impacts include but are not necessarily limited to the following:

• Fishery Mortality: The rate at which the stock is depleted by direct mortality imposed by removing the fish from the sea.

• Change in Biomass Level: The change over time in the biomass of the stock, as measured in metric tons (mt). Two measures are used: total biomass, which is the estimated biomass of the entire stock, and spawning biomass, which is the estimated biomass of all of the spawning females in the stock.

• Spatial/Temporal Concentration of Catch: The degree to which the fishery will concentrate in a particular geographic area during a particular period of time each season. This pattern in space and time can affect fishing mortality and can also influence habitat suitability for spawning, rearing, and feeding.

• Habitat Suitability: The degree to which habitat has the right characteristics to support the target stock at one or more life-history stages (spawning, rearing of juveniles, availability of food at all stages, availability of refuge area to allow escape from predators at all stages). Habitat suitability can be affected directly, for example by mechanical damage from bottom trawling or longlining, or influenced indirectly, for example, by the gradual depletion of corals that provide hard substrate.

• Prey Availability: The extent to which prey species are present in the environment and available as food to the target stock. Like habitat suitability, this measure can be affected directly, for example, by the direct removal of prey species by the fishery, or indirectly, for example, by a change in the structure of the food web.

3.17.3 Data

Detailed information on the species discussed below can be found in the Life History Appendix to the Groundfish FMP, regarding utilization patterns, fisheries that harvest the species, geographic range, migration and movements, reproduction, growth and development, and trophic interactions. Useful information also is contained in the Groundfish Fishery Specification EIS, Bycatch EIS and EFH EIS.

3.17.4 Past and Present Conditions of Overfished Groundfish Species

3.17.4.1 Bocaccio (Sebastes paucispinis)

The format below for describing historical and baseline conditions will be repeated for all groundfish species or species groups. Alternatively, the information presented in this section and the subsections that follow will be summarized in one or more tables.

3.17.4.1.1 Life History and Distribution

Bocaccio (*Sebastes paucispinis*) is a rockfish species that ranges from Krozoff and Kodiak Islands in the Gulf of Alaska to central Baja California, Mexico. Historically, they have been abundant in water off central and southern California. There are two separate West Coast populations. The southern stock exists south of Cape Mendocino and the northern stock north of 48 degrees N latitude in northern Washington (off Cape Flattery). It is unclear whether this stock separation implies stock structure. Juveniles settle in nearshore waters after a pelagic stage that lasts several months. Adults are most commonly found at 100-150 m over the outer continental shelf. Bocaccio is found in a wide variety of habitats, often on or near bottom features, but sometimes over muddy bottoms.

Bocaccios are ovoviviparous. Spawning takes place during the entire year.

Maximum age of bocaccio has been radiometrically determined to be at least 40 and perhaps more than 50 years old. They are difficult to age and length measurements serve as a proxy in stock assessments.

3.17.4.1.2 Population Trends

Bocaccio was declared overfished by the Council in the fall of 1999. Catch restrictions were implemented in 2000 to initiate rebuilding. In 2004, a rebuilding plan was enacted as part of Amendment 16-3 to the Groundfish FMP. In response to the 2002 assessment, which indicated very low productivity, the 2003 OY was set at 20 mt, and the retained catch was about 12 mt. Including mortality of estimated discards, estimated 2003 total kill was 22 mt. Based on the 2003 assessment, which showed a much more productive stock, the 2004 OY was set at 250 mt, however, management used an operational target of 199 mt. The final catch was 78 mt. Discards brought the estimated 2004 kill to 83 mt.

3.17.4.1.3 Trophic Interactions

Larval bocaccios eat diatoms, dinoflagellates, tintinnids, and cladocerans. Copepods and euphausiids of all life stages are common prey for juveniles. Adults eat small fishes associated with kelp beds, including other species of rockfishes and occasionally small amounts of shellfish. Bocaccios are eaten by sharks, salmon, other rockfishes, lingcod, Albacore, sea lions, porpoises, and whales. Adult bocaccios are often caught with chilipepper rockfish and have been observed schooling with speckled, vermilion, widow, and yellowtail rockfish. They compete with chilipepper, widow rockfish, yellowtail rockfish and shortbelly rockfishes for both food and habitat resources.

3.17.4.1.4 Management Overview

Assessment scientists and managers have treated West Coast bocaccio as two separate independent stocks north and south of Cape Mendocino. Bocaccios have been an important component of California rockfish fisheries. Catches increased to high levels in the 1970s and early 1980s due to relatively strong recruitment. The Council began implementing increasingly restrictive regulations after an assessment of the southern stock in 1990 indicated that fishing rates were too high. Subsequent

assessments have indicated that the stock was in severe decline, and NMFS declared the stock overfished in 1999. MacCall *et al.* (1999) estimated spawning output of the southern stock to be 2.1% of its unfished biomass and 5.1% of the MSY level. The northern stock of bocaccio has not been assessed.

3.17.4.1.5 Past and Present Effects and Management Actions

The following direct and indirect effects were identified as potentially having population-level effects:

3.17.4.1.5.1 Mortality Due to Catch/Bycatch

Catches of this species have declined steeply from the 1970s, reflecting both a long-term decline in abundance and progressive harvest restrictions. The value of catch data since 2000 is imprecise because of management-induced discarding. Recent discards in the trawl fishery have been monitored. Because of the lack of data, discard rates in other commercial fisheries are assumed to be similar to those for the trawl fishery. Discards in the recreational fishery are provided by RecFIN. Catch, both retained and discarded by fishery for years 2000 through 2004 are reported in Table 3-128.

Table 3-128. Retained and Discarded Catch of Bocaccio by Fishery, 2000- 2004 (mt)

YEAR	TRAWL	HOOK & LINE	SETNET	Rec. South	Rec. North	TOTAL

Source: MacCall, Alec D., Status of Bocaccio off California in 2005, Table ES2, p. 3.

Based on the 1996 stock assessment bocaccio was declared formally overfished, thereby requiring development of a rebuilding plan. Rebuilding was initiated through catch restrictions beginning in 2000. The rebuilding OY was set at 100mt for 2000-2002. In response to the 2002 assessment that indicated very low productivity, the 2003 OY was set at 20mt. During the same year the retained catch was 12mt. Including mortality estimated discards, the estimated total kill was 22mt. Based on the 2003 assessment, that revealed a more productive stock, the 2004 OY was set at 250mt. However, management set the operational catch target at 199mt. The final catch was 78mt. Discards brought the estimated 2004 catch to 83mt. In 2004, a formal rebuilding plan was implemented for bocaccio by the Council.

3.17.4.1.5.2 Change in Reproductive Success Due to Removal of Predators, Cannibalism, Spatial/Temporal Concentration of Fishery Catch/Bycatch, Fishery Selectivity of Juveniles

The strong 1999 year class remains dominant. However, the 2003 year class appears stronger than average (Table 3-129). Little is known about factors that affect reproductive success.

Year	Spawning Output (billion eggs)	Relative Abundance	Total Age-1 Biomass(mt)	Recruits at Age-1	Catch(mt)	Exploitation Rate
1995	751	5.6%	4994	755	777	15.6%
2004	1261	9.4%	8078	1342	83	1.0%
2005	1440	10.7%	8561	885		

Source: MacCall, Alec D., Status of Bocaccio off California in 2005, Table 5, p. 13.

3.17.4.1.5.3 Change in Prey Availability Due to Fishery Catch/Bycatch of Prey Species

Little is known about ecological relationships between bocaccio and other organisms. Larval bocaccios eat diatoms, dinoflagellates, tintinnids, and cladocerans. Copepods and euphausiids of all life stages are common prey for juveniles. Adults eat small fishes associated with kelp beds, including other species of rockfishes and occasionally small amounts of shellfish. They compete with chilipepper, widow rockfish, yellowtail rockfish and shortbelly rockfishes for both food and habitat resources.

3.17.4.1.5.4 Change in Important Habitat Due to Fishery Gear Impacts

Bocaccios are most abundant in waters off central and southern California. Juveniles settle in nearshore waters after a several month pelagic stage. Adults are found at depths of 6.5-261 fm (12-478 m). Most adults are caught off the middle and lower shelf at depths between 27 fm and 137 fm (50 and 250 m). Larger fish tend to be deeper. Bocaccio is found in a wide variety of habitats, often on or near bottom features but sometimes over muddy bottoms. While usually found near the bottom they also have occurred as much as 16.4 fm (30 m) off bottom.

In November 1999, in order to keep trawlers from capturing canary rockfish, bocaccio, cowcod, and lingcod that associate with high relief rocky habitat on the continental shelf, the Council adopted a gear restriction that limits large footrope size. Differential trip limits were assigned to the three categories of trawl gear configurations: large footropes greater than 8 inches (20.5 cm), small footropes less than or equal to eight inches (< 20.5 cm), and midwater or pelagic gear. This rule prohibited vessels from delivering nearshore and shelf rockfish species and many flatfish species if they use footropes with rollers larger than eight inches. Large footropes could still be used for deepwater shelf and slope species. Though only preliminary research has been done, it widely is believed that this gear restriction has been effective in keeping boats from being able to fish in high relief habitat.

3.17.4.1.6 Comparative Baseline

Based on the 2005 assessment, the estimated unfished spawning output is 13325 billion eggs (compared with 13387 billion eggs estimated in the 2003 rebuilding analysis), based on the average recruitment from spawning years between 1950 and 1985. Estimated B_{MSY} is 5330 billion eggs (compared with 5355 billon eggs in 2003). According to the 2005 assessment, the current (2005) spawning output is 1419 billion eggs, which is 27% of the estimated B_{MSY} .

Results of stock projections suggest that the stock will be in the state of rebuilding when the TIQ program is implemented. Catch projections provided by both the stock assessment author and the STAR Panel are given in the Table 3-130.

YEAR	STAR Panel Catc	h Projections (mt)	Assessment Projections		
	Minimum	Maximum	Catch (mt)	Spawning Output	
2005	150	150	281	1430	
2010	129	359	327	1711	
2012	158	425	423	1962	
2015	211	535	511	2594	

Table 3-130. Projected Abundance of Bocaccio
--

* Projected abundance at an exploitation rate of 0.0498 Sources: PFMC (2005b) and MacCall (2005, p. 5).

- 3.17.4.2 Cowcod (S. levis)
- 3.17.4.3 Canary Rockfish (S. pinniger)
- 3.17.4.4 Darkblotched rockfish (S. crameri)
- 3.17.4.5 Pacific Ocean Perch (S. alutus)
- 3.17.4.6 Widow Rockfish (S. entomelas)
- 3.17.4.7 Yelloweye Rockfish (S. ruberrimus)
- 3.17.5 Past and Present Conditions of Non-Overfished Groundfish Species
- 3.17.5.1 Cabezon (Scorpaenichthys marmoratus)
- 3.17.5.2 Chilipepper (S. goodei)
- 3.17.5.3 Lingcod (Ophiodon elongates)
- 3.17.5.4 Pacific Cod (Gadus macrocephalus)
- 3.17.5.5 Pacific Whiting (Merluccius productus)
- 3.17.5.6 Shortbelly Rockfish (S. jordani)
- 3.17.5.7 Yellowtail Rockfish (S. flavidus)
- 3.17.5.8 Splitnose Rockfish (*S. diploproa*)
- 3.17.5.9 Slope Rockfish Complex
- 3.17.5.9.1 Aurora rockfish (*Sebastes aurora*)
- 3.17.5.9.2 Bank (Sebastes rufus)
- 3.17.5.9.3 Blackgill (S. melanostomus)

- 3.17.5.9.4 Redbanded (Sebastes babcocki)
- 3.17.5.9.5 Sharpchin (*S.zacentrus*)
- 3.17.5.9.6 Shortraker (Sebastes borealis)
- 3.17.5.9.7 Yellowmouth (Sebastes reedi)
- 3.17.5.10 Arrowtooth Flounder (Atheresthes stomias)
- 3.17.5.11 Petrale Sole (Eopsetta jordani)
- 3.17.5.12 English Sole (Parophrys vetulus)
- 3.17.5.13 Other Flatfish Complex
- 3.17.5.13.1 Butter sole (Isopsetta isolepis)
- 3.17.5.13.2 Curlfin sole (Pleuronichthya decurrens)
- 3.17.5.13.3 Flathead sole (Hippoglossoides elassodon)
- 3.17.5.13.4 Pacific sanddab (Citharichthys sordidus)
- 3.17.5.13.5 Rex sole (Glyptocephalus zachirus)
- 3.17.5.13.6 Rock sole (Lepidopsetta bilineata)
- 3.17.5.13.7 Sand sole (Psettichthys melanostictus)
- 3.17.5.13.8 Starry flounder (Platichthys stellatus)
- 3.17.5.14 DTS Complex
- 3.17.5.14.1 Dover sole (Microstomus pacificus)
- 3.17.5.14.2 Shortspine thornyhead (Sebastolobus alascanus)
- 3.17.5.14.3Longspine thornyhead (Sebastolobus altivelis)
- 3.17.5.14.4 Sablefish (Anoplopoma fimbria)
- 3.17.5.15 Spiny dogfish (Squalus acanthias)

3.17.5.16 Big Skate (Raja binoculata)

3.17.5.17 Leopard Shark (Triakis semifasciata)

3.18 Other Fish Resources

3.18.1 Potentially Affected Other Fish Resources

Other affected resources, non-groundfish species, and fisheries that target them often need to be considered in groundfish management for two reasons. First, they may be caught incidentally in fisheries targeting groundfish. Therefore, management measures that change total fishing effort in groundfish fisheries could increase or decrease fishing mortality on incidentally caught species. Second, those fisheries targeting non-groundfish species may be affected by management measures intended to reduce or eliminate incidental catches of overfished groundfish species in these fisheries.

Following an approach used in the Council's Groundfish Bycatch EIS, species listed below (excluding protected species described in other sections) are examined to capture the impacts of the alternatives under consideration. The species are: California halibut, Pacific halibut, pink shrimp, spot prawn, ridgeback prawn, Dungeness crab, jack mackerel, Pacific mackerel, walleye pollock, common thresher shark, and eulachon. These species were selected because they represent the range of impacts likely to be experienced by a broader range of species, but with similar life histories, distributions, and vulnerabilities to bycatch impacts.

3.18.2 Condition Indicators for Other Fish Resources

Indicators of the historical and baseline conditions of Other Fish Resources are similar to those listed for groundfish species in Section 3.17.2.

3.18.3 Data

Information needed to complete the profiles for the selected species can be found in the groundfish fishery specification, Bycatch and EFH EISs.

3.18.4 Past and Present Conditions of Other Affected Fish Resources

The format below for describing historical and baseline conditions will be repeated for all Other Affected Fish Resources. Alternatively, the information presented in this section and the subsections that follow will be summarized in one or more tables.

3.18.4.1 Pacific halibut (*Hippoglossus stenolepis*)

3.18.4.1.1 Life History and Distribution

Pacific halibut is a large flatfish which inhabits the continental shelf of the US and Canada. They are demersal and are caught most often between 90 to 900 feet. Halibut from California through the Bering Sea are considered to form one homogenous population. Halibut off the West Coast are at the extreme southern end of their range. The majority of the stock and all major spawning grounds are in

more northern waters off Canada and Alaska. The halibut that inhabit West Coast waters result from the southerly migration of juveniles.

Halibut spawn during the winter in deep water (approximately 1,000 feet). Their eggs and larvae rise and drift with ocean currents in a counter-clockwise direction around the northeast Pacific Ocean. Young fish settle to the bottom in shallow feeding areas. Juvenile migration is usually completed by the age of six. Adult fish tend to remain on the same grounds year after year, making only a seasonal migration from the more shallow feeding grounds in summer to deeper spawning grounds in the winter.

Pacific halibut are the largest of all flatfish, weighing up to about 500 pounds. Females typically grow faster and live longer than males. The oldest halibut on record was 55 years old. Most are less than 25 years old.

3.18.4.1.2 Population Trends

The assessment of the Pacific halibut stock status was revised in 1996 due to the observed changes in individual growth rates that affected fishing gear selectivity. The new analyses showed that the exploitable portion of the stock apparently peaked at 326,520 mt in 1988 (Sullivan and Parma 1998). The population has since declined slightly and has maintained a biomass in the range of 270,000 to 277,000 mt. The long-term average yield was estimated at 26,980 mt (Parma 1998).

Until 2001, the exploitable biomass off the West Coast was estimated as a proportion of the total for the two areas. As a result of a reanalysis and reevaluation of assessment methods for these areas in 2001, the biomass off the West Coast was estimated from survey data and a separate assessment of abundance in British Columbia. This change resulted in about a 5% increase in the biomass estimate for the West Coast (Clark and Hare 2001).

3.18.4.1.3 Trophic Interactions

Halibut are carnivorous. Larval halibut feed on plankton. When they are one to three years old they feed on small crustaceans and small fish. As halibut grow, fish become a larger part of their diet. They prey upon cod, sablefish, pollock, rockfish, sculpins, turbot, and other flatfish. They also leave the bottom to feed on sand lance and herring in the water column. Octopus, crabs, clams, and occasionally small halibut are also eaten. Large juveniles and adult halibut occasionally are eaten by marine mammals but are rarely prey for other fish.

3.18.4.1.4 Management Overview

Pacific halibut are managed by the bilateral (US/Canada) International Pacific Halibut Commission (IPHC). Implementing regulations are set by each country in their own waters. The Pacific Halibut Catch Sharing Plan for waters off Washington, Oregon and California (Area 2A) specifies management measures for the West Coast. Implementing catch levels and regulations are the responsibility of the Council, the states of Washington, Oregon, and California, and the Pacific halibut treaty tribes. A license from the IPHC is required to participate in the commercial fishery. The commercial sector in Area 2A is confined to waters south of Point Chehalis, Washington. In the non-treaty commercial sector, 85% of the harvest is allocated to the directed halibut fishery and 15% to the salmon troll fishery to cover incidental catch. When the Area 2A total allowable catch is above 900,000 pounds, halibut may be retained in the limited entry sablefish fishery north of Point Chehalis.

3.18.4.1.5 Past and Present Effects and Management Actions

The following direct and indirect effects are capable of having population-level effects on Pacific halibut:

3.18.4.1.5.1 Mortality due to Bycatch

Pacific halibut bycatch mortality in groundfish fisheries was relatively low until the 1960s when it increased due to the development of foreign fisheries. Total bycatch mortality for IPHC regulatory areas:

- Peaked in 1965 at approximately 21 million pounds
- Decreased in the late 1960s to approximately 15 million pounds
- Increased to approximately 20 million pounds by the early 1970s
- Decreased through the late 1970s with an increase to approximately 18 million pounds in 1980.

The bycatch of Pacific halibut in groundfish fisheries decreases the amount that can be taken by fishermen in the directed IPHC fishery. Pacific halibut bycatch data for the limited entry trawl fishery are presented in Table 3-131.

Year	2000	2001	2002	2003	2004	2005
Bycatch (mt)						

Source:

3.18.4.1.5.2 Spawning Disruption

The early directed Pacific halibut fishery took place year-round. Fish caught during spawning season were of poor quality. Bycatch contains both adult (>81 cm) and juvenile fish (<81 cm). A winter season fishery closure was proposed as a result of the 1913 US and Canada discussions on international halibut management. This closure was proposed in order to eliminate a period of fishing when poor quality fish were caught.

Pacific halibut spawn in very deep water (400 to 600m) off the continental shelf edge and negative effects would arise to the degree that fisheries utilize these areas.

3.18.4.1.5.3 Reduced Recruitment: Spatial/Temporal Concentration of Bycatch

Alaska groundfish fisheries take the majority (more than 90%) of Pacific halibut bycatch. Juveniles may or may not have completed their migration from the nursery ground to home areas. Their capture has the potential effect of reducing recruitment to adult stock in the home area where they would have migrated. Adult fish caught as bycatch have completed their migration back to home areas. Therefore, bycatch of adult fish can be expected to affect only the stock in the area where the bycatch is taken. Approximately 50 to 60 percent of the bycatch is below the directed fishery size limit of 81 cm.

3.18.4.1.6 Comparative Baseline

The assessment of the Pacific halibut stock status was revised in 1996 due to observed changes in individual growth rates that affected fishing selectivity. Pacific halibut have shown a decrease in size and age over time. Fish today weigh approximately a third of what fish of the same size weighed 20

years ago. The new analyses indicated that the exploitable portion of the stock apparently peaked at 326,520 mt in 1988. The population has since declined slightly and has maintained a biomass in the range of 270,000 to 277,000 mt. The long-term average yield was estimated at 26,980 mt round weight (Parma 1998).

The nature of the Pacific halibut commercial fishery has changed in recent years. Both Canadian and US fisheries have gone from open access with short season fisheries to IFQ fisheries that last eight months. In addition, quota allocations have been implemented for Native American treaty, commercial, and recreational fisheries for waters from Washington to California. Removals of Pacific halibut for 2002 totaled 44,453 mt (net weight). The breakdown by fishery is: commercial catch 33,749 mt (76%); sport catch 3,946 mt (9%); incidental bycatch mortality, 5,806 mt (13%): personal use, 363mt (1%); and waste, 726 mt (2%).

Currently, the Pacific halibut resource is considered to be healthy. The 2005 estimated total exploitable biomass was 395 million pounds (Clark and Hare, 2005). The total exploitable biomass is predicted to be 382 million pounds in 2006. It is inferred that any direct or indirect effects of past bycatch in groundfish fisheries were taken into account under the IPHC management process.

3.18.4.2 California halibut (Paralichthys californicus)

- 3.18.4.3 Pink shrimp (Pandalus jordani)
- 3.18.4.4 Spot prawn (Pandalus platyceros)
- 3.18.4.5 Ridgeback prawn (*Sicyonia ingentis*)
- 3.18.4.6 Dungeness crab (*Cancer magister*)
- 3.18.4.7 Jack mackerel (Trachurus symmetricus)
- 3.18.4.8 Pacific mackerel (Scomber japonicus)
- 3.18.4.9 Walleye pollock (Theragra chalcogramma)
- 3.18.4.10 Common thresher shark (Alopias vulpinus)
- 3.18.4.11 Eulachon (thaleichthys pacificus)

3.19 Marine Mammals

3.19.1 Potentially Affected Marine Mammals

The waters off Washington, Oregon and California support a wide variety of marine mammals. Approximately 30 species, including seals and sea lions, sea otters, whales, dolphins, and porpoise, occur within the EEZ. Many marine mammal species seasonally migrate through West Coast waters, while others are year-round residents

The 2005-2006 Groundfish Fishery Specification EIS (PFMC, 2004) reported marine mammal fishery interactions observed during the first year of the West Coast Groundfish Observer Program. Information obtained indicated that lethal interactions occurred in both the trawl and longline fisheries, although the highest mortality was seven California sea lions taken by trawl gear. Trawlers also took two Steller sea lions and an unidentified sea lion. Because marine mammals are diving animals and strong swimmers, they are more likely to be taken in trawl gear than longline gear. Other marine mammals noted to have been taken in West Coast groundfish fisheries are the harbor seal, sea otter, Dall's porpoise, white-sided dolphin, and short-beaked dolphin.

Species	Gear Type	Type of Interaction	
California Sea Lion	Trawl	7 Individuals Taken	
Unidentified Sea Lion	Trawl	1 Individual Taken	
Steller sea Lion	Trawl	2 Individuals Taken	
California Sea Lion	Trawl and Longline	Feeding on Discard	
Steller sea Lion	Trawl and Longline	Feeding on Discard	
Pacific white-sided Dolphin	Trawl	Feeding on Discard	

 Table 3-132. Interactions between Marine Mammals and West Coast Groundfish Trawl Fishery Documented by West Coast Groundfish Observers between September 2001 and October 2002

Source: PFMC, 2004, p.225. Note – Approximately 10% of the coast-wide limited entry trawl landed weight was observed.

3.19.2 Condition Indicators for Marine Mammals

Indicators of the historical and baseline conditions of marine mammals in terms of fishery impacts include but are not necessarily limited to incidental takes/entanglement, prey availability, spatial and temporal distribution of the fishery catch, and disturbance by fishing vessels.

Fisheries interact with marine mammals either operationally or biologically. Operational effects are direct and occur in the form of incidental takes that may result in disturbance, serious injury or mortality. Operational interactions between marine mammals and fisheries result from entanglement in actively fishing or derelict fishing gear. Marine mammals become entangled when they encounter derelict or active fishing gear. Biological interactions result from disturbance of normal marine mammal foraging behavior.

Some types of fisheries are much more likely to catch marine mammals incidentally than others. Incidental take is a direct source of mortality and NMFS requires all commercial fisheries in the US EEZ to report the incidental take and injury of marine mammals that occur during their operation. Provisions of the MMPA requires that all commercial fisheries be placed into one of three categories, based on the frequency of incidental take (serious injuries and mortalities) relative to the value of

potential biological removal (PBR) for each stock or marine mammal. Category 1 fisheries are those fisheries with frequent incidental take, defined as those with takes greater than or equal to 50% of PBR for a particular stock. Category II designates fisheries with occasional serious injuries and mortalities, defined as those with takes between 1% and 50% of PBR. Category III designates fisheries with a remote likelihood or no known serious injuries or mortalities, defined as those with takes less than or equal to 1% of PBR.

In some cases, individual marine mammals may be killed outright by fishing activity. In other cases, individuals are affected in ways that may decrease their chances of surviving natural phenomenon or reproducing successfully. These sub-lethal impacts reduce the overall "fitness" of individuals and may have population-level implications if enough animals are impacted. Although some fisheries have no record of incidental take of marine mammals, some may contribute to the effect of entanglement in lost fishing gear. Evidence of entanglement comes from observations of animals trailing ropes, buoys, nets, or bearing scars from such gear. Sometimes stranded marine mammals also have evidence of entanglement but it may not be possible to ascertain whether the entanglement caused the injury or whether the corpse picked up gear as it floated around after death. Sometimes an animal is observed to become entangled in specific fishing gear, in which case an incidental take or minor injury may be recorded for the particular fishery, but many times the contributions of individual fisheries to the overall effects of entanglement are difficult to document and quantify.

Prey availability to marine mammals depends on a large number of factors and differs by species and season. Among these factors are oceanographic processes such as upwelling, thermal stratification, fronts, gyres, and tidal currents that concentrate prey at particular times and places. Prey availability also depends on the abundance of competing predators and the ecology of prey species, including their natural rates of reproduction, seasonal migration, and movements within the water column. The relative contributions of factors that influence prey availability for particular species and areas are rarely known. Most critical is the lack of information on how events outside an animal's foraging range or in a different season may influence the availability of prey to animals in a particular place and time.

The question of whether commercial fisheries have an effect on the availability of prey to marine mammals may be addressed by examining the degree of direct competition (harvest) for prey and by looking for potential indirect or cascading effects of fisheries on the food web of the mammals. For marine mammals whose diets overlap to some extent with the target or bycatch species of the fisheries, fishery removals could potentially decrease the density of prey fields or cause changes in the distribution of prey such that foraging success of the marine mammals is affected. If alternative prey is not available or is of poorer nutritional quality than the preferred species, or if the animal must spend more time and energy searching for prey, reproductive success and/or survival can be compromised. In the case of marine mammals that do not feed on fish or feed on different species than are taken in the fisheries, the removal of a large numbers of target fish from the ecosystem may alter the predator/prey dynamics and thus the abundance of another species that are eaten by marine mammals. The mechanisms and causal pathways for many potential food web effects are not well documented because they are difficult to study.

The effects of disturbance caused by vessel traffic, fishing operations, engine noise, and sonar pulses on marine mammals are largely unknown. Observed behavior ranges from attraction to the vessel, to course modification or maintenance of distance from the vessel. Dall's porpoise, Pacific white-sided dolphins, and beaked whales have been observed adjacent to vessels for extended periods of time. A small number of fatal collisions with various vessels have been recorded in California and Alaska in the past decade.

3.19.3 Data

Information useful to this analysis is available in various agency reports, and the PFMC's Bycatch and EFH EISs.

3.19.4 Past and Present Effects on Marine Mammals

3.19.4.1 Pinnipeds

The format below for describing historical and baseline conditions will be repeated for all potentially affected marine mammal species. Alternatively, the information presented in this section and the subsections that follow will be summarized in one or more tables.

3.19.4.1.1 Northern elephant seal (Mirounga angustirostris)

3.19.4.1.1.1 Life History and Distribution

Elephant seals (*Mirounga angustirostris*) range throughout the northeast Pacific Ocean from central Baja California, Mexico to the GOA and eastern Aleutian Islands, with occasional sightings in the southern Bering Sea. They are polygamous breeders with males forming harems and defending them against other mature males. Breeding occurs on islands from central Baja California north through central Oregon. Pupping and mating occurs on isolated islands and mainland rookeries during January and February. Following the breeding season, adults go to sea and forge until they return to rookery islands to molt in April (females) and July (males). Following the molt adults again return to foraging areas, where they feed until returning for the following breeding season. Elephant seals complete two long distance migrations each year, with males traveling further then females.

3.19.4.1.1.2 Population Trends

The existing population of northern elephant seals is descended from perhaps 100 animals that survived in Mexico after the species was nearly exterminated by commercial hunting in the 19th century. The population has expanded rapidly since hunting was halted. An estimated population of 127,000 animals existed in US and Mexico waters in 1991, with 95,000 animals present in the US Approximately 101,000 animals were estimated to make up the US population in 2001.

3.19.4.1.1.3 Trophic Interactions

Northern elephant seals feed mainly at night in very deep water and consume whiting, skates, rays, sharks cephalopods, shrimp, euphausiids, and pelagic red crab. Males forage in areas close to or over the continental shelf break, during intense feeding. Females tend to forage in deeper waters off the continental shelf. In these waters, elephant seals dive to depths of 400m, apparently feeding on organisms associated with the deep scattering layer. Some adult and sub-adult males occupy more coastal habitats where dive records suggest feeding on or near the bottom. While the proportion of the population using coastal habitats is unknown, most adult males and females appear to feed in the water column over very deep water.

3.19.4.1.1.4 Management Overview

Management of the northern elephant seal is the responsibility of NMFS. Since they are protected under the MMPA, a moratorium exists on the taking of all marine mammals, except for subsistence

use by Alaska Natives. Northern elephant seals are not an important species for Alaska Native subsistence hunters. Because their annual human-caused mortality is less than the calculated PRB for this stock, they are not considered a "strategic" stock under the MMPA.

3.19.4.1.1.5 Directed Mortality from Incidental Take by West Coast Groundfish Fisheries

There are no recent estimated incidental kills of Northern elephant seals in groundfish fisheries along Washington, Oregon and California. However, they have been caught in setnet fisheries. On average 86 elephant seals are taken each year in various gillnet fisheries from California to Washington (Carretta et al. 2002).

3.19.4.1.1.6 Comparative Baseline

The population of northern elephant seals in US waters continues to expand and is currently over 100,000 animals. They spend part of the year in Alaska waters, but there is little information on their diet there. Incidental take in groundfish fisheries appears to be a very rare occurrence.

3.19.4.1.2 Northern fur seal (Callorhinus ursinus)

3.19.4.1.2.1 Life History and Distribution

The northern fur seal ranges throughout the North Pacific Ocean from southern California north to the Bering Sea and west to the Okhotsk Sea and Honshu Island, Japan. The species is sexually dimorphic, meaning that mature males and females look very different. They have a highly polygamous mating system, breeding in dense colonies on islands located near highly productive marine areas. Breeding is restricted to only a few sites: the Pribilof Islands, Commander Islands, Bogoslof Island, and San Miguel Island. Most females, pups, and juveniles leave the Bering Sea by late November and are pelagic in the North Pacific during the late fall and winter, migrating south as far as Southern California in the eastern North Pacific and Japan in the western North Pacific, until they begin returning to the rookeries in March.

Two separate stocks of northern fur seals are recognized within US waters: an eastern Pacific stock, that includes all the animals in the BSAI and GOA, and a San Miguel Island (California) stock. Population estimates for the eastern Pacific stock are calculated by estimating the number of pups at rookeries and then multiplying by an expansion factor (4.5) that approximates a life table analysis(Angliss and Lodge 2002).

3.19.4.1.2.2 Population Trends

Until the mid-1970s, northern fur seal population trends could be explained by commercial harvest patterns in the North Pacific Ocean. Large population declines coincided with large harvests of female and juvenile fur seals. The fur seal population has shown a resiliency to sustained harvest of adult males when females and juveniles were not harvested. The history of pelagic sealing (1875-1909), its impact on the fur seal population, and a subsequent treaty banning pelagic sealing is found in Gentry (1998). At the peak of pelagic sealing (1891-1900), more than 42,000 animals were taken annually in the Bering Sea. Because the takes were greatly reducing the stock, Great Britain (for Canada), Japan, Russia and the United States ratified the Treaty for the Preservation and Protection of Fur Seals and Sea Otters in 1911. With the signing of the treaty, commercial pelagic harvests ended. The population grew rapidly after the cessation of pelagic sealing until the mid-1940s.

The Alaska population of fur seals peaked at a high of approximately 2 million animals during the 1950s. In 1957, the signatories to the 1911 Treaty ratified a new agreement. During those negotiations, calculations presented by the US suggested that maximum sustained productivity would

occur at lower female population levels than those that existed in the early 1950s. Consistent with that analysis, from 1956 to 1968, a total of about 30,000 to 96,000 juvenile males were harvested each year and a pelagic collection of about 16,000 females were taken for research purposes by the US and Canada. This harvest of females and juveniles caused a large population decline into the late 1960s.

With the cessation of female and juvenile harvests, the population increased only briefly into the mid-1970s. The population then began a steady decline of 6 to 8 percent per year into the 1980s. The cause of this decline has not been determined. By 1983 the population was estimated to be 877,000 seals (Angliss *et al*, 2001). Since 1998, population estimates from pup surveys indicate that the population is declining at a rate of more than five percent per year. The cause of the decline is unknown.

3.19.4.1.2.3 Trophic Interactions

Northern fur seals food habitats studies that were based on the frequency of occurrence indicate that the diet consisted of 67% fish, (34% Pollock, 16% capelin, 6% Pacific herring, 4% deep-sea smelt and lantern fish, 2% salmon, 2% Atka mackerel, and no more than 1% eulachon, Pacific cod, rockfish, sablefish, sculpins, Pacific sand lance, flatfish and other fish) and 33 percent squid (Perez 1990)

3.19.4.1.2.4 Management Overview

Northern fur seals are managed by NMFS and by co-management agreements with Alaska Native Organizations under Section 119 of the MMPA. Northern fur seals were listed as depleted under the MMPA in 1988 because population levels had declined to less than 50% of that observed in the late 1950s.

3.19.4.1.2.5 Past and Present Effects and Management Actions

Direct Mortality from Incidental Take by West Coast MSA Groundfish Fisheries

Incidental take of fur seals from the foreign and joint venture groundfish fisheries averaged 22 animals per year form 1978 to 1988 (Perez and Loughlin 1991). The high seas driftnet fisheries killed thousands of fur seals every year, including an estimated 5,200 fur seals in 1991, the last year before those fisheries were outlawed by United Nations Resolution (46/215) (Hill and DeMaster 1999).

Based on self-reported mortalities, State of Alaska managed salmon fisheries took an average of 15 fur seals per year from 1990 to 1998. Most of these mortalities come from the Bristol Bay salmon drift gillnet fishery.

The incidental take of northern fur seals is uncommon in groundfish fisheries. The last recorded mortality in any Alaska groundfish fishery occurred in 1996. The estimated average take in trawls is less than one seal per year (Angliss *et al.* 2001). During the period 1994-1998 there were no reported mortalities of northern fur seals in any observed fishery along the West Coast of the continental US

The contribution of MSA fisheries to gear and debris that causes entanglement of fur seals is unknown.

Indirect Effects through Changes in Prey Availability

Ecological interactions between northern fur seals and groundfish fisheries are caused by spatial and temporal overlap between fur seal foraging areas and groundfish fisheries. The diet of northern fur seals includes a wide range of fish species.

3.19.4.1.2.6 Comparative Baseline

Northern fur seals are numerous. However, they are listed as a "depleted" stock under the MMPA because of major population declines from 1950 to the late 1960s and again from the mid-1970s through the early 1980s. Subsistence hunts make up the great majority of anthropogenic mortality, but these levels are well below PBR. Incidental take in groundfish fisheries hovers around zero. There still is concern about potential competitive interactions for prey.

- 3.19.4.1.3 Guadalupe furl seal (Arctocephalus townsendi)
- 3.19.4.1.4 California sea lion (Zalophus californianus)
- 3.19.4.1.5 Pacific harbor seal (Phoca vitulina richardsi)
- 3.19.4.1.6 Northern or Steller sea lion *(Eumetopias jubatus)*
- 3.19.4.2 Sea otters
- 3.19.4.2.1 Southern (Enhydra lutris nereis)
- 3.19.4.2.2 Washington (Enhydra lutris kenyoni)
- 3.19.4.3 Cetaceans
- 3.19.4.3.1 Minke whale (*Balaenoptera acutorostrata*)
- 3.19.4.3.2 Short-finned pilot whale (*Globicephala macrorhynus*)
- 3.19.4.3.3 Gray whale (Eschrilchtius robustus)
- 3.19.4.3.4 Harbor porpoise (*Phocoena phocoena*)
- 3.19.4.3.5 Dall's porpoise (*Phocoenoides dalli*)
- 3.19.4.3.6 Short-beaked common dolphin Pacific white-sided dolphin (*Delphinus delphis*)
- 3.19.4.3.7 Long-beaked common dolphin (*Delphinus capensis*)

3.20 Seabirds

3.20.1 Potentially Affected Seabirds

The highly productive California Current System supports more than two million breeding seabirds and at least twice that number of migrant visitors. 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 seabirds, millions of other birds are seasonally abundant in this oceanic habitat including: waterfowl, waterbirds (loons and grebes), and shorebirds (phalaropes). Not surprisingly, 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 US Fish and Wildlife Service (USFWS) is the primary federal agency responsible for seabird conservation and management. Four species found off the Pacific coast are listed under the ESA (Short-tail albatross (*Phoebastria albatrus*), California brown pelican (*Pelecanus occidentalis*), California least tern (*Sterna artillarum browni*), and Marbled murrelet (*Brachyramphs marmoratus*)). The USFWS has classified several seabird species that occur off the Pacific Coast as "Species of Conservation Concern." These species include the 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*), and Xantus's murrelet (*Synthliboramphus hypoleucus*).

Under the MSA, NMFS must ensure fishery management actions comply with other laws designed to protect seabirds. NMFS also is required to consult with USFWS if fishery management plan actions may affect seabird species listed as endangered or threatened.

3.20.2 Condition Indicators for Seabirds

Indicators of the historical and baseline conditions of seabirds in terms of fishery impacts include but are not necessarily limited to incidental takes mortality from vessel strikes, changes in prey availability, ingestion of processing waste and discards, and habitat suitability.

Seabirds are caught incidentally in all types of fishing operations. Table 3-133 provides observer data for West Coast groundfish fisheries for the time period September 2001 to October 2002. The risk of seabirds getting caught in fishing gear varies with the density and behavior of bird species around the fishing vessel, the type of fishing gear used, and the technique and/or devices used, if any, to deter or avoid the birds. Many factors contribute to the abundance and distribution of birds at sea, including the availability of natural prey, but many species are attracted to fishing vessels in order to forage on bait, offal, discards, and natural prey disturbed by fishing operations.

Table 3-133 Interactions between Seabirds and West Coast Groundfish Fisheries Documented by West Coast				
Groundfish Observers between September 2001 and October 2002.				

Species	Gear Type	Type of Interaction	
Unidentified Gull(Larus species)	Trawl	1 Individual Taken	
Unidentified Seabird	Trawl	4 Individuals Taken	
Short-tailed Albatross (<i>Phoebastria albatrus</i>)	Longline and Trawl	Feeding on Discard	

Source: PFMC Bycatch EIS Table 4.3.16, p 4-137

Although more than 100 species of seabirds occur along the West Coast, little information is available about the incidental take of seabirds in West Coast groundfish fisheries. Observers aboard groundfish vessels off the West Coast during August 2001 –October 2002 reported that four cormorants and one gull were taken by the limited entry trawl fleet.

Catcher processors and motherships participating in the Pacific whiting fishery have had full observer coverage since the mid-1970s. The non-whiting portion of the fishery has had observer coverage only since the fall of 2001. Between September 2001 and October 2002, approximately 10% of the coast wide limited entry trawl landed weight was observed.

Seabirds sometimes strike vessels and fishing gear in flight. Some birds fly away without injury but others are injured.

Seabird species differ greatly from one another in their prey requirements and feeding behavior, leading to substantial differences in their responses to changes in the environment. Diets consist largely of fish and squid less than 15 cm long and large zooplankton. Although they may take a wide variety of prey species during the year, most seabirds in a given area and time depend on one or a few prey species. Diets and foraging ranges are most restricted during the breeding season, when high-energy food must be delivered efficiently to nestlings, and are more flexible during other times of the year. Prey availability may also depend on the ecology of food species, including productivity of other predators, food-web relationships of the prey, and prey behavior, such as migration of fish and zooplankton. Many factors that influence prey availability are completely unknown. Most critical is the lack of information on how events beyond a seabirds foraging range may influence prey availability. Such factors may include environmental changes, fluctuations in region wide stocks of forage and non-forage species, and commercial harvest.

Scavenging of fishery wastes can influence seabird populations in either a negative or positive manner. If populations of large gulls increase as a result of waste and discards, local populations of other species may be reduced through increased competition for nest sites and predation pressure on young birds. Further, sudden withdrawal of discards could cause the predatory species to increase pressure on other species long before the predator populations decline. The seabird species whose normal foraging behavior includes scavenging on dead material, may be at risk of either becoming entangled or being incidentally taken in fishing gear.

Fishing vessels can affect seabird populations whether or not the vessels are engaged in fishing or processing activities. Many surface-feeding birds are attracted to vessels, while others may be displaced from foraging areas. The magnitude of the impact depends on the location, timing, and frequency of vessel traffic and on how closely those factors coincide with important foraging areas.

There is some concern that fishing activity, especially trawling, may have detrimental impacts on seabirds by disrupting the schooling behavior of their prey and therefore decreasing their foraging success. The intensity and longevity of trawling impacts on the structure and distribution of forage fish schools are not known. However, given the large number of variables that influence foraging success for different species and the ability of birds to search for prey over large distances, it is unlikely that any localized disruptions of prey fields could be demonstrated to have specific adverse effects on birds. There is evidence that some forms of trawling may make fish vulnerable to diving birds by disturbing or injuring the fish.

3.20.3 Data

Information useful to this analysis is available in various agency reports, and the PFMC's Bycatch and EFH EISs.

3.20.4 Past and Present Conditions of Seabirds

The format below for describing historical and baseline conditions will be repeated for all potentially affected seabird species. Alternatively, the information presented in this section and the subsections that follow will be summarized in one or more tables

3.20.4.1 Albatross

3.20.4.1.1 Life History and Distribution

Albatross range extensively throughout waters off the Pacific Coast. In particular, three species, the short-tailed albatross (*Phoebastria albatrus*), the black-footed albatross (*Phoebastria nigripes*), and the Laysan albatross (*Phoebastria immutabilis*) occur in the waters off Washington, Oregon, and California.

Short-tailed albatross

The short-tailed albatross is a very large seabird with narrow, seven-foot-long wings adapted for soaring low over the ocean. Young birds are chocolate brown, gradually turning white as they grow older. Adult short-tailed albatross have an entirely white back, white or pale yellow head and back of the neck, and black and white wings. Their large pink bill is hooked at the end with a blue tip. Presently, these birds nest on two islands in Japan, Torishima and Kinami-kojima. Single eggs are laid in October and November, chicks hatch in December through February, and the young fledge from May to July. Immature birds wander across the North Pacific until they begin breeding at 6 to 9 years of age.

Once considered the most common albatross ranging over the continental shelf, the short-tailed albatross was hunted to near extinction in the early 1900s. It is now thought to be one of the rarest birds in the world. Relatively little is know about seasonal movements or factors determining marine distribution of short-tailed albatross. It is believed that the species was formerly common off China, in the Sea of Japan, the Sea of Okhotsk, the Bering Sea north to the Bering Strait, and throughout the enter temperate North Pacific, from Alaska to Baja California.

Black-footed albatross

Much like the short-tailed albatross, the black-footed albatross ranges throughout the North Pacific. It is the most abundant albatross species along the Pacific Coast and is present throughout the year. Breeding occurs in the Northwestern Hawaiian Islands and Torishima Island, and the species disperses from the Bering Sea south along the West Coast to California

Laysan albatross

The Laysan albatross, also known as the "gooney bird," is a large white and black seabird with a wingspan that reaches 85 inches. The most abundant North Pacific albatross is the Laysan albatross. The vast majority of the Laysan albatross population breeds in the Northwestern Hawaiian Islands, fewer numbers breed on the Japanese Ogasawara Islands, and fewer pairs breed on islands off Baja California, Mexico. They range, when at sea, from the Bering Sea, to California and to Japan. They are monogamous and if one of the mates should die it may be several years before the survivor can make a new pair bond. Only one egg is laid per year. Similar to the other North Pacific albatross species, Laysan albatross feed on schooling fish and squid at the ocean's surface.

3.20.4.1.2 Population Trends

Short-tailed albatross

Historical records indicate that there were over 100,000 individuals at the Torishima Island colony at the turn of the century and during 1998 and 1999 just over 400 breeding adults were found at the colony. The population on Torishima Island is now growing at an annual rate of 7.8%. The current estimate of the short-tailed albatross world population is about 1700 individuals.

Black-footed albatross

The global black-footed albatross population is estimated at about 56,600 breeding pairs and thought to be decreasing. This species is classified as vulnerable by the IUCN (International Union for the Conservation of Nature and Natural Resources) based on a 19% population decrease during 1995 to 2000 and a projected future decline of more than 20% over the next 60 years owing to interactions with longline fisheries for tuna, billfish, and groundfish in the North Pacific.

Laysan albatross

The USFWS counts Laysan albatross at Midway Atoll once every four years and counts birds or samples density at French Frigate Shoals and Laysan Island every year. These monitoring sites account for 93% of the world population of about 393,000 breeding pairs. At these three sites breeding populations have declined at an average rate of 3.2% per year since 1992.

3.20.4.1.3 Trophic Interactions

Short-tailed albatross

Short-tailed albatross forage at the water's surface on squid, crustaceans, and various fish species. They forage along the edge of the continental shelf and on the outer shelf where upwelling brings their prey to the surface. They may forage at night, as well as, during the day. Since they range widely over the ocean and are opportunistic feeders, their diet varies with local availability. Albatross are attracted to fishery wastes released from fishing vessels and processors and are vulnerable to being caught in fishing gear, especially on baited hooks longline fisheries.

Black-footed albatross

Black-footed albatross prey on fish, sea urchins, amphipods, and squid. Foraging is done at night and prey is caught at the ocean's surface. This species will follow fishing vessels and consume discards. Besides interactions with longline gear, other threats to black-footed albatross include nest loss due to waves, pollution, introduced predators, oiling, ingestion of plastic and volcanic eruptions on Torishima Island.

Laysan albatross

Cephalopods play a major role in the diet of Laysan albatross. Squid are the most important food item, although which species are eaten is poorly known. Few observations have been published about their feeding in the wild, other than of those birds scavenging near fishing vessels. They take food in the upper meter of the ocean's surface. In addition to squid, other food items include myctophids, other invertebrates and fish. Similar to the other North Pacific albatross species, Laysan albatross feed on schooling fish and squid at the ocean's surface.

3.20.4.1.4 Management Overview

Short-tailed albatross

Management responsibility for the short-tailed albatross is under the jurisdiction of the USFWS. The short-tailed albatross was originally designated as "endangered" under the Endangered Species Conservation Act of 1969 as a foreign-listed species (because they do not nest in US territory). In 1973, when the ESA replaced the 1969 Act, the short-tailed albatross was included as a foreign

species but not as a native species. This created an administrative error by listing its status as endangered elsewhere except in the US The USFWS corrected the error by extending the species' endangered status to include its range within the US The proposed and final rules contain extensive information on the species life history, demographics, and population status (USFWS 1998a and 2000c).

At the time a species is proposed for listing under the ESA, critical habitat can also be proposed. Habitats outside the US are not eligible for critical habitat designation. Because the North Pacific Ocean and Bering Sea once supported millions of short-tailed albatross, USFWS scientists believe that this species is nowhere near its habitat carrying capacity. NMFS determined that designation of critical habitat within the US would not be beneficial to the short-tailed albatross (USFWS 1998a and 2000c).

Under the requirements of the ESA, the USFWS is responsible for determining whether proposed federal actions are likely to jeopardize the recovery of the species.

Black-footed albatross

Wildlife management responsibility for the black-footed albatross falls under the jurisdiction of the USFWS. Most research on the species has taken place in their northwest Hawaiian breeding colonies. Black-footed albatross have been assigned "vulnerable" status on the World Conservation Union's Red List of Threatened Species because of reported declines in numbers on their breeding colonies.

Laysan albatross

Wildlife management responsibilities for Laysan albatross fall under the jurisdiction of the USFWS. The species is protected under the US Migratory Bird Treaty Act.

3.20.4.1.5 Past and Present Effects and Management Actions

3.20.4.1.5.1 Direct Mortality from Incidental Takes in West Coast MSA Groundfish Fisheries

Short-tail albatross

No short-tailed albatross have been recorded as being taken in the groundfish trawl fishery. Short-tail albatross have been reported to be taken by vessels using hook-and line gear. Because incidental catch is so small, estimation of the total take is problematic. Uncertainty exists on how the known take should be expanded to the unobserved portion of fisheries.

Black-footed albatross

Laysan albatross

3.20.4.1.5.2 Direct Mortality from Vessel Strikes

Short-tailed albatross

Many trawl vessels deploy a cable ("third wire") from the vessels to the trawl net monitoring device (sonar transducers). These cables are not typically monitored by groundfish observers and any birds killed by such collisions would not be likely to make their way into the trawl net and would therefore not be recorded in the observers haul sample. The distribution and extent of seabird mortalities or injuries by species is therefore unknown.

Black-footed albatross

Laysan albatross

3.20.4.1.5.3 Changes in Prey Availability

Short-tailed albatross

The impacts of groundfish and other fisheries on the availability of prey to short-tailed albatross are unknown. The ability of albatross to forage over huge areas is presumed to lessen the potential impact of localized depletion of prey. The fact that the short-tailed albatross population is growing at or near its theoretical maximum rate and the environment used to support millions of them, it is thought that food availability is not a limited at present (USFWS 2000c).

Black-footed albatross

Laysan albatross

3.20.4.1.5.4 Consumption of Fishery Discards

Short-tailed albatross

Short-tailed albatross are attracted to fishing vessels and processors to eat discards and offal. Benefits of the food source are countered by an increased risk of incidental take.

Black-footed albatross

Laysan albatross

3.20.4.1.6 Comparative Baseline

Short-tailed albatross

Short-tailed albatross were nearly exterminated by commercial hunting about 100 years ago but are making a comeback. The population appears to be increasing at a near-maximum rate. They still are one of the rarest species on earth with an estimated population of only 1600 to 1700 birds. They are listed as "endangered" under the ESA. Recent scientific research indicates that new seabird avoidance techniques can greatly reduce the incidental take of species with similar feeding behavior as short-tailed albatross.

Black-footed albatross

Black-footed albatross is the most numerous albatross species along the Pacific Coast. There were an estimated 300,000 black-footed albatross in the world as of 2001. However, their numbers have declined over the past ten years. This species is classified as "vulnerable" by the IUCN (International Union for the Conservation of Nature and Natural Resources) based on a 19% population decrease during 1995-2000 and a projected future decline of more than 20% over about the next 60 years owing to interactions with longline fisheries. The species faces serious threats from incidental take in longline fisheries throughout its range, especially by foreign tuna and swordfish pelagic longline fisheries in the Central and North Pacific.

Laysan albatross

The most abundant North Pacific albatross species is the Laysan albatross. At three main monitoring sites, Midway Atoll, French Frigate Shoals and Laysan Island, breeding populations have declined at an average rate of 3.2% per year since 1992.

3.20.4.2 California brown pelican

3.20.4.3 Northern Fulmars

3.20.4.4 Shearwaters

3.20.4.5 Cormorants

3.20.4.6 Puffins

3.21 Other Protected Resources

3.21.1 Potentially Affected Other Protected Species

Protected species fall under three overlapping categories reflecting four mandates: the Endangered Species Act of 1973 (ESA), the Marine Mammal Protection Act of 1972 (MMPA), the Migratory Bird Treaty Act (MBTA), and EO 13186. Groundfish fisheries may interact with these species, causing mortality or harming to them. Different protected species are affected by a variety of gear types. For example, ESA-listed salmon stocks are caught in mid-water trawl fisheries targeting Pacific whiting.

Several species of marine mammals, seabirds, sea turtles and salmon on the West Coast have been listed as threatened or endangered 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. Species subject to conservation and management requirements of the ESA are identified below.

3.21.2 Condition Indicators for Other Protected Species

It is possible that the effects of management action on protected species correlate with changes in the level of fishing effort. Increased fishing effort, other things held constant, could lead to an increase in interactions between fishing vessels and protected species, while a decrease in fishing effort would have the opposite effect. Thus, changes in fishing effort could be one way to evaluate the relative effects of the alternatives. However, there are limited data available on the distribution, intensity, and duration of fishing effort associated with groundfish. If such data are available, the distribution and intensity level of fishing effort will have to be correlated with the distribution of protected species to determine effects.

In addition to the quantity of effort expended by harvesters, the spatial and temporal distribution of the catch is off interest. This interest stems from the possibility of the fishery moving into areas and taking place during times of the year that alters the characteristics of fishery/other protected resource interactions. Prey availability and habitat suitability are also considered important indicators of change.

3.21.3 Data

Information useful to this analysis is available in various agency reports, and the PFMC's Bycatch and EFH EISs.

3.21.4 Past and Present Conditions of Other Protected Resources

Since marine mammal and seabird species that are protected were discussed in their respective sections of this chapter, attention is focused on salmon and sea turtles.

3.21.4.1 Sea Turtles

Numerous human-induced factors have adversely affected sea turtle populations in the North Pacific and resulted in their threatened or endangered status. Documented incidental capture and mortality by purse seines, gillnets, trawls, longline fisheries, and other types of fishing gear adversely affect sea turtles. However, the relative effect of each of these sources of impacts on sea turtles is difficult to assess. Sea turtle species that might interact with groundfish fisheries are discussed below.

3.21.4.1.1 Leatherback Sea turtles

The format below for describing historical and baseline conditions will be repeated for all Other Protected Species. Alternatively, the information presented in this section and the subsections that follow will be summarized in one or more tables

3.21.4.1.1.1 Life History and Distribution

Leatherback turtles are the largest sea turtles in the world, reaching a shell length of 1.6 m and a mass of 700 kg. They reach sexual maturity at an estimated age of 13 to 14 years for females and live for more than 30 years. Leatherbacks must surface to breathe air, but can stay submerged for two hours and dive to 1,000 m. Males do not leave the ocean, but females come ashore on open sandy beaches to dig nests and lay eggs. Nestlings emerge from the sand at night and attempt to make their way to the sea. Very little is known about the distribution and natural history of these young turtles after they leave their natal beaches.

Leatherback turtles are widely distributed throughout the world's oceans. In the Pacific Ocean, they range as far north as Alaska and as far south as Chile and New Zealand. The Pacific Coast of Mexico is regarded as the most important breeding ground for nesting leatherback turtles in the world. No nesting is known to occur in US waters of the Pacific.

Leatherback turtles undertake long migrations and exhibit broad thermal tolerances. They have been found in waters ranging from 7 to 27 degrees C. They are typically associated with continental shelf habitats and pelagic environments.

3.21.4.1.1.2 Population Trends

Estimating the population size of this species is especially difficult because individuals are widely dispersed and males never come ashore. Population estimates are usually based on the number of females seen on nesting beaches.

3.21.4.1.1.3 Trophic Interactions

Leatherback turtles feed predominately on jellyfish and other large planktonic species. There is little information available on their diet in subarctic waters. To a large extent, the oceanic distribution may reflect the distribution and abundance of their planktonic prey. Nestling and juvenile turtles fall prey to a host of bird, mammal, and fish species throughout their range.

3.21.4.1.1.4 Management Overview

NMFS and the USFWS share responsibilities at the federal level for the research, management, and recovery of Pacific sea turtle populations under US jurisdiction. The leatherback turtle was listed as endangered under the ESA in June of 1970. NMFS and USFWS have created a joint Pacific Sea Turtle Recovery team to develop a recovery plan for the species. Under the requirements of the ESA, these agencies are responsible for issuing Section 7 consultations for federal action that may impact the species.

Leatherback turtles are classified as Critically Endangered in the *Red List of Threatened Species*, where taxa classified are considered to be "facing an extremely high risk of extinction in the wild in the immediate future." In October of 2000, the US ratified the Inter-American Convention for the Protection and Conservation of Sea Turtles. This treaty is the first international agreement dedicated solely to raising standards for the protection of sea turtles.

3.21.4.1.1.5 Past and Present Effects and Management Actions

Direct and Indirect Effects of External Fisheries

Commercial fisheries have affected leatherback turtles. The primary threats are entanglement in fishing gear (e.g. longlines, driftnets and etc.), boat collisions, and contamination by oil spills, and ingestion of marine debris. Spotila et al. (2000) indicates that a conservative estimate of annual leatherback fishery-related mortality (from longlines, trawls and gillnets) in the Pacific during the 1990s was 1,500 animals. They estimate that this represented about a 23 percent mortality rate.

Direct and Indirect Effects of Groundfish Fisheries

Little is known about the interactions between sea turtles and West Coast fisheries. Directed fishing for sea turtles in West Coast groundfish fisheries is prohibited because of their ESA listings. However, incidental takes of sea turtles by longlines and trawls can occur.

According to NMFS, there have been no direct takes of leatherbacks in the West Coast groundfish fisheries. Further, there is no fishery that is targeting the prey of this species. NMFS has concluded that the direct and indirect effects of commercial fisheries on leatherback turtles are negligible and not likely to jeopardize its survival or recovery.

3.21.4.1.1.6 Comparative Baseline

Leather back turtle populations are in serious decline around the world, largely due to many humanrelated sources of mortality. All of them must be addressed, if this species is to recover for the brink of extinction. However, some commercial fisheries have played a role in the decline of this species.

3.21.4.1.2 Olive Ridley sea turtle

3.21.4.1.3 Loggerhead sea turtle

3.21.4.1.4 Green sea turtle

3.21.4.2 Salmon

Chinook or king salmon (*Oncorhynchus tshawytscha*) and coho or silver salmon (*O. Kisutch*) are the main species caught in Council-managed ocean salmon fisheries. Therefore the discussion focuses on these two species

3.22 Habitat

3.22.1 Potentially Affected Habitat

Healthy marine habitat is basic to the wellbeing of marine species and their place in the food web. The marine habitats of the West Coast support living marine resources at the most fundamental level by providing the conditions necessary for populations to sustain themselves. From a broad perspective, habitat is the geographic area, and the characteristics of that area, where the species occurs at any time during its life. Habitat characteristics comprise a variety of attributes and scales, including physical (geological), biological, and chemical parameters, location, and time. It is the interactions between environmental variables that make up habitat that determine a species' biological niche. These variables include both physical variables such as depth, substrate, temperature range, salinity, and dissolved oxygen, and biological variables such as the presence of competitors, predators, or facilitators.

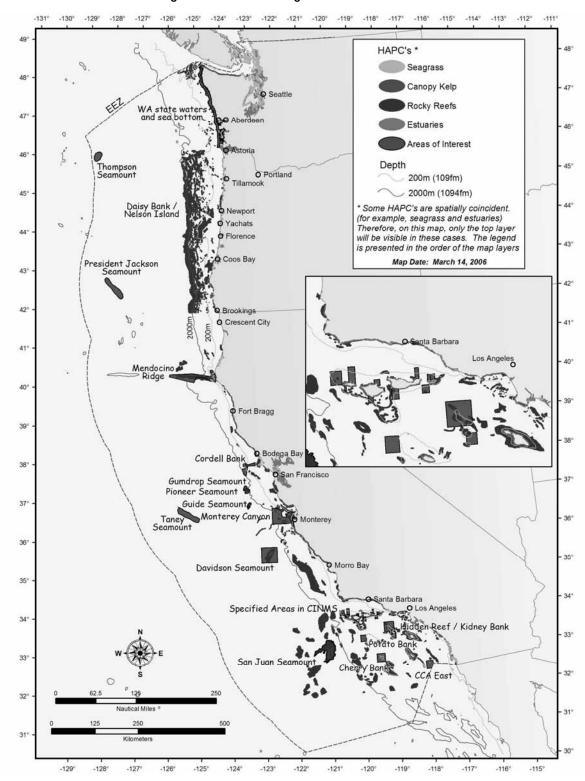
The EFH EIS reports that habitat use by species subject to trawl fisheries extends out to the deepest depth observed for groundfish, or 3400 m. As a result, the habitat resource category covers extensive areas of the Pacific coast. However, not all of this area may have the same value for groundfish or the trawl industry. We have identified two sub categories of habitat that may have interactions with the trawl industry: essential fish habitat (EFH)/habitat areas of particular concern (HAPC), and marine protected areas (MPA)/marine areas closed to trawling. Regulations restrict trawling in some portions of these habitat categories, but fishermen may access them if allowed to change gear under an IFQ system.

3.22.1.1 Essential Fish Habitat/Habitat Areas of Particular Concern

The MSA establishes a requirement for regional councils and NMFS to describe and identify EFH (Section 303(a)(7), Section 305(b)), and NMFS published regulations to guide Councils in this action (50 CFR part 600; subpart J). The Pacific Council and NOAA Fisheries have prepared an EIS for EFH that formed the basis of Amendment 19 that described and identified EFH for the Pacific Region. The decision for EFH was based on runs of a model that calculated habitat suitability for species and life stages; the model calculated a habitat suitability probability (HSP) that formed the basis for various alternatives. The overall extent of groundfish EFH for all FMU species is identified as all waters and substrate within the following areas:

- Depths less than or equal to 3,500 m (1,914 fathoms) to mean higher high water level (MHHW) or the upriver extent of saltwater intrusion, defined as upstream and landward to where ocean-derived salts measure less than 0.5 ppt during the period of average annual low flow.
- Seamounts in depths greater than 3,500 m as mapped in the EFH assessment GIS.
- Areas designated as HAPCs not already identified by the above criteria.

The following subsection describes the five HAPCs established under Amendment 19. Figure 7.2 in the final EIS for Amendment 19 provides a graphic description of the HAPCs and is reproduced here as Figure 3-16. One type of HAPC—the oil platform HAPC—was included in the amendment approved by the Council, but was not approved as part of the final amendment, and therefore is not included in the figure.





Source: This figure is reproduced from Figure 7.2 of the EIS for Amendment 19.

3.22.1.1.1 Estuaries

Estuaries are protected nearshore areas such as bays, sounds, inlets, and river mouths, influenced by ocean and freshwater. Tidal cycles and freshwater runoff varies salinity within estuaries and results in great diversity, offering freshwater, brackish and marine habitats within close proximity (Haertel and Osterberg 1967). Estuaries tend to be shallow, protected, nutrient rich, and biologically productive, providing important habitat for marine organisms, including groundfish. For many fish species, estuaries provide important habitats for reproduction, feeding, and refuge (Gunter 1957). These important ecological functions are vulnerable to damage from a wide range of human activities because estuaries receive runoff from adjacent land areas and are often close to human population centers. Anthropogenic impacts to estuaries may include nutrient loading, introduction of non-native species, changes in water temperature, increased turbidity etc.

3.22.1.1.2 Canopy Kelp

Of the habitats associated with the rocky shelf habitat composite, kelp forests are of primary importance to the ecosystem and serve as important groundfish habitat. Lush kelp forest communities (e.g., giant kelp, bull kelp, elk kelp, and feather boa kelp) are found relatively close to shore along the open coast. On the rocky shelf, these subtidal communities provide vertically-structured habitat through the water column; a canopy of tangled blades from the surface to a depth of 10 feet; a water column, stipe region and the bottom, holdfast region. The stands provide nurseries, feeding grounds and shelter to a variety of groundfish species and their prey (Ebeling, et al. 1980; Feder, et al. 1974). Giant kelp communities are highly productive relative to other habitats, including wetlands, shallow and deep sand bottoms, and rock bottom artificial reefs (Bond *et al.*, 1998). Their net primary production is an important component to the energy flow within food webs. Foster and Schiel (1985) reported that the net primary productivity of kelp beds may be the highest of any marine community. The net primary production of seaweeds in a kelp forest is available to consumers in three forms: living tissue on attached plants; drift in the form of whole plants or detached pieces; and dissolved organic matter exuded by attached and drifting plants (Foster and Schiel 1985).

3.22.1.1.3 Seagrass

Seagrass species found on the West Coast of the US include eelgrass (*Zostera spp., Ruppia sp.*) and surfgrass (*Phyllospadix spp.*). These grasses are vascular plants, not seaweeds, forming dense beds of leafy shoots year-round in the lower intertidal and subtidal areas. Eelgrass is found on soft-bottom substrates in intertidal and shallow subtidal areas of estuaries. Surfgrass is found on hard-bottom substrates along higher energy coasts. Studies have shown seagrass beds to be among the areas of highest primary productivity in the world (Herke and Rogers 1993; Hoss and Thayer 1993). High primary production, results in high rates of secondary production (Emmett, et al. 1991; Good 1987; Herke and Rogers 1993; Sogard and Able 1991). Seagrasses also provide habitat for many invertebrates and epiphytes and provide many crustaceans, fish, and birds with protection and food. Several commercially important species use seagrass beds including Dungeness crab (Spencer 1932) and Pacific herring (Taylor, 1964). Pacific coast seagrasses have been shown to be vulnerable to anthropogenically introduced species of seagrasses such as *Spartina alterniflora* (Taylor et al. 2004) and *Zostera japonica* (Harrison and Bigley 1982).

3.22.1.1.4 Rocky Reefs

Rocky habitats are generally categorized as either nearshore or offshore in reference to the proximity of the habitat to the coastline. Rocky habitat may be composed of bedrock, boulders, or smaller rocks such as cobble and gravel. Hard substrates are one of the least abundant benthic habitats, yet they are

among the most important habitats for groundfish. Typical shallow water hard bottom fishes include rockfish (e.g. *Sebastes spp.*), lingcod, and sculpins (MMS 2002). Managed species known to use nearshore hard bottom habitat in the coastal zone include black rockfish, black-and-yellow rockfish, brown rockfish, cabezon, calico rockfish, California scorpionfish, chilipepper, copper rockfish, gopher rockfish, kelp greenling, leopard shark, lingcod, olive rockfish, quillback rockfish, redstripe rockfish, rosethorn rockfish, shortbelly rockfish, silvergray rockfish, and spotted ratfish. In the offshore area, many managed species are dependent on hard bottom habitat during some portion of their life cycle. Typically, deeper water hard bottom habitats are inhabited by large, mobile fishes such as rockfish, sablefish, Pacific hake, spotted ratfish, and spiny dogfish (MMS 2002). Cross and Allen (1993) estimated that about 30 percent of the fish species and 40 percent of the families occur over hard substrates. Fishing with certain gear types can modify rocky habitat and have a negative impact on plants and animals found there.

3.22.1.1.5 Areas of interest

Areas of interest are discrete areas that are of special interest due to their unique geological and ecological characteristics. The following areas of interest are designated HAPCs:

- Off of Washington: All waters and sea bottom in state waters shoreward from the three nautical mile boundary of the territorial sea shoreward to MHHW.
- Off of Oregon: Daisy Bank/Nelson Island, Thompson Seamount, President Jackson Seamount.
- Off of California: all seamounts, including Gumdrop Seamount, Pioneer Seamount, Guide Seamount, Taney Seamount, Davidson Seamount, and San Juan Seamount; Mendocino Ridge; Cordell Bank; Monterey Canyon; specific areas in the federal waters of the CINMS; specific areas of the Cowcod Conservation Area.

3.22.1.2 Marine Protected Areas and Areas Closed to Trawling

Marine protected area (MPA) is a broad term describing a managed area in the marine environment that provides some level of resource protection. MPAs are a management tool that may employ a range of strategies to protect the marine environment—from prohibiting the harvesting of all marine life, to allowing the take of only selected marine species, or restricting other kinds of human uses. Besides having different levels of protection and use, MPAs vary dramatically in size and shape, protect a range of natural or cultural resources, and are designated by a variety of authorities. The federal government, individual states, and jurisdictions within states may specify MPAs within their jurisdictions. The national MPA center has developed a database of MPAs that allows searches by jurisdiction. For purposes of this project, we will identify MPAs in federal waters, and indicate whether each MPA restricts fishing activity.

Marine areas closed to trawling are a specific type of MPA. As part of the EFH process to address adverse fishing impacts, the Pacific Council has proposed 41 potential trawl closure areas. Marine Protected Areas and areas closed to trawling or bottom contact gear may also be affected by the changes in the distribution of trawl effort. The three tables below list marine sanctuaries and other protected areas that may be affected.³⁶

³⁶ Closed areas described in Table 3-135 and Table 3-136 were provided in a comment from Merrick Burden to the November 28 *Analytical Framework*.

Area Designation	Agency
Olympic Coast National Marine Sanctuary	National Oceanic and Atmospheric Administration
Monterey Bay National Marine Sanctuary	National Oceanic and Atmospheric Administration
Gulf of the Farallones National Marine Sanctuary	National Oceanic and Atmospheric Administration
Channel Islands National Marine Sanctuary	National Oceanic and Atmospheric Administration
Yelloweye Rockfish Conservation Area	NOAA – NMFS
Columbia River Salmon Conservation Zone	NOAA – NMFS
Klamath River Salmon Conservation Zone	NOAA – NMFS
Western and Eastern Cowcod Conservation Areas	NOAA – NMFS

Washington	Oregon	California	California
Olympic_2	Nehalem Bank / Shale Pile	Eel River Canyon	Monterey Bay / Canyon
Biogenic_1	Astoria Canyon	Blunts Reef	Point Sur Deep
Biogenic_2	Siletz Deepwater	Mendocino Ridge	TNC/ED Area 2
Grays Canyon	Daisy Bank / Nelson Island	Delgada Canyon	TNC/ED Area 1
Biogenic_3	Newport Rockpile / Stonewall Bank	Tolo Bank	TNC/ED Area 3
	Heceta Bank	Point Arena Offshore	Potato Bank
	Deepwater off Coos Bay	Cordell Bank	Cherry Bank
	Bandon High Spot	Biogenic Area 12	Hidden Reef / Kidney Bank
	Rogue Canyon.	Farallon Islands / Fanny Shoal	Catalina Island
		Half Moon Bay	Cowcod Conservation Area East.

Table 3-135. Other Areas Closed to Trawling

Table 3-136. Other Areas Closed to Bottom Contact Gear

Oregon	California	California	California
Thompson Seamount	Inner Cordell Bank (within 50 fm isobath)	Gull Island	Santa Barbara
President Jackson Seamount	Anacapa Island MCA	Harris Point	Scorpion
	Anacapa Island MR	Judith Rock	Skunk Point
	Carrington Point	Painted Cove	South Point.
	Footprint	Richardson Rock	Davidson Seamount

3.22.2 Condition Indicators for Habitat

Indicators of the historical and baseline conditions of habitat in terms of fishery impacts include but are not necessarily limited to the following:

- Amount of gear interactions with habitat by gear
- Location of interactions with habitat
- Habitat type affected

The conditions of habitat are not likely to be measurable by quantifiable indicators.

3.22.3 Data

The assessment consolidates the best available ecological, environmental, and fisheries information into various databases, including a geographic information system (GIS) and the habitat use database (HUD). The following types of data were used in this process to identify groundfish EFH:

- Geological substrate (GIS)
- Estuaries (GIS)
- Canopy kelp (GIS)
- Seagrass (GIS)
- Structure-forming invertebrate information
- Bathymetric data (GIS)
- Latitude (GIS)
- Information on pelagic habitat
- Data quality (GIS and other databases)
- Information on the functional relationships between fish and habitat (including a literature review consolidated in the HUD).

An expert panel developed the following six habitat categories, each with one or more habitat types:

Habitat Category	Habitat type
Nearshore biogenic	Estuarine macrophyte
	Estuarine shellfish
Nearshore unconsolidated bottom	Soft bottom
Nearshore hard bottom	Hard bottom
Offshore biogenic	Macrophyte
	Shelf shellfish
	Shelf sponge
	Slope sponge
	Shelf coral
	Slope coral
	Ridge
	Basin
	Continental rise
Offshore unconsolidated bottom	Shelf soft bottom
	Shelf canyons, gullies, and ice formed features
	Ridge
	Slope canyons, gullies, and ice formed features
	Continental rise, canyons, gullies, and landslides
Offshore hard bottom	Canyon and ice formed features
	Exposure
	Slope canyons, gullies, landslides, and exposures
	Basin

The EFH EIS describes and maps the various habitats found in the Pacific Region. A GIS database contains the geographical delineation of each parcel of habitat, over which other information may be overlain.

The EFH EIS contains the available information for the use of each habitat parcel by each life stage of the fish species addressed in the Groundfish FMP. Maps of probabilities of habitat use by species and life stages are available through the NOAA Fisheries Northwest Regional Office.

The EFH EIS contains the available information relevant to habitat impacts of fishing activities. The EIS describes the gear types used in the Pacific region and their habitat impacts. Of the suite of gears, trawl (pelagic and non-pelagic) is the primary gear of interest as this document specifically addresses

trawling. Hook and line gear, especially longline, and pot gear are also important as some alternatives may allow fishermen to change from trawling to other gears or for fishermen using non-trawl gear to increase their harvest by using trawl IFQ. Longline and pots are the most likely substitute gears for catching species targeted by trawling.

Statistical areas for catch reporting are too large to provide sufficient detail for attributing fishing effort to specific habitat parcels. As a trawl IFQ program could lead fishermen to change fishing locations, a mechanism to estimate the spatial distribution of fishing effort would be necessary to quantitatively project the redistribution of fishing effort and the amounts and locations of the impacts on each habitat type. Baring the ability to develop such a model, a qualitative discussion will be provided along with examples of the mechanisms by which shifting might occur and a qualitative discussion of the types and amounts of shifting.

3.22.4 Past and Present Conditions of Habitat

The information available for habitat is provided in the EFH EIS. Geographic information in the Pacific Region consists of parcels of habitat category and habitat type in the GIS database. The available information does not permit evaluation of past conditions or trends in condition. The available information describes the habitat types and their utilization by organisms, but does not assess the quality of the habitats in terms of disturbance or degradation from original condition.

3.23 Trophic Relationships

3.23.1 Potentially Affected Trophic Relationships

3.23.1.1 Predators

Groundfish species may be preyed upon by a number of different organisms depending on the life stage in question. The eggs of groundfish species may be consumed by various planktivores and benthic predators (e.g. gastropods, crabs, fishes, echinoderms). Larvae and juveniles are taken by sea birds, porpoises, larger life stages of groundfish, chaetognaths, and invertebrates (e.g. siphonophores, jellyfishes). Adults of managed groundfish species are preyed upon by man, sharks, marine mammals (e.g. sea lions, seals, whales, dolphins, porpoises, and otters), halibut, albacore, salmon, and other larger predatory groundfish such as cabezon, lingcod, and sablefish. These groundfish predators either occupy the same habitats as their groundfish prey or encounter those habitats in the course of hunting over larger areas of ocean territory.

There is some concern that the biological environment has been directly affected by fishing and other marine harvesting activities that remove top-level predators. For example, several recent studies have suggested that removal of whales and other marine mammals has created cascading effects throughout marine food webs. From an ecosystem perspective, human fishing activities might be viewed as large-scale predation that consumes species at a variety of trophic levels and may also affect other trophic levels directly or indirectly. Effects of fishing on species abundance, species diversity, community structure and physical environment have been described in numerous studies. For example, top predators may be removed, resulting in increases of species lower in the food web. Fishing practices can also affect habitats, community structure and biodiversity. The cumulative effects of 100 years of West Coast groundfish fishing (and fishing for other species) have helped shape present day ecosystem structure. Forage species (including groundfish and non-groundfish) captured

in the course of groundfish fishing may be removed from the environment. Top-level predator species may also be removed, resulting in increases of their prey species. Or, their competitors may increase, making it difficult to regain their previous position in the hierarchy. In either case, fishing increases the mortality rate of "unfished" populations. These and other changes could alter trophic dynamics, abundance and biodiversity of the ecosystem. It is difficult, however, to separate many of these fisheries-related changes from environmental ones. See the Life History Appendix to the FMP and the Habitat Use Database for detailed information on the known predators of each species in the groundfish FMU.

3.23.1.2 Prey

Major prey items of managed groundfish species include copepod eggs, copepod nauplii, amphipods, diatoms, dinoflagellates, tintinnids, cladocerans, fish and invertebrate eggs and larvae, mysids, ophiuroids, tunicates, worms (e.g. annelids and polychaetes), shrimp, decapod crustaceans, bivalve mollusks, squids and octopi, euphausiids, pelagic fishes (e.g. anchovies, smelt, lanternfishes, and herring), sculpins, juvenile flatfishes, juvenile rockfishes, and other small fishes. These prey occupy the same habitats as the groundfish species/life stage that prey upon them. There is usually a dietary progression in groundfish coinciding with ontogeny, which generally begins with the consumption of zooplankton during early life stages and culminates with the consumption of crustaceans, bivalves, cephalopods and/or fishes in the adult life stage. The various species/life stages of groundfish take prey by a wide range of strategies including planktivory, sit and wait predation, and active predation on sedentary or mobile prey items. Some groundfish species feed throughout the diel cycle, some feed diurnally, and others are nocturnal hunters. Groundfish diets may shift in response to seasonal variations in prey abundance. Cannibalism on various life stages is known to occur in some groundfish such as the macrourids, cabezon, kelp greenling, gopher rockfish, Pacific whiting, rock and petrale sole. See the Life History Appendix to the FMP and the Habitat Use Database for detailed information on the trophic interactions of each species in the groundfish FMU.

3.23.2 Condition Indicators for Trophic Relationships

Indicators of the historical and baseline conditions of trophic relationships in terms of fishery impacts include but are not necessarily limited to the following:

- Prey abundance
- Predator abundance
- Average trophic level

The conditions of trophic relationships are not likely to be measurable by quantifiable indicators.

3.23.3 Data

Most research dealing with predator-prey relationships in the Pacific Region deals with coastal survival of salmon, and evaluating how oceanic and climate process affect primary and secondary productivity and the connection to juvenile salmon growth and survival in the California Current (e.g., <u>http://www.nwfsc.noaa.gov/research/divisions/fed/oceanecology.cfm</u>). Various ecosystem modeling approaches, such as Ecopath/Ecosim, have been used for these studies. These models require data on abundance and distribution of lower trophic level species, especially those important to salmon. Similar data for non-coastal-salmon appears less readily available. For example, the EIS for EFH described predators and prey for the west coast groundfish but discussed predator-prey relationships

only generally. The Stock Assessment and Fishery Evaluation document for the west coast groundfish did not specifically address ecosystem issues, which would include predator-prey relationships.

3.23.4 Past and Present Condition of Trophic Relationships

A summary of information available for predator-prey interactions is provided in the EFH EIS. The available information does not permit evaluation of past conditions or trends in condition. The available information describes the predators and prey of Pacific coast groundfish, but does not assess the status of the species involved in terms of disturbance or degradation from the original condition.

5 Summary of Other Environmental Management Issues

This chapter summarizes a range of environmental issues that are required under 40 CFR 1502.16. This CEQ regulation describes the analysis of environmental consequences required under an EIS. The discussion in this section follows the environmental impacts disclosed in Chapter 4.

5.1 Short-Term Uses versus Long-Term Productivity

Balancing short-term use and long-term productivity is the essence of fisheries management. Short-term uses generally affect the present quality of life for the public; while long-term productivity is based on environmental sustainability and concerns the quality of life of future generations. While harvest in any one year may or may not affect long-term productivity, harvests are part of an ongoing activity. Fishing over many years cumulatively affects productivity.

This action does not directly affect the process by which sustainable harvest levels are set or enforced. It may however help to improve catch monitoring and bycatch accounting in the groundfish trawl fishery. The proposed action may also indirectly affect the sustainability of marine resources by inducing change in fishing behavior including areas and times fished.

5.2 Irreversible Resource Commitments

A resource is irretrievably committed if its use is lost for a time, but is not actually or practically lost permanently. The analysis of direct, indirect, and cumulative impacts in this document generally addresses any irretrievable resource commitments. Assignment of fishing quotas to particular entities under some of the alternatives considered in this analysis may represent an irretrievable resource commitment, since the quota may be unavailable for use by other participants. Also, fish that are harvested represent an irretrievable resource commitment, as do the inputs in terms of capital and labor (including energy and resources) needed to harvest and market these fish. Nevertheless, these factors are not likely to be adversely affected by any of the alternatives considered in this document.

5.3 Energy Requirements and Conservation Potential of the Alternatives

The proposed action may indirectly affect energy use primarily in the form of fossil fuels used to power fishing vessels. Fuel consumption is likely to correlate with harvest levels, although this was not empirically tested as it is outside the scope of this action. Individual fishing quotas may actually conserve fossil fuel by allowing vessels increased flexibility in where and when to fish; although there are a variety of other factors that could affect overall energy use and efficient utilization. Changes in fuel prices, for example, could greatly affect the level of fishing vessel operations independent of the other regulatory factors under the alternatives.

5.4 Urban Quality, Historic Resources, and the Design of the Built Environment

Public investment in shoreside amenities and marine-related infrastructure such as docks, boat basins, jetties, and navigable channels, is sensitive to changes in tax revenue. By itself, changes in fishing-

related revenue may not have an overwhelming impact on local tax revenues, but external factors such as changes in the broader economy could act cumulatively. It is also possible that as private investment shrinks so that, for example, there are fewer fishing vessels, there will be less political motivation to devote public resources to maintaining port infrastructure. Such changes could also affect cultural and historic resources as fishing and fishing-dependent activities are supplanted, changing the character of a coastal community. The effects described above are speculative. No direct impacts of the proposed action on cultural historic resources protected under the National Historical Preservation Act are expected. However further fleet consolidation, which is likely to occur in response to economic incentives under any of the alternatives, may indirectly affect the level of private and public investment in port infrastructure.

5.5 Possible Conflicts between the Proposed Action and Other Plans and Policies for the Affected Area

Groundfish species are caught incidentally in fisheries managed under other Council FMPs (e.g., salmon, coastal pelagic species, and highly migratory species). FMPs try to strike a balance between conservation and utilization and so generally include objectives related to resource use and capacity levels of the fishing fleet. Impacts of this action may affect these fisheries as a result of spillover if displaced groundfish vessels choose to pursue other fishing opportunities, and thus possibly come into conflict with some of the objectives of these FMPs.

5.6 Significant and Unavoidable Adverse Impacts

The EIS must include a discussion of those adverse effects that cannot be avoided (40 CFR 1502.16). This discussion focuses on potentially significant adverse impacts of the proposed action, as implemented by the different alternatives. CEQ regulations at 40 CFR 1508.27 define "significantly" in terms of both context and intensity, and provide ten factors to consider when evaluating the intensity of an impact. NOAA provides agency guidance in determining significant impacts of fishery management actions in administrative order NAO 216-6 at §6.02, which expands on the CEQ definition. These criteria focus on the components of the human environment most likely to be affected by these types of actions. Based on the guidance in these two sources, the proposed action could result in the following potentially significant impacts.

By itself, the proposed action does not have significant social or economic impacts interrelated with the potential significant natural or physical environmental effects discussed above (NAO 216-6 §6.02h). Changes in ex-vessel revenue and personal income are not anticipated to substantially change from levels estimated for the recent past and present.

CEQ regulations also state that "the degree to which the action may establish a precedent for future actions with significant effects or represents a decision in principle about future consideration" (40 CFR 1508.27(b)(6)) should be part of the significance evaluation. Clearly if individual quotas are established for groundfish trawl catch there is likely to be pressure to extend a quota system to other groundfish and non-groundfish fisheries in the future.

5.7 Mitigation

An EIS must discuss "means to mitigate the adverse environmental impacts" stemming from the proposed action (40 CFR 1502.1(h)), even if the adverse impacts are not by themselves significant.

Potential mitigation measures are discussed with respect to the components of the human environment potentially affected by the proposed action.

Habitat and ecosystem: Although adverse impacts to overfished species' habitats may be caused by a range of natural events and human activities, mitigation measures within the scope of NMFS authority would address fishing-related impacts. For example, the existing system of RCAs would not be affected by this action, nor would the ongoing process to establish and manage groundfish EFH. The alternatives do include provisions to allow designation of area-specific fishing quotas, if necessary, to reduce the likelihood of local depletion of harvested fish stocks.

Bycatch reduction: Amendment 18 to the Groundfish FMP includes consideration of bycatch caps and individual fishing quotas. Effective bycatch monitoring will be an important basis for implementing these types of programs. A higher level of observer coverage than under the current WCGOP will likely be necessary. In addition to limiting total mortality, individual quota programs could provide incentives for fishermen to find ways to reduce bycatch rates, since they would more directly bear the cost and reap the benefits of managing their own bycatch.

Socioeconomic sectors: Adverse socioeconomic impacts may result from changes in the geographic distribution of commercial harvests and recreational fishing opportunities. The alternatives considered in this document include Community Stability Holdback provisions that would allow associations of quota holders to engage in cooperative fishing activities. This program is designed to at least partially protect communities from economic impacts of any adverse changes in the geographic distribution of fishing activity under an IFQ program.

6 Consistency with the IFQ program, West Coast Groundfish FMP and with MSA National Standards and Requirements

This section examines the consistency of the proposed action with the IFQ program goals, objectives, constraints and guiding principles, West Coast Groundfish FMP, national standards of the MSA and with other applicable requirements of the MSA.

6.1 Consistency with ITQ Project Goals, Objectives, Constraints and Guiding Principles

The ITQ program goals, objectives, constraints and guiding principles are described in Section 1.1.2. The relative performance of the proposed action with respect to these goals, objectives, and constraints and guiding principles is summarized in this section.

6.2 Consistency with FMP Goals and Objectives

The Groundfish FMP goals and objectives are described below, together with the way in which the proposed action addresses these objectives.

Management Goals.

Goal 1 - Conservation. Prevent overfishing and rebuild overfished stocks by managing for appropriate harvest levels, and prevent, to the extent practicable, any net loss of the habitat of living marine resources.

Goal 2 - Economics. Maximize the value of the groundfish resource as a whole.

Goal 3 - Utilization. Achieve the maximum biological yield of the overall groundfish fishery, promote year-round availability of quality seafood to the consumer, and promote recreational fishing opportunities.

Objectives. To accomplish these management goals, a number of objectives will be considered and followed as closely as practicable:

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.

Objective 2. Adopt harvest specifications and management measures consistent with resource stewardship responsibilities for each groundfish species or species group.

Objective 3. For species or species groups which are below the level necessary to produce MSY, consider rebuilding the stock to the MSY level and, if necessary, develop a plan to rebuild the stock.

Objective 4. Where conservation problems have been identified for non-groundfish species, and the best scientific information shows the groundfish fishery has a direct impact on the ability of that species to maintain its long-term reproductive health, the Council may consider establishing management measures to control the impacts of groundfish fishing on those species. Management measures may be imposed on the groundfish fishery to reduce fishing mortality of a non-groundfish

species for documented conservation reasons. The action will be designed to minimize disruption of the groundfish fishery, in so far as consistent with the goal to minimize the bycatch of non-groundfish species, and will not preclude achievement of a quota, harvest guideline, or allocation of groundfish, if any, unless such action is required by other applicable law.

Objective 5. Describe and identify EFH, adverse impacts on EFH, and other actions to conserve and enhance EFH, and adopt management measures that minimize, to the extent practicable, adverse impacts from fishing on EFH.

Economics.

Objective 6. Attempt to achieve the greatest possible net economic benefit to the nation from the managed fisheries.

Objective 7. Identify those sectors of the groundfish fishery for which it is beneficial to promote yearround marketing opportunities and establish management policies that extend those sectors' fishing and marketing opportunities as long as practicable during the fishing year.

Objective 8. Gear restrictions to minimize the necessity for other management measures will be used whenever practicable.

Utilization.

Objective 9. Develop management measures and policies that foster and encourage full utilization (harvesting and processing) of the Pacific Coast groundfish resources by domestic fisheries.

Objective 10. Recognizing the multi-species nature of the fishery and establish a concept of managing by species and gear or by groups of interrelated species.

Objective 11. 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 other information necessary to determine the extent to which it is practicable to reduce bycatch and bycatch mortality.

Objective 12. Provide for foreign participation in the fishery, consistent with the other goals to take that portion of the OY not utilized by domestic fisheries while minimizing conflict with domestic fisheries.

Social Factors.

Objective 13. When conservation actions are necessary to protect a stock or stock assemblage, attempt to develop management measures that will affect users equitably.

Objective 14. Minimize gear conflicts among resource users.

Objective 15. When considering alternative management measures to resolve an issue, choose the measure that best accomplishes the change with the least disruption of current domestic fishing practices, marketing procedures, and the environment.

Objective 16. Avoid unnecessary adverse impacts on small entities.

Objective 17. Consider the importance of groundfish resources to fishing communities, provide for the sustained participation of fishing communities, and minimize adverse economic impacts on fishing communities to the extent practicable.

Objective 18. Promote the safety of human life at sea.

6.3 Consistency with MSA National Standards

An FMP or plan amendment and any pursuant regulations must be consistent with ten national standards contained in Sec. 301 of the MSA. The national standards are described below, together with the way in which the proposed action is consistent with these standards.

National Standard 1: 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.

National Standard 2: Conservation and management measures shall be based on the best scientific information available.

National Standard 3: To the extent practicable, an individual stock of fish shall be managed as a unit throughout its range, and interrelated stocks of fish shall be managed as a unit or in close coordination.

National Standard 4: Conservation and management measures shall not discriminate between residents of different states. If it becomes necessary to allocate or assign fishing privileges among various United States fishers, such allocation shall be (A) fair and equitable to all such fishers; (B) reasonably calculated to promote conservation; and (C) carried out in such manner that no particular individual, corporation, or other entity acquires an excessive share of such privileges. The proposed measures will not discriminate between residents of different states.

National Standard 5: Conservation and management measures shall, where practicable, consider efficiency in the utilization of fishery resources; except that no such measure shall have economic allocation as its sole purpose.

National Standard 6: Conservation and management measures shall take into account and allow for variations among, and contingencies in, fisheries, fishery resources, and catches.

National Standard 7: Conservation and management measures shall, where practicable, minimize costs and avoid unnecessary duplication.

National Standard 8: Conservation and management measures shall, 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.

National Standard 9: Conservation and management measures shall, to the extent practicable, (A) minimize bycatch and (B) to the extent bycatch cannot be avoided, minimize the mortality of such bycatch.

National Standard 10: Conservation and management measures shall, to the extent practicable, promote the safety of human life at sea

6.4 Consistency with MSA Requirements for a Limited Access System

Sec. 303(b)(6) of the MSA states that, in developing a limited access system for a fishery in order to achieve optimum yield, the Council and the Secretary shall take into account

- (A) present participation in the fishery,
- (B) historical fishing practices in, and dependence on, the fishery,

(C) the economics of the fishery,

- (D) the capability of fishing vessels used in the fishery to engage in other fisheries,
- (E) the cultural and social framework relevant to the fishery and any affected fishing communities, and

(F) any other relevant considerations.

6.5 Consistency with MSA Requirements for Individual Fishing Quotas

Sec. 303(d)(5) of the MSA states that, in submitting and approving any new individual fishing quota program on or after October 1, 2000, the Councils and the Secretary shall consider the report of the National Academy of Sciences required under section 108(f) of the Sustainable Fisheries Act, and any recommendations contained in such report, and shall ensure that any such program

(A) establishes procedures and requirements for the review and revision of the terms of any such program (including any revisions that may be necessary once a national policy with respect to individual fishing quota programs is implemented), and, if appropriate, for the renewal, reallocation, or reissuance of individual fishing quotas;

(B) provides for the effective enforcement and management of any such program, including adequate observer coverage, and for fees under section 304(d)(2) to recover actual costs directly related to such enforcement and management; and

(C) provides for a fair and equitable initial allocation of individual fishing quotas, prevents any person from acquiring an excessive share of the individual fishing quotas issued, and considers the allocation of a portion of the annual harvest in the fishery for entry level fishermen, small vessel owners, and crew members who do not hold or qualify for individual fishing quotas.

6.6 MSA Fishery Impact Statement

Sec. 303(a)(9) of the MSA requires any fishery management plan or amendment to include a fishery impact statement which shall assess, specify, and describe the likely effects, if any, of the conservation and management measures on--

(A) participants in the fisheries and fishing communities affected by the plan or amendment; and

(B) participants in the fisheries conducted in adjacent areas under the authority of another Council, after consultation with such Council and representatives of those participants.

Information for the fishery impact statement will be abstracted from the detailed information presented in Appendix B and the sector and community analysis presented in the main body of the EIS.

7 Cross-Cutting Mandates

This section examines the consistency of the proposed action with other applicable federal mandates.

7.1 Other Federal Laws

7.1.1 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 Council-preferred Alternative would be implemented in a manner that is consistent to the maximum extent practicable with the enforceable policies of the approved coastal zone management programs of Washington, Oregon, and California. This determination has been submitted to the responsible state agencies for review under Section 307(c)(1) of the CZMA. The relationship of the groundfish FMP with the CZMA is discussed in Section 11.7.3 of the Groundfish FMP. The Groundfish FMP has been found to be consistent with the Washington, Oregon, and California coastal zone management programs. The recommended action is consistent and within the scope of the actions contemplated under the framework FMP.

Under the CZMA, each state develops its own coastal zone management program which is then submitted for federal approval. This has resulted in programs which vary widely from one state to the next. The proposed action is not expected to affect any state's coastal management program.

7.1.2 Endangered Species Act

NMFS issued BOs 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 groundfish fishery 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). During the 2000 Pacific whiting season, the whiting fisheries exceeded the chinook bycatch amount specified in the Pacific whiting fishery BO (December 15, 1999) incidental take statement estimate of 11,000 fish, by approximately 500 fish. In the 2001 whiting season, however, the whiting fishery's chinook bycatch was about 7,000 fish, which approximates the long-term average. After reviewing data from, and management of, the 2000 and 2001 whiting fisheries (including industry bycatch minimization measures), the status of the affected listed chinook, environmental baseline information, and the incidental take statement from the 1999 whiting BO, NMFS determined in a letter dated April 25, 2002 that a re-initiation of the 1999 whiting BO was not required. NMFS has concluded that implementation of the FMP for the Pacific Coast groundfish fishery is 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. The proposed action is within the scope of these consultations.

The analysis of impacts to salmon (see Section 4.19.1.1 Other Fish Resources) and protected resources will be used to evaluate the consistency of the proposed action with the ESA.

7.1.3 Marine Mammal Protection Act

The MMPA of 1972 is the principle federal legislation that guides marine mammal species protection and conservation policy in the United States. Under the MMPA, NMFS is responsible for the management and conservation of 153 stocks of whales, dolphins, porpoise, as well as seals, sea lions, and fur seals; while the US Fish and Wildlife Service is responsible for walrus, sea otters, and the West Indian manatee.

Off the West Coast, the Steller sea lion (*Eumetopias jubatus*) eastern stock, Guadalupe fur seal (*Arctocephalus townsendi*), and Southern sea otter (*Enhydra lutris*) California stock are listed as threatened under the ESA. The sperm whale (*Physeter macrocephalus*) Washington, Oregon, and California stock, humpback whale (*Megaptera novaeangliae*) Washington, Oregon, and California - Mexico Stock, blue whale (*Balaenoptera musculus*) eastern north Pacific stock, and Fin whale (*Balaenoptera physalus*) Washington, Oregon, and California stock are listed as depleted under the MMPA. Any species listed as endangered or threatened under the ESA is automatically considered depleted under the MMPA.

The West Coast groundfish trawl fishery is considered a Category III fishery, indicating a remote likelihood of or no known serious injuries or mortalities to marine mammals, in the annual list of fisheries published in the *Federal Register*. Based on its Category III status, the incidental take of marine mammals in the West Coast groundfish trawl fishery does not significantly impact marine mammal stocks.

The analysis of impacts to marine mammals will be used to evaluate the consistency of the proposed action with the MMPA

7.1.4 Migratory Bird Treaty Act

The MBTA 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 the populations of many native bird species. The MBTA 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 MBTA prohibits the directed take of seabirds, but the incidental take of seabirds does occur.

The analysis of impacts to seabirds will be used to evaluate the consistency of the proposed action with the MBTA.

7.1.5 Paperwork Reduction Act

The Paperwork Reduction Act (PRA) (44 USC. 3501, et seq.) is designed "to minimize the paperwork burden for individuals, small businesses, educational and nonprofit institutions, federal contractors, state, local and tribal governments, and other persons resulting from the collection of information by or for the federal government." In brief, this law is intended to ensure that the government is not overly burdening the public with requests for information. This is accomplished through an information collection budget (ICB). The ICB for each agency is in terms of the total estimated time burden of responding to official inquiries. The President's Office of Management and Budget (0MB) oversees the ICB of each agency. Agencies must annually identify and obtain clearance from 0MB for new or significant revisions to reporting and record keeping requirements.

Procedurally, the PRA requirements constrain what, how, and how frequently information will be collected from the public affected by a rule that requires reporting (e.g., the amount of fish caught during a fishing trip). New collections of information must be submitted to OMB for clearance before a final rule may take effect. For each rule that requires a collection of information, the agency must describe in detail what data will be collected, how it will be collected and how often, from whom it will be collected, how much time will be spent by each affected person in complying with the information requirements, why the information is necessary and how it will be used. Information collections approved by OMB have a maximum effectiveness of three years. To be extended beyond that time requires another submission for OMB clearance. Required collection of information from the public can not be enforced without being included in an approved ICB.

A trawl IFQ program, if adopted, would contain collection of information requirements subject to the PRA. These would include reporting and recordkeeping requirements for vessels and processors for vessels and processors. These reporting and recordkeeping requirements will be submitted to OMB for review and clearance.

7.1.6 Regulatory Flexibility Act

This section will contain a summary of the IRFA presented in Appendix A

7.2 Executive Orders

7.2.1 EO 12866 (Regulatory Impact Review)

This section contains a summary of the RIR presented in Appendix A

7.2.2 EO 12898 (Environmental Justice)

Executive Order 12898 (*Federal Actions to Address Environmental Justice in Minority and Low-Income Populations*, 59 Fed Reg 7629 [1994]) requires each federal agency to achieve environmental justice by addressing "disproportionately high and adverse human health and environmental effects . . . on minority populations and low-income populations." This section will address the two main components involved in addressing environmental justice considerations: (1) ensuring effective public participation (among populations that may traditionally have been under-represented in the public participation process) and (2) identifying high and adverse impacts that may disproportionately accrue to low-income populations or minority populations. The latter component will itself consist of two steps: (a) identification of the presence of populations that could trigger environmental justice concerns and (b) an analysis of specific effects on those populations.

7.2.2.1 Public Participation among Minority Populations and Low-Income Populations

EO 12898 requires that communities potentially bearing disproportionately high and adverse effects have meaningful input into the decisions being made about the project. This section will describe

what was done to inform the communities about the project and the potential impacts it will have on their communities (e.g., notices, mailings, fact sheets, briefings, presentations, news releases, translations, newsletters, reports, community interviews, telephone hotlines, question and answer sessions, stakeholder meetings, and/or the like), what input was received from the communities, and how that input was utilized in the decisions that were made regarding the project during this stage of the analysis.

7.2.2.2 Identification of Affected Minority Populations and Low-Income Populations

The information contained in this section consists to a substantial degree of an additional screening of fishing community demographic information presented in Appendix B to portray minority populations and low-income populations in relevant communities. This section will also include a description of the methodology and criteria utilized for identifying minority populations and low-income populations and the references used for establishing the criteria. In brief, these will consist of:

- Relevant CEQ and NOAA Fisheries specific guidance regarding "meaningfully greater" minority population or low-income population determination versus a larger comparative context.
- Income indicator screening (utilizing poverty level and income data from US Bureau of the Census) for identified geographies, consistent with those utilized for community analysis in earlier report sections, typically screened against county level data as the reference community, where appropriate, given the geographically dispersed nature of this project. The methodology and justification utilized in determining the reference community will be explicitly presented, with the specific approach depending on the results generated from other impact area analyses (that will then be subjected to environmental justice screening). Where "population pocket" screening is possible utilizing standardized demographic data (e.g., resident processing workers in group quarters) this will be pursued.
- Minority indicator screening (total minority population as defined by total population exclusive of the non-Hispanic white population component) for identified geographies, consistent with those utilized for community analysis in earlier report sections, typically screened against county level data (or other appropriate level as noted for low-income populations). Similar as for low-income population screening, where "population pocket" screening for low-income populations is possible utilizing standardized demographic data this will be pursued as well.

7.2.2.3 Effects of the Proposed Actions on Low-Income and Minority Population

This analysis involves, in part, taking the previously identified impacts associated with the various management alternatives and juxtaposing the footprint of those alternatives with the footprint of populations of concern for environmental justice analysis to provide a comprehensive accounting of all impacts on minority populations and low-income populations. In this case, given the nature of the project, few, if any, physical environment impacts are likely to disproportionately accrue to minority populations or low-income populations. Rather, impacts are much more likely to be economic in nature (but they may include direct, indirect, and cumulative impacts). Reference communities utilized in the impact analysis will be consistent with those used in the screening analysis.

Indicators will include:

- Disproportionate loss of employment among low-income populations or minority populations (compared to employment changes among higher-income or non-minority populations)
- Disproportionate loss of economic activity in low-income population or minority population areas (compared to areas associated with higher-income or non-minority populations)
- Disproportionate loss of revenue to communities associated with low-income populations or minority populations (compared to communities associated with higher-income or non-minority populations)

7.2.3 E0 13132 (Federalism)

EO 13132, otherwise known as the Federalism EO, was signed by the President on August 4, 1999, and published August 10, 1999 (64 FR 43255). The EO superseded the previous Federalism EOs (12612 and 13083), but supplements EOs 12372, 12866, and 12988. This EO is intended to guide federal agencies in the formulation and implementation of "policies that have federalism implications." Such policies are regulations, legislative comments or proposed legislation, and other policy statements or actions that have substantial direct effects on the states, on the relationship between the national government and the states, or on the distribution of power and responsibilities among the various levels of government. This EO requires federal agencies to have a process to ensure meaningful and timely input by state and local officials in the development of regulatory policies that have federalism implications. A federalism summary impact statement is also required for rules that have federalism implications.

The EO establishes fundamental federalism principles based on the US Constitution, specifies federalism policy making criteria, and special requirements for preemption of state law. For example, a federal action that limits the policy making discretion of a state is to be taken only where there is constitutional and statutory authority for the action and it is appropriate in light of the presence of a problem of national significance. Also, where a federal statute does not have expressed provisions for preemption of state law, such preemption by federal rule making may be done only when the exercise of state authority directly conflicts with the exercise of federal authority. To preclude conflict between state and federal law on fishery management issues, the Magnuson-Stevens Act explicitly establishes conditions for federal preemption of state regulations (and extension of state fishery management authority into the EEZ). Furthermore, close state-federal consultation on groundfish fisheries measures is provided by the Council process.

7.2.4 E0 13175 (Consultation and Coordination with Indian Tribal Government)

The EO on consultation and coordination with Indian tribal governments was signed by the President on November 6, 2000, and published November 9, 2000 (65 FR 67249). This EO supersedes the previous EO 13084: Consultation and coordination with Indian tribal governments. The purpose of this EO is to establish regular and meaningful consultation and collaboration with Indian tribal governments in the development of federal regulatory practices that significantly or uniquely affect their communities; to reduce the imposition on unfunded mandates on Indian tribal governments; and to streamline the application process for and increase the availability of waivers to Indian tribal governments. This EO requires federal agencies to have an effective process to involve and consult with representatives of Indian tribal governments in developing regulatory policies and prohibits regulations that impose substantial direct compliance costs on Indian tribal communities.

7.2.5 EO 13186 (Responsibilities of Federal Agencies to Protect Migratory Birds)

EO 13186 supplements the MBTA (above) by requiring federal agencies to work with the USFWS to develop memoranda of agreement to conserve migratory birds. NMFS is in the process of implementing a memorandum of understanding. The protocols developed by this consultation will guide agency regulatory actions and policy decisions in order to address this conservation goal. The EO also directs agencies to evaluate the effects of their actions on migratory birds in environmental documents prepared pursuant to NEPA.

The analysis of impacts to seabirds will be used to evaluate the consistency of the proposed action with EO 13186.

8 List of Preparers

Name	Affiliation
Jim Seger	Pacific Fishery Management Council
Marcus L. Hartley	Northern Economics, Inc.
Jonathan King	Northern Economics, Inc.
Dr. Donald Schug	Northern Economics, Inc.
Terri McCoy	Northern Economics, Inc.
Dr. Edward Waters	Independent Consultant
Dr. Richard Marasco	Independent Consultant
Dr. Mike Downs	EDAW, Inc.
Dr. Robert J. Trumble	MRAG Americas, Inc.
Jon Isaacs	URS, Inc.
Anne Lee	URS, Inc.

Acronyms and Glossary

9

Item	Definition
ABC	Allowable Biological Catch
BO-TCV	Bought-out trawl catcher vessels
BPnoTG	Buyers and processors with no purchases of trawl groundfish
BPwTG	Buyers and processors with purchases of trawl groundfish
CW-TCV	Combination whiting trawl catcher vessels
EIS	Environmental Impact Statement
FTE	Full time equivalent
IEP	Independent Experts Panel
IFQ	Individual Fishing Quota
IQ	Individual Quota
SW-TCV	Inshore whiting trawl catcher vessels
LD-TCV	Large diversified trawl catcher vessels
MSY	Maximum Sustainable Yield
NEPA	National Environmental Policy Act
NMFS	National Marine Fisheries Service
NOAA	National Oceanographic and Atmospheric Administration
AW-TCV	At-sea whiting trawl catcher vessels
OY	Optimum Yield
PacFIN	Pacific Fisheries Information Network
PFMC	Pacific Fishery Management Council
QP	Quota Pound
QS	Quota Share
RecFIN	Recreational Fisheries Information Network
SAFE	Stock Assessment and Fishery Evaluation
SD-TCV	Small diversified trawl catcher vessels
TIQ	Trawl Individual Quota
TIQC	Trawl Individual Quota Committee

Allowable Biological Catch — The ABC is a scientific calculation of the sustainable harvest level of a fishery, and is used to set the upper limit of the annual total allowable catch. It is calculated by applying the estimated (or proxy) harvest rate that produces maxim urn sustainable yield to the estimated exploitable stock biomass (the portion of the fish population that can be harvested).

Allocation — Direct and deliberate distribution of the opportunity to participate in a fishery among identifiable, discrete user groups or individuals.

Biomass — The total weight of a stock of fish; measured in terms of total weight, spawning capacity, or other appropriate units of production.

Bycatch — Fish which are harvested in a fishery, but which are not sold or kept for personal use, and includes economic discards and regulatory discards.

Days at Sea — The total days, including steaming time that a boat spends at sea to fish.

Discard — Release or return fish to the sea, whether or not such fish are brought fully onboard a fishing vessel. Discards are fish that are caught but not kept.

Economic Discards — Fish which are the target of a fishery, but which are not retained because they are of an undesirable size, sex, or quality, or for other economic reasons.

Essential Fish Habitat — Those waters and substrate necessary to fish for spawning, breeding, feeding or growth to maturity.

Exclusive Economic Zone — The zone established by Presidential Proclamation 5030, 3 C.F.R. 22, dated March 10, 1983, and is that area adjacent to the United States which, except where modified to accommodate international boundaries, encompasses all waters from the seaward boundary of each of the coastal states to a line on which each point is 200 nautical miles (370.40 km) from the baseline from which the territorial se of the United States is measured.

Fishing Mortality Rate — Instantaneous fishing mortality rate. A measurement of the rate of removal of fish from a population by fishing. Fishing mortality can be reported as either annual or instantaneous. Annual mortality is the percentage of fish dying in one year. Instantaneous is that percentage of fish dying at any one time. The acceptable rates of fishing mortality may vary from species to species.

Fishing Morality Rate at MSY — A fishing mortality rate that would produce MSY when the stock biomass is sufficient for producing MSY on a continuing basis.

Full Time Equivalent — Total number of workers, including part-time, in an area as the equivalent of full-time positions.

Individual Fishing Quota — A Federal permit under a limited access system to harvest a quantity of fish, expressed by a unit or units representing a percentage of the total allowance that may be received or held for exclusive use by a person.

Individual Transferable Quota — A type of Individual Fishing Quota which can be transferred (sold, leased or traded) to others.

Maximum Sustainable Yield — An estimate of the largest annual catch or yield that can be continuously taken over a long period from a stock under prevailing ecological and environmental conditions.

Minimum Stock Size Threshold — A threshold biomass used to determine if a stock is overfished.

Observer — Any person required or authorized to be carried on a vessel for conservation and management purposes by regulations or permits under MSA.

Quota Pounds — The annual catch amount allocated to an individual.

Quota Shares — An individual's portion of the total allocation expressed as a percentage.

Optimum Yield — The amount of fish which (A) will provide the greatest overall benefit to the Nation, particularly with respect to food production and recreational opportunities, and taking into account the protection of marine ecosystems; (B) is prescribed as such on the basis of the maximum sustainable yield from the fishery, as reduced by any relevant economic, social, or ecological factor; and (C) in the case of an overfished fishery, provides for rebuilding to a level consistent with producing the maximum sustainable yield in such fishery.

Regulatory Discards — Fish harvested in a fishery which fishermen are required by regulation to discard whenever caught, or are required by regulation to retain but not sell.

Carryover Allowances — The amount of unused quota pounds permit holders are able to carry-over for use in the following year.

10 Literature Cited and References

Alcock, F., 2006. Property rights and equity in fisheries management: The significance of vertical integration. Presented at *Sharing the Fish – Allocation Issues in Fisheries Management 2006 Conference*, Fremantle, Australia, 26 February-2 March, 2006. http://www.fishallocation.com/papers/index.html

Angliss, R.P., and Lodge, K.L., 2002. Alaska Marine Mammal Stock Assessments, 2002. National Marine Mammal Laboratory, Seattle, WA.

Angliss, R.P., Lopez, A., and DeMaster, D.P., 2001. Draft Alaska Marine Mammal Stock Assessments, 2001. National Marine Mammal Laboratory, Seattle, WA.

Carretta, J.V., Muto, M.M., Barlow, J., Baker, J., Forney, K.A., Lowry, M., 2002. US Pacific Marine Mammal Stock Assessments: 2002. NOAA-TM-NMFS-SWFSC Technical Memorandum. Southwest Fisheries Science Center. NMFS/NOAA La Jolla Laboratory, La Jolla, CA.

Clark, W.G., and Hare, S.R., 2001. Effects of climate and stock size on recruitment and growth of pacific halibut. *North American Journal of Fisheries Management* 22:852-862.

Clark, W.G., and Hare, S.R., 2005. Summary of the 2005 Pacific halibut stock assessment. International Pacific Halibut Commission, Seattle, WA.

Costanza, R., R. d'Arge, R. de Groot, S. Farber, M. Grasso, B. Hannon, K. Limburg, S. Naeem, R. O'Neil, J. Paruelo, R. Raskin, P. Sutton and M. van den Belt, 1997. The value of the world's ecosystem services and natural capital. *Nature* 387:253-260.

Freese, Steve, Deputy Regional Administrator, NOAA Fisheries Northwest Regional Office. Personal communication via telephone, January 2006.

Gentry, R.L., 1998. *Behavior and Ecology of the Northern Fur Seal*. Princeton University Press, Princeton, NJ.

Halvorsen, R., Fahad K., and J., Lawarrée, 2000. Inshore Sector Catcher Vessel Cooperatives in the Bering Sea/Aleutian Islands Pollock Fisheries. Discussion paper prepared for the North Pacific Fishery Management Council, Anchorage AK.

Hill, P.S. and DeMaster, D.P., 1999. Alaska marine mammal stock assessment, 1999. NOAA Technical Memorandum, NMFS-AFSC-110, DOC, NMFS National Marine Mammal Laboratory, Seattle, WA.

MacCall, A., Ralston, S., Pearson, D., and Williams, E., 1999. Status of bocaccio off California in 1999, and outlook for the next millennium. Pacific Fishery Management Council, Portland, OR.

MacCall, A.D., 2005. Status of bocaccio off California in 2005. Pacific Fishery Management Council, Portland, OR.

Matulich, S.C., R.C. Mittelhammer, and C. Reberte. 1996. Toward a more complete model of individual transferable fishing quotas: Implications of incorporating the processing sector. *Journal of Environmental Economics and Management* 31(1):112-128.

Matulich, S.C., and M. Sever. 1999. Reconsidering the initial allocation of ITQs: The search for a Pareto-safe allocation between fishing and processing sectors. *Land Economics* 75(2):203-219.

Matulich, S.C, and M. Clark. 2003. North Pacific Halibut and Sablefish IFQ Policy Design: Quantifying the Impacts on Processors, *Marine Resource Economics* 18(2):149-166.

National Marine Fisheries Service (NMFS), 1999. Our living oceans: Report on the status of US living marine resources, 1999. USDC, NOAA Tech. Memo. NMFS-F/SPO-41.

National Marine Fisheries Service (NMFS) (In cooperation with the Pacific Fishery Management Council), 2004. *The Pacific Coast Groundfish Fishery Management Plan Bycatch Mitigation Program Final Environmental Impact Statement*. Seattle, WA.

National Marine Fisheries Service (NMFS), 2005. *Pacific Coast Groundfish Fishery Management Plan Essential Fish Habitat Designation and Minimization of Adverse Impacts Final Environmental Impact Statement*. Seattle, WA.

National Research Council, 1999. *Sharing the Fish: Toward a National Policy on Fishing Quotas. Committee to Review Individual Fishing Quotas.* National Academy Press, Washington, DC

National Research Council. 2001. *Marine Protected Areas: Tools for Sustaining Ocean Ecosystem*. National Academies Press, Washington, D.C.

National Research Council. 2004. *Valuing Ecosystem Services: Toward Better Environmental Decision-Making.* National Academies Press, Washington, D.C.

North Pacific Fishery Management Council Scientific Statistical Committee, 2002. Minutes: Scientific Statistical Committee, April 8-10, 2002, Anchorage, Alaska.

North Pacific Fishery Management Council/National Marine Fisheries Service (NPFMC/NMFS), 2004. Experimental Analysis of Arbitration Structures. Preliminary Results. Appendix 3-4C, RIR/IRFA, *Final Environmental Impact Statement for the Bering Sea Aleutian Islands King and Tanner Crab Fisheries.* North Pacific Fishery Management Council, Anchorage, AK.

Ostrom, E., 1990. *Governing the Commons*. Cambridge University Press, New York.

Pacific Fishery Management Council (PFMC), 2004. Proposed Acceptable Biological Catch and Optimum Yield Specifications and Management Measures: 2005-2006 Pacific Coast Groundfish Fishery; Final Environmental Impact Statement Including Regulatory Impact Review and Initial Regulatory Flexibility Analysis. Pacific Fishery Management Council, Portland, OR.

Pacific Fishery Management Council (PFMC), 2005b. Rebuilding Analyses for Overfished Groundfish Stocks, STAR Panel, September 26 – 30, 2005.

Parma, A.M., 1998. Changes in halibut recruitment, growth, and maturity and the harvesting strategy. International Pacific Halibut Commission 74th Annual Meeting Report, International Pacific Halibut Commission, Seattle, WA.

Perez, M.A., 1990. Review of marine mammal population and prey information for Bering Sea ecosystem studies. NOAA Technical Memorandum, NMFS F/NWC-186, US DOC, NOAA.

Perez, M.A., and Loughlin, T.R., 1991. Incidental catch of marine mammals by foreign and JV trawl vessels in the US EEZ of the North Pacific. US DOC, NOAA Tech. Rep. NMFS.

Small Business Administration (SBA), 2002. The Regulatory Flexibility Act An Implementation Guide for Federal Agencies.

Sullivan, P.J., and Parma, A.M., 1998. Population assessments, 1997. International Pacific Halibut Commission Report of Assessment and Research Activities, 1997, International Pacific Halibut Commission, Seattle, WA.

Spotila, J.R., Reina, R.D., Steyermark, A.C., Plotkin, P.T., and Paladino, F.V., 2000. Pacific leatherback turtles face extinction. *Nature* 405:529-530.

Terry, J. 1993. Individual transferable quotas for the fixed gear sablefish and halibut fisheries of Alaska. In *The Use of Individual Quotas in Fisheries Management*, Organisation for Economic Co-operation and Development, Paris.

US Fish and Wildlife Service (USFWS), 1998. Beringian Seabird Colony Catalog – computer database and Colony Status Record archives. USDI, USFWS, Migratory Bird Management, Anchorage, AK.

US Fish and Wildlife Service (USFWS), 2000. Final rule extending the endangered status of the shorttailed albatross (*Phoebastria albatrus*) to include the species' range within the United States. *Federal Register* 65 (July 31, 2000), pp. 46643-46654.

11 Index

FINAL CONSIDERATION OF INSEASON ADJUSTMENTS (IF NECESSARY)

Consideration of inseason adjustments to ongoing and upcoming groundfish fisheries may be a two-step process at this meeting. The Council will meet on Wednesday, September 13, 2006, and consider advisory body and public advice on inseason adjustments under Agenda Item C.3. If the Council elects to make final inseason adjustments under Agenda Item C.3, 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 C.3, the Council task under this agenda item is to consider advisory body advice and public comment on the status of ongoing 2006 groundfish fisheries and recommended inseason adjustments for 2006 groundfish fisheries an ecessary.

<u>Council Action</u>: Consider information on the status of ongoing fisheries and adopt inseason adjustments as necessary.

Reference Materials: None.

Agenda Order:

a. Agenda Item Overview

John DeVore

- b. Reports and Comments of Advisory Bodies
- c. Public Comments
- d. **Council Action**: Adopt or Confirm Final Recommendations for Adjustments to 2006 Fisheries

PFMC 08/18/06

INSEASON CHINOOK BYCATCH TRIGGER FOR THE PACIFIC WHITING FISHERY AND TECHNICAL CORRECTION TO THE ACCEPTABLE BIOLOGICAL CATCH FOR PETRALE SOLE IN THE 2007-2008 HARVEST SPECIFICATIONS AND MANAGEMENT MEASURES

In finalizing the documents analyzing and implementing the Council's recommendations for the 2007-2008 Pacific Coast Groundfish Fishery and Amendment 16-4, the need for a Council decision on one management measure and a correction of one harvest specification was discovered. The management measure the Council needs to consider is adopting an inseason trigger to give NMFS the authority to implement the Ocean Salmon Conservation Zone for 2007 and 2008 Pacific whiting fisheries if needed to reduce the bycatch of Chinook salmon. There is also the need for a technical correction of the Council-recommended 2007 acceptable biological catch (ABC) for petrale sole. Both of these actions were considered in the draft environmental impact statement (DEIS) for the 2007-2008 groundfish harvest specifications and management measures. These two proposed actions are the only 2007 and 2008 refinements to be considered under this agenda item.

Ocean Salmon Conservation Zone in 2007-2008 Pacific Whiting Fisheries

During the 2005 fishery, when it became apparent to NMFS that the whiting fishery could exceed the 11,000 Chinook level (a critical level identified in the Biological Opinion), the agency took emergency action to close the fishery shoreward of a boundary line approximating the 100 fm depth contour, an area referred to as the Ocean Salmon Conservation Zone (70 FR 51682, August 31, 2005). This was a valuable mitigation measure and the 2006 exempted fishing permit for the shore-based whiting sector allowed NMFS to invoke a similar closure if bycatch had threatened to exceed the 11,000 Chinook threshold. Having the Ocean Salmon Conservation Zone in effect throughout the whiting season was not recommended by the Council because such a closure could shift effort into offshore waters between 100 fm and 150 fm where historical data indicates there are higher catch rates for canary and darkblotched rockfish. Maintaining the ability to close the whiting fishery in the nearshore area inseason provides the fishery participants with flexibility to avoid overfished species, but maintains a mechanism for reducing the incidental take of Chinook salmon. The more flexible approach of applying this mitigation measure in response to conditions in the fishery allows industry and NMFS to tradeoff the impacts of salmon bycatch (more prevalent in inshore waters) and bycatch of the three depleted rockfish species (which occur more often in offshore waters).

While this action was contemplated in the DEIS for all sectors of the 2007 and 2008 whiting fisheries, it was not explicitly addressed by the Council in June when the Council-preferred management measures were decided. To correct this oversight, NMFS is asking the Council to consider adopting the Ocean Salmon Conservation Zone as part of the Council-preferred alternative to give NMFS the authority to implement a nearshore closure for all sectors of the whiting fishery if Chinook take exceeds acceptable levels. If the Council recommends this action, the final EIS (FEIS) and the proposed rule for 2007 and 2008 groundfish fisheries will be changed accordingly to represent this as part of the Council-preferred alternative. The Council and NMFS will still have the authority to make routine inseason changes for 2007 and 2008

whiting fisheries in the next two years. The incidental take level for Chinook salmon can also change through the Endangered Species Act consultation process if needed.

Petrale Sole ABC

The Council recommended a 2007 petrale sole ABC of 2,917 mt on the advice of the Council's Groundfish Management Team (GMT). However, subsequent to that June Council decision, it was discovered that the GMT calculation of the 2007 ABC specification was slightly incorrect. The Council should have specified an ABC of 3,025 mt for 2007, which is the sum of the northern ABC of 1,397 mt and the southern ABC of 1,628 mt from the recent assessment. Instead, the 2007 ABC of 2,917 mt chosen by the Council in June was incorrectly calculated by summing the northern 40-10 adjusted OY of 1,289 mt and the southern ABC of 1,628 mt. Therefore, the Council needs to consider a technical correction to the 2007 petrale sole ABC originally recommended by the Council is calculated correctly as the sum of the northern ABC of 1,475 mt and the southern ABC of 1,444 mt and therefore does not need to be changed. Pending Council action on this technical correction, the FEIS and the proposed rule for 2007 and 2008 groundfish fisheries will be changed accordingly.

Council Action:

- 1. Consider adopting the inseason trigger to implement the Ocean Salmon Conservation Zone for 2007 and 2008 Pacific whiting fisheries if needed to reduce Chinook salmon take.
- 2. Specify the correct 2007 ABC for petrale sole.

Reference Materials: None

Agenda Order:

- a. Agenda Item Overview
- b. Reports and Comments of Advisory Bodies
- c. Public Comment
- d. **Council Action**: Consider Adopting an Inseason Chinook Bycatch Trigger to Implement an Ocean Salmon Conservation Zone in the 2007 and 2008 Pacific Whiting Fishery, and a Technical Correction to the 2007 Petrale Sole ABC.

PFMC 08/23/06 John DeVore

NATIONAL MARINE FISHERIES SERVICE (NMFS) 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 Council.

NMFS Northwest Fisheries Science Center (NWFSC) will also briefly report on groundfishrelated science and research activities. The NWFSC will also present a report (Agenda Item C.1.a, Attachment 2) analyzing groundfish discards in the 2002 and 2003 trawl fisheries and comparing resulting catch estimates with those provided in a recent report done by the Marine Resources Assessment Group (MRAG).

Council Task:

Discussion.

Reference Materials:

- 1. Agenda Item C.1.a, Attachment 1: List of Groundfish and Pacific Halibut *Federal Register* Notices Published Since the June 2006 Council Meeting.
- 2. Agenda Item C.1.a, Attachment 2: Discard in the 2002 and 2003 Groundfish Trawl Fisheries: A Comparison of MRAG and Northwest Fishery Science Center Analyses.

Agenda Order:

- a. Activity Reports:
 - 1. Northwest Region
 - 2. Science Center
- b. Reports and Comments of Advisory Bodies
- c. Public Comment
- d. Council Discussion

PFMC 08/24/06

Frank Lockhart Elizabeth Clarke

FEDERAL REGISTER NOTICES Groundfish and Halibut Notices, June 1 through August 28, 2006

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

71FR31104. Pacific Coast Groundfish Fishery; Suspension of the Primary Pacific Whiting Season for the Shore-based Sector South of 42° North Latitude - 6/1/06

71FR33432. Notice of Availability for Amendment 18 to the Pacific Coast Groundfish Management Plan (FMP.) NMFS announces that PFMC has submitted Amendment 18 to the Pacific Coast Groundfish FMP for Secretarial review - 6/9/06

71FR34306. Pacific Fishery Management Council; Notice of Intent, Extension of Public Scoping Period for Intersector Groundfish Allocations. NMFS and PFMC announce their intent to extend the public scoping period for an EIS in accordance with NEPA - 6/14/06

71FR36506. Proposed Rule to Implement Amendment 18 to the Pacific Coast Groundfish FMP. $- \frac{6}{27}$ /06

71FR37839. Pacific Coast Groundfish Fishery; Inseason Adjustments. NMFS announces changes to management measures in the commercial and recreational Pacific Coast Groundfish Fisheries - 7/3/06

71FR38863. Pacific Fishery Management Council; Notice of Intent; Extension of Public Scoping Period for Intersector Groundfish Allocations. NMFS and the PFMC announce their intent to extend the public scoping period for an EIS in accordance with NEPA - 7/10/06

71FR44590. Pacific Coast Groundfish Fishery: End of the Pacific Whiting Primary Season for the Shore-based Sector and the Resumption of Trip Limits. NMFS announces the end of the 2006 primary season for the Pacific Whiting Shore-based fishery - 8/7/06

71 FR 47808. Environmental Protection Agency announces Environmental Impacts Statements. Notice of Availability for EIS on Pacific Coast Groundfish FMP, 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 - 8/18/06

71 FR 48824. Pacific Coast Groundfish Fishery; Specifications and Management Measures. This action extends a temporary rule, now in effect, that establishes the 2006 optimum yield for darkblotched rockfish caught in the U.S. Exclusive Economic Zone off the coasts of Washington, Oregon, and California - 8/22/06

Agenda Item C.1.a Attachment 2 September 2006

Discard in the 2002 and 2003 Groundfish Trawl Fisheries: A Comparison of MRAG and NW Fishery Science Center Analyses

Prepared by:

James Hastie Jonathan Cusick Nancy Gove Janell Majewski

Northwest Fisheries Science Center Fishery Resource Analysis and Monitoring Division 2725 Montlake Blvd E. Seattle, WA 98112

August 2006

Introduction

In July 2005, the report, *Wasted Resources: Bycatch and discards in U. S. Fisheries* (Harrington, et al. 2005), was released by MRAG Americas, Inc. This analysis (referred to as MRAG, hereafter) included estimates of discard for fisheries throughout the United States. Included in the report were estimates of discard in the west coast non-whiting groundfish trawl fishery for 2002 and 2003. The NWFSC has developed estimates of discard for these years which are significantly lower for several species than those contained in the MRAG report. The purpose of this report is to provide an overview and comparison of the methods used and to review the discard conclusions of each analysis.

Overview

The 2005 MRAG analysis used amounts of discarded and retained fish published in the NWFSC's West Coast Groundfish Observer Program (WCGOP) Initial Data Report (WCGOP 2003) and summary fishery landings data to estimate the total discard weight of a variety of species caught in the limited-entry groundfish trawl fishery in 2002 and 2003. The NWFSC estimates of total trawl discard of these species was developed using raw data from WCGOP, logbook, and fish ticket programs. Fleet-wide estimates of discard from these analyses are presented in Table 4. The estimated combined discard for 18 species in the MRAG analysis was 50% higher for 2002 and three times higher for 2003 than the amounts estimated by the NWFSC. There are a number of significant differences between the methods used to estimate discards by the NWFSC and by MRAG which contributed to the disparity of these estimates.

These methodological differences are summarized as follows:

- 1. MRAG assumed that discard rates were constant from September 2001 to the end of 2003. The discard rates used by MRAG were calculated from data collected between September 1, 2001 and August 31, 2002. Using these discard rates to determine discards for the 2002 trawl fishery is reasonable. However, significant changes in groundfish fishery management, such as the closing of conservation areas to fishing, were initiated in 2003 and the resulting changes in fishing behavior cannot be captured in data from the previous collection time period. The NWFSC estimates utilized data collected in 2003 for estimating the amount of discarded fish in 2003.
- 2. The NWFSC and MRAG methods utilized different data stratifications. In the WCGOP Initial Data Report, observer data were summarized using five target fishing strategies: DTS, flatfish, shelf rockfish, slope rockfish, and non-groundfish. Each observed haul was assigned to a single strategy using decision rules based on retained species composition. In the NWFSC analysis of fleet discard outlined here, data were stratified using geographic area (North and South of 40° 10' N. latitude) and fishing depth, but not target strategy. The move away from using target-strategy categories is also reflected in the second Observer Program Report (WCGOP 2004), and was motivated primarily by the reduction in the diversity of available fishing strategies that has accompanied management efforts to rebuild numerous species. The data

stratification used by MRAG included the same geographic areas and the target strategy categories included in the Initial Data Report.

3. Different approaches were used to expand observed discard to a fleet-wide level. MRAG chose selected species listed in the Initial Data Report to represent each target strategy. No species was chosen as a target species in more than one strategy. For the combined target species in each strategy, ratios of retained catch by the total versus observed fleets were used to expand observed amounts of discard within each strategy. In the NWFSC analysis, estimates of discard for species that were regarded as bycatch species, observed discard was expanded using the total retained catch of all target species, without reference to target fisheries. Since most of these species had very restrictive landing limits, reliable estimates of total discard are difficult to obtain without using the amount of effort directed towards other species to expand data from limited observations. For commonly targeted species estimates of total discard were based solely on retained and discarded catches of the individual species. Since trip limits for these species are far less restrictive and fisher groundfish income is reliant upon them, fleetwide landed catches, at the individual species level, provide a reliable and more direct basis for expanding observer data.

4. The manner in which MRAG assigned and used representative target species to expand observed discards was inconsistent with how target strategy designations were constructed for the WCGOP report.

- **4.A.** When applying the WCGOP decision rules to categorize each haul, the overall landings of an individual species were commonly distributed among several fishing strategies. For example, although retained catch of petrale sole was assigned principally to the Flatfish strategy, it is present in all strategies, and nearly 7% of the observed total is assigned to the DTS strategy. The MRAG analysis compared the fleet-wide landings of each designated target species to observed landings <u>only</u> within the single strategy it was chosen to represent.
- **4.B.** Additionally, for most of the fishing strategies, the Initial Data Report does not provide data for all species used by the decision rule in assigning a strategy to a haul. As a result, the landings of species chosen by MRAG for expanding most strategies represent only a fraction of the poundage associated with all of the strategy's target species.
- 5. MRAG applied discard rates to a broader group of fishing vessels, including those fishing under different regulations or with different gear. For example, trawl tows conducted under Exempted Fishing Permits (EFPs) were not included in the WCGOP Initial Data Report utilized by MRAG. EFP fishing operates under different regulations then regular limited-entry trawl management. For example, several recent EFPs have required full retention of some species. Thus, applying discard rates from the limited-entry trawl fleet to EFP trips, or visa-versa, may not be appropriate. There were two bottom trawl EFPs conducted in 2002 and two EFPs in 2003. The catch landing summaries used by MRAG included all fish landed under EFPs as well as regular

landings. In the NWFSC analysis, EFP fishing was separated from regular trawl fishing in circumstances where retention requirements would affect the rates at which species were discarded.

6. The MRAG report does not differentiate between discard and discard mortality, implying that all discarded fish are expected to die. In contrast, the Council has assumed that a substantial portion of the sablefish and lingcod that are discarded survive.

Methods

MRAG methods used to estimate discards in the 2002 and 2003 non-whiting trawl fisheries

The following is a summary of our understanding of how the analyses by MRAG were conducted. We have developed this summary based on communications with J. Harrington, the senior author of the work. We appreciate the time that the author has taken to explain the details of their analysis.

The MRAG analysis of discard in the west coast groundfish trawl fishery was based on observations conducted in this fishery between September 2001 and August 2002, as summarized in the report, "West Coast Groundfish Observer Program Initial Data Report and Summary Analyses January 2003". In the Initial Data Report, amounts of discarded and retained catch are summarized for numerous species, according to depth, season, area, and target fishery strata.

The target strategies included in the Initial Data Report consisted of: DTS, flatfish, shelf rockfish, slope rockfish, and non-groundfish. Each observed haul was assigned to one of these target strategies, using an algorithm based on retained species composition. The catch of all species from a haul was assigned to the same target strategy. Therefore, retained and discarded amounts of sablefish, for example, were associated with nearly all target strategies, even though the presence of retained sablefish was only used in determining whether a DTS designation would be applied to a haul.

For the MRAG analysis, data associated with each non-whiting target fishery were combined across depth and season strata, yielding 12-month totals for discarded and retained catch for each reported species within each area and target fishery/strategy classification (Harrington, pers. comm.). Next, observed amounts of discard were expanded within each fishing strategy. From the set of individual species identified in the Initial Data Report, key species within each target strategy were assigned by MRAG to represent fishing effort. The key species assigned to each target strategy were:

- DTS: Dover sole, shortspine and longspine thornyheads, and sablefish
- Flatfish: petrale sole and arrowtooth flounder
- Shelf rockfish: bocaccio, chilipepper, canary, cowcod, widow, yellowtail, and yelloweye rockfishes
- Slope rockfish: darkblotched and splitnose rockfish and Pacific ocean perch
- Non-groundfish: sharks and skates

For the combined target species in each strategy, trawl landings in 2002 and 2003 were summarized for northern and southern areas, using data obtained from the Pacific Fishery Information Network (PacFIN). Next, expansion factors were constructed by dividing these annual area totals by the combined retained amounts of each strategy's target species, as compiled from the Initial Data Report. Strategy- and area-specific estimates of discard were computed by multiplying these expansion factors by the observed discards of all reported species within each area and target strategy. These estimates were then summed across fishing strategies to produce the area-wide discard estimates provided in the MRAG report.

An example which illustrates the derivation of the MRAG discard estimate for sablefish in the area north of 40°10' N. Lat. is presented in Table 1. Column A lists the pounds of sablefish discard observed, for the NMFS-defined target strategies and depth intervals. In Column B, these amounts are combined across depths for each strategy, and converted to metric tons in Column C. Column D summarizes the observed retained tonnage of the "target" species which were selected by MRAG to represent each strategy, for purposes of expanding the observed discard. Column E reports the entire trawl fleet's 2002 landed catch, in the northern area, of MRAG's selected target species. Dividing Column E by Column D yields the expansion factors shown in Column F. These expansion factors are then multiplied by the observed sablefish discard (Column G) that are summed to obtain an estimate for all trawl discard of sablefish in the northern area. Columns H, I, and J provide comparable data to Columns E, F, and G for use in deriving estimated sablefish discard in 2003. It should be noted that this derivation of the discard amounts in Column G (or J) is equivalent to calculating a discard ratio by dividing Column C by Column D, and multiplying that ratio by the fleet landings in Column E (or H).

Methods used by the NW Fisheries Science Center to estimate discards in the 2002 and 2003 non-whiting trawl fisheries

The approach used by the NWFSC is based on methods developed and reviewed by the SSC for projecting catch and discards in the trawl fishery. Amounts of observed discarded and retained species were summarized within each of seven depth strata for northern and southern areas (divided at 40°10' N. Lat.). For major target species (e.g. DTS, flatfish), discard ratios were calculated within each stratum by dividing the amount of a species that was discarded by its retained weight. For bycatch species (those under rebuilding plans and hake), discard ratios were calculated by dividing the amount of a species that was discarded by the retained target species weight.

Retained weights of individual and combined target species recorded in trawl logbooks were summarized using the same area and depth stratification scheme. For a designated target species, the estimated discard within each stratum was calculated by multiplying the stratum retained weight of that species recorded in logbooks by the observed discard ratio for that species and stratum. For a designated bycatch species, the estimated discard within each stratum was calculated by multiplying the observed discard ratio for that species and stratum by the retained weight of all designated target species in that stratum, as recorded in the logbooks. Not all landings have a corresponding entry in the logbook data base. To adjust for these missing records, ratios of fish ticket-to-logbook species poundage were used to expand the estimates of discard for logbook trips up to a coast-wide directed trawl total. For rebuilding species, the expansion ratios used the combined target-species retained weights from each data set. For the target species, the retained poundage of each individual species was used to expand that species' estimated discard. Expansion ratios were calculated for each area, state, and 2-month period. Following application of the expansion ratios, discard amounts were then aggregated coast-wide.

Several trawl Exempted Fishing Permit (EFP) programs were conducted during 2003 and all required full retention of *Sebastes* species. Since all potential discards were landed and captured within the fish ticket reporting system, application of non-EFP discard rates to all logbook tows would have overstated the true amounts of discard (and total catch) for *Sebastes* species. Because an official listing of tows conducted as part of EFPs was not available at the time these estimates were made, an interim approach for categorizing EFP tows is used. During 2003, only EFP participants had the ability to legally bottom trawl for groundfish within the trawl RCA. Utilizing this restriction, rockfish discard rates were not applied to target tonnage caught within the RCA depths off Oregon and Washington. Additionally, the principal EFP in Washington allowed large amounts of arrowtooth flounder to be landed in excess of trip limits. Accordingly, tows by Washington vessels that exceeded the 2-month allowance of arrowtooth flounder for non-EFP vessels are also categorized as EFP tows. The total target species poundage estimated for EFPs, using these criteria, was also subtracted from fish ticket landings in each state and 2-month period before expansion ratios were calculated.

An example which illustrates the derivation of the NWFSC discard estimate for sablefish the area north of 40°10' N. Lat. is presented in Table 2. Columns A and B summarize observed sablefish retention and discard, respectively, for the seven depth intervals used in the analysis. Dividing Column B amounts by those in Column A yields the ratios of discarded-to-retained catch shown in Column C. Column D summarizes retained amounts of sablefish reported in logbooks for each depth interval. Estimated discard, at the logbook level (Column E), is obtained by multiplying the retained catch (Column D) by the discard ratio (Column C). The amount of sablefish landed in the northern area, for all depths, is shown in Column F. The ratio of fish-ticket-to-logbook tonnage (Column F divided by Column D) is shown in column G. This ratio is multiplied by the Column E total to expand the logbook-level discard estimate up to the entire fleet (Column H).

Major areas of difference between MRAG and NWFSC discard estimation methods

The two approaches outlined above reflect several important methodological differences.

1. The MRAG group used 2002 discard information to estimate discard in both the 2002 and 2003 fishery. The WCGOP data through August 2003 was reviewed, posted and available in January 2004 and could have been used by MRAG for their report published in 2005. This is

important since the management measures in 2002 were very different from those used in 2003. The NWFSC analysis outlined here used 2003 data to estimate discard for the 2003 fishery.

Fishery managers implemented a number of more restrictive measures for the 2003 limited-entry groundfish trawl fishery. The most significant change in management was the creation of the trawl Rockfish Conservation Area (RCA) in January 2003. The RCA restricted groundfish trawling to depths shallower than 75-100 fathoms and deeper than 150-200 fathoms, depending on the time of year. These restrictive measures altered the behavior of fishers, thereby changing discard rates in the fishery. The NWFSC West Coast Groundfish Observer Program Data Report and Summary Analysis released in January 2004, which summarized discard rates from September 1, 2001 through August 31, 2003, showed a substantial reduction of discard percentages between the initial year of data collection and the second year of data collection (WCGOP 2004). For instance, during the first year of analysis, 17% of coast-wide observed Dover sole catch was discarded. During the second year, the discard rate for observed Dover sole catch fell to 10% in every observed area-depth stratum.

2. The MRAG analysis combined observed discard poundage across depth strata in an unweighted manner. As a result, in situations where the distribution of observed hauls and retained poundage is significantly different from that of the overall fleet, the MRAG approach would lead to biased estimates of total discard. The NWFSC analysis herein addressed the potential for disproportionate observer coverage through applying observed depth-specific discard rates to the actual fleet fishing activity reported in logbooks for the same depth intervals.

The January 2003 Observer Program report summarized observed fishing according to five target strategy categories, which were assigned on an individual haul basis. These assignments were based on the species composition of the retained catch. This categorization was not included in subsequent observer reports for the trawl fleet, nor was it utilized in the current NWFSC analysis of discard for 2002-03. Management efforts to rebuild numerous species have effectively reduced the number of fishing strategies available to the trawl fleet and fishing depth provides a simpler method for capturing differences among the strategies that remain. The MRAG analysis was based on expanding observed discard within the five non-whiting target fishery categories, using their assignment of principal species within each target fishery.

However, as is readily apparent in Table 3, most species are retained, and can be significant contributors to, more than one target fishery. Therefore, using a small number of species to expand observations in each target fishery and restricting a species from being used to expand more than one fishery is inconsistent with the manner in which target fisheries were defined in the observer report, and is likely to introduce bias into the estimates of total discards. Furthermore, the strategy designations that were assigned at the haul level for summary in the Observer report were based on evaluation of many more species than were reported individually. The poundage of all flatfish species, including additional species such as English and rex soles, sanddabs, and starry flounder, was used in assigning a haul to the Flatfish strategy. Since all of these species were not included in the Initial Data Report's tables, they were not readily available for use by MRAG. As a result their discard expansions within the Flatfish, and other strategies, are based on the limited number of species they used to define those strategies. This shortcoming is likely to introduce an additional source of bias into the MRAG estimates. In

short, the strategies used to summarize observations in the Initial Data Report were neither designed nor intended to be used for expanding observed discard in the manner employed by MRAG.

3. The ratios used to expand the observed discard amounts of target species were very different. In the NWFSC approach herein, discarded-to-retained ratios and the expansions of observed amounts were calculated on an individual species basis. As presented in the example above, the estimated amount of total sablefish discard was estimated solely as a function of observed discarded and retained sablefish and the amount of retained sablefish recorded in logbooks and fish tickets. For bycatch species, discard ratios were calculated relative to the combined retained amounts of all target species, without consideration of target strategy.

In the MRAG analysis, the overall discard estimates for all species were based on the rate of a species' discard relative to the target species which they designated for each fishing strategy. Notwithstanding the reliance on target strategies and the related considerations identified above, this approach is conceptually similar to the NWFSC analysis of bycatch species' discard. However, the rationale behind the NWFSC's use of this approach is based on the restrictiveness of landing limits for rebuilding species, and any other factors that may have affected the propensity for fishers to land these species. For species that are targeted and routinely landed, it is not clear that estimating discard as a function of the catch of other species is the most reliable approach.

4. The MRAG report did not account for the substantial amount of EFP fishing that occurred in 2003 in the northern area. Since these EFPs required full retention of *Sebastes* species, their use of all trawl landings to expand the strategy-specific discard amounts would be expected to over-estimate *Sebastes* discard in the northern area.

Comparison of Results

A comparison of the coast-wide discard estimates from each of these analyses is presented in Table 4. As addressed in footnote 1, the NWFSC estimates for bocaccio, chilipepper, cowcod, and splitnose are for the area south of 40°10' N. Lat., only. These estimates were restricted to this area because individual ABCs/OYs for these species are only specified for the southern area. The amount of gross discard summed across all species for which estimates were made in both analyses is significantly higher in the MRAG analysis. In addition to being about 1.5 times higher than the NWFSC estimate in 2002 and more than 3 times higher in 2003, the MRAG estimates increase between the two years, while the NWFSC estimates for 2003 fishery, and the Rockfish Conservation Areas were implemented for the first time in 2003, there is no basis for believing either the magnitude or the trend implied by the 2003 MRAG results. The discussion provided above, regarding the questionable use of the target fishery strategies in MRAG's expansion of observed discard, calls into question the magnitude of their estimates for both years.

In both years, sablefish and whiting are the two species where MRAG discard estimates exceed those produced by the NWFSC by the greatest amount. In the sablefish example provided above (Harrington, pers. comm.), the most striking element of the calculation is that roughly **44%** of the total sablefish discard in the northern area in each year (1,888 mt in 2002; 2,269 mt in 2003) is attributed to the Non-Groundfish strategy. Because sharks and skates were assigned by MRAG as the target species for this strategy, and only 2,200 lb were retained on observed hauls, an expansion factor of more than 1,100 was used to generate the huge amounts of discard attributed to this strategy. Since the amount retained shark/skate poundage assigned to the Non-Groundfish strategy is not a reasonable method for expanding observed discard of other species in the Non-Groundfish strategy. Since the MRAG report provides only the total area discard estimates, without any of the intermediate calculations, it is not possible to easily ascertain what percentage of the total discard estimate for each species was attributed by them to the Non-Groundfish strategy.

Another important difference in the magnitude of discard estimates for sablefish and lingcod involves assumptions regarding mortality of discards. The MRAG report implies that all discards of these two species die. The columns in Table 4 summarizing the NWFSC estimates include amounts of mortality for each, based on the gross discard estimates and assumptions regarding survival of discards. Discard survival rates of 50% are used for both species, reflecting Council assumptions based on studies in the peer-reviewed literature, such as Davis and Olla (2002), Davis, et al. (2001), Olla, et al. (1997) and Olla, et al. (1998).

References

- Davis, M.W., and Olla, B.L. 2002. Mortality of lingcod towed in a net is related to fish length, seawater temperature and air exposure: a laboratory bycatch study. N. Am. J. Fish Manage. 22: 1095-1104.
- Davis, M.W., Olla, B.L., and Schreck, C.B. 2001. Stress induced by hooking, net towing, elevated sea water temperature and air in sablefish: lack of concordance between mortality and physiological measures of stress. J. Fish Biol. 58: 1-15.
- Harrington, J. M., R.A. Myers, and A. A. Rosenberg. 2005. Wasted Resources: Bycatch and discards in U. S. Fisheries. MRAG Americas, Inc.
- Olla, B.L., Davis, M.W., and Schreck, C.B. 1997. Effects of simulated trawling on sablefish and walleye pollock: the role of light intensity, net velocity and towing duration. J. Fish Biol. 50: 1181-1194.
- Olla, B.L., Davis, M.W., and Schreck, C.B. 1998. Temperature magnified postcapture mortality in adult sablefish after simulated trawling. J. Fish Biol. 53: 743-751.
- West Coast Groundfish Observer Program (WCGOP). 2003. West Coast Groundfish Observer Program Initial Data Report and Summary Analyses. NOAA Fisheries, Northwest Fisheries Science Center, 2725 Montlake Blvd E, Seattle, WA 98112. Available at http://www.nwfsc.noaa.gov/research/divisions/fram/observer/ datareport/docs/narjan03.pdf.
- West Coast Groundfish Observer Program (WCGOP). 2004. West Coast Groundfish Observer Program Data Report and Summary Analyses. NOAA Fisheries, Northwest Fisheries Science Center, 2725 Montlake Blvd E, Seattle, WA 98112. Available at http://www.nwfsc.noaa.gov/research/divisions/fram/observer/ datareport/docs/narrative-trawlreportjan2004.pdf.

Table 1.--MRAG derivation of estimated sablefish discards in the trawl fishery for the area north of 40°10' N. Lat. in 2002 and 2003.

	From	Observer	Data (9/	(01-8/02)		2002		2003			
					Retained	Fleet	Expan-	Est.	Fleet	Expan-	Est.
					"target" ¹	total for	sion	Fleet	total for	sion	Fleet
	Depth	Sable	efish Disca	ard	species	"target" 1	Factor	Discard	"target" 1	Factor	Discard
Strategy	range	lb	lb	mt	(mt)	species	(FT / obs)	(mt)	species	(FT / obs)	(mt)
		[A]	[B]	[C]	[D]	[E]	[F]	[G]	[H]	[I]	[J]
Non-Groundfish	0-100 fm	3,568	3,579								
	>200 fm	11	0,070	1.6	1.0	1,129	1,131	1,888	1,395	1,398	2,269
DTS (Dover sole,	0-100 fm	82,142									
sablefish, and	100-200	35,772	193,841								
thornyheads)	>200 fm	75,927		87.9	780.6	7,051	9	794	8,800	11	991
Shelf Rockfish	0-100 fm	5,003	5,054								
	100-200	51	2.3		190.3	1,555	8	19	500	3	6
Slope Rockfish	0-100 fm	281									
	100-200	3,442	4,294								
	>200 fm	571		1.9	15.5	251	16	32	234	15	29
Flatfish	0-100 fm	437,776									
	100-200	26,439	476,850								
	>200 fm	12,635		216.3	490.9	3,611	7	1,591	4,094	8	1,804
Total			683,618	310				4,324			5,100

¹ Species designated by MRAG for use in expanding discards from observed vessels up to the fleet level:

Non-groundfish: sharks and skates

DTS: Dover sole, shortspine and longspine thornyheads, and sablefish

Shelf rockfish: bocaccio, chilipepper, canary, cowcod, widow, yellowtail, and yelloweye rockfishes

Slope rockfish: darkblotched and splitnose rockfish and Pacific ocean perch

Flatfish: petrale sole and arrowtooth flounder

Table 2.--Northwest Fishery Science Center derivation of estimated sablefish discards in the trawl fishery for the area north of 40°10' N. Lat. in 2002 and 2003.

	2002 data for sablefish									
	Obse	erver program	data	Logbook	Logbook-	Landed	fish ticket /	Expanded		
			discards /	retained	level	(fish ticket)	logbook	discard		
	retained lb	discard lb	retained	mt	discard mt	mt	mt	mt		
	[A]	[B]	[C]	[D]	[E]	[F]	[G]	[H]		
< 50 fm	4,800	29,809	6.21	15	94					
50-75 fm	25,867	189,377	7.32	56	410					
75-100 fm	21,841	85,011	3.89	78	303					
100-150 fm	16,527	24,830	1.50	48	73					
150-200 fm	10,360	29,908	2.89	47	134					
200-300 fm	99,285	102,359	1.03	216	223					
> 300 fm	174,281	63,579	0.36	393	143					
All depths	352,961	524,873	1.49	853	1,380	1,025	1.20	1,576		

	2003 data for sablefish									
	Obse	erver program	data	Logbook	Logbook-	Landed	fish ticket /	Expanded		
			discards /	retained	level	(fish ticket)	logbook	discard		
	retained lb	discard lb	retained	mt	discard mt	mt	mt	mt		
	[A]	[B]	[C]	[D]	[E]	[F]	[G]	[H]		
< 50 fm	2,542	411	0.16	43	7					
50-75 fm	2,117	13,441	6.35	89	568					
75-100 fm	10,084	3,907	0.39	29	11					
100-150 fm	9	69	7.40	32	237					
150-200 fm	20,540	21,104	1.03	93	95					
200-300 fm	186,524	75,567	0.41	710	288					
> 300 fm	174,438	40,353	0.23	531	123					
All depths	396,254	154,851	0.39	1,528	1,329	1,770	1.16	1,499		

Table 3.--Summary of amounts (lb) of retained and discarded trawl catch of selected species observed from September 2001 through August 2002, by area and assigned target strategy.

		Nor	-Ground	fish		DTS		Sh	Shelf rockfish		S	Slope rockfish			Flatfish			All Targets		
Species		North	South	Coast	North	South	Coast	North	South	Coast	North	South	Coast	North	South	Coast	North	South	Coast	
Whiting	Retained	0	326	326	153	0	153	0	40	40	0	0	0	1,526	83	1,610	1,679	449	2,129	
	Discarded	3,692	484	4,176	141,883	31,078	172,961	75,769	33,103	108,872	13,358	9,763	23,121	436,717	13,668	450,385	671,419	88,096	759,515	
Arrowtooth	Retained	0	0	0	70,584	350	70,934	1,218	0	1,218	2,055	3	2,058	583,772	0	583,772	657,629	353	657,982	
flounder	Discarded	498	0	498	189,203	632	189,835	49,228	186	49,414	5,094	10	5,104	325,108	920	326,028	569,132	1,748	570,880	
Petrale	Retained	0	100	100	39,338	692	40,030	4,520	3,357	7,878	1,259	3,390	4,649	498,373	49,973	548,346	543,490	57,512	601,003	
sole	Discarded	671	0	671	10,065	19	10,083	2,309	95	2,405	142	62	204	54,217	1,428	55,645	67,404	1,604	69,009	
Dover	Retained	0	100	100	1,006,946	508,913	1,515,859	2,088	622	2,710	3,619	557	4,176	119,647	731	120,378	1,132,300	510,923	1,643,223	
sole	Discarded	222	820	1,041	120,431	94,587	215,018	5,504	3,292	8,796	2,922	4,650	7,572	121,002	2,611	123,613	250,080	105,960	356,040	
Longspine	Retained	0	2	2	278,704	188,149	466,853	0	0	0	0	5	5	0	0	0	278,704	188,156	466,860	
thornyheads	Discarded	0	230	230	53,383	36,454	89,838	0	1	1	2	7	9	515	0	515	53,901	36,692	90,593	
Shortspine	Retained	0	25	25	77,837	54,208	132,045	30	306	336	413	97	510	4,566	1	4,567	82,845	54,637	137,482	
thornyheads	Discarded	0	108	108	30,376	16,771	47,147	102	22	124	1,162	803	1,964	7,757	379	8,137	39,398	18,082	57,480	
Thornyheads	Retained	0	0	0	35,814	8,589	44,404	0	0	0	0	17	17	2,058	0	2,058	37,872	8,606	46,478	
	Discarded	0	0	0	46,265	19,304	65,569	0	68	68	131	283	414	945	9	955	47,341	19,664	67,005	
Sablefish	Retained	0	595	595	321,591	97,295	418,886	926	5,225	6,151	1,860	902	2,763	29,761	1,606	31,367	354,138	105,623	459,761	
	Discarded	3.579	67	3.647	193,841	70,428	264,269	5.054	34,306	39,360	4,295	7,088	11,383	476,849	16,882	493,731	683,618	128,772	812,390	
	Retained	0	0	0	99	371	470	158	,	1,981	10	19	29	1,881	728	2,609	2,148	2,941	5,089	
	Discarded	87	18	104	381	165	546	139	6,471	6.611	73	1,220	1,293	907	5,212	6,119	1,588	13,085		
Chilipepper	Retained	0	29	29	215	841	1.056	150	44,627	44,777	56	24	79	7	6,377	6,384	428	51.898	52,326	
	Discarded	0	0	0	266	256	522	369	25,823	26,192	899	1,689	2,588	2,533	14,576	17,110	4,067	42.345		
	Retained	0	0	0	1,704	75	1.779	3.746		3,910	16	0	16	6,973	234	7,207	12,440	472	12,912	
	Discarded	352	0	352	1,240	24	1,264	3,073	1	3,074	137	3	140	5,219	129	5,348	10,021	157		
	Retained	0	0	0	4	0	4	0	0	,	0	0	0	0	0	0	4	0	,	
	Discarded	0	0	0	0	42	42	0	466	466	0	32	32	7	242	249	7	782	789	
Widow	Retained	0	0	0	92	0	92	195,607	207	195,814	33	0	33	303	52	355	196,035	259	196,293	
rockfish	Discarded	0	3	3	26	12	38	132	28	160	63	73	135	324	60	384	544	176	721	
Yellowtail	Retained	0	0	0	2,619	0	2,619	219,942	0	219,942	0	0	0	18,501	46	18,547	241,062	46	241,108	
rockfish	Discarded	650	0	650	1,605	0	1,605	36,479	0	36,479	274	0	274	6,768	3	6,771	45,777	3	45,780	
Yelloweye	Retained	0	0	0	70	0	70	22	1	23	7	0	7	118	17	135	217	18	235	
	Discarded	0	0	0	16	0	16	5	1	6	7	14	22	146	32	178	174	48	222	
DarkBlotched	Retained	0	0	0	2,625	454	3,079	255	19	274	3,751	205	3,956	645	51	696	7,275	730	8,005	
rockfish	Discarded	12	0	12	6,100	101	6,200	361	76	437	4,662	167	4,829	16,047	203	16,250	27,181	546	27,728	
POP	Retained	0	0	0	9,920	10	9,930	171	0	171	30,094	0	30,094	10,782	0	10,782	50,967	10	50,977	
	Discarded	6	0	6	2,006	2	2,008	76	0	76	2,929	34	2,964	1,681	0	1,681	6,698	37	6,735	
Splitnose	Retained	0	278	278	320	1,482	1,801	2	112	114	310	29,974	30,284	90	1,065	1,155	721	32,911	33,633	
rockfish	Discarded	1	407	408	10,657	3,780	14,437	206	1,052	1,258	8,908	8,831	17,740	8,031	1,044	9,075	27,803	15,114	42,917	
Black	Retained	0	0	0	0	0	0	46	0	46	0	0	0	214	0	214	260	0	260	
rockfish	Discarded	0	0	0	0	0	0	0	0	0	0	0	0	759	0	759	759	0	759	
Lingcod	Retained	0	652	652	6,135	90	6,225	2,039	2,115	4,154	194	55	249	13,678	2,283	15,961	22,046	5,195	27,241	
J.	Discarded	511	105	616	14,326	326	14,652	4,141	2,396	6,537	1,054	5,456	6,510	62,375	7,709	70,084	82,407	15,991	98,399	
Pacific	Retained	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Halibut	Discarded	13	0	13	7,597	0	7,597	542	0	542	97	0	97	18,219	39	18,258	26,469	39	-	
	Retained	0	59	59	0	0	0	0	0	0	0	0	0	4	33	37	4	92	,	
	Discarded	124	15,100	15,224	836	8	844	288	44	332	88	12	101	7,933	215	8,148	9,270	15,378		
	Retained	2.200	6,223	8,423	47,315	4,251	51,566	3.470	3,337	6.807	1,785	250	2,035	281,697	17.130	298,827	336.467	31,190	367,658	
Undi N.																				

		200)2		2003				
		MRAG		NWFSC		MRAG		NWFSC	
	North of	South of	Coast-	Coast-	North of	South of	Coast-	Coast-	
	40°10'	40°10'	wide	wide	40°10'	40°10'	wide	wide	
Whiting	4,351	344	4,695	1,841	4,887	231	5,118	1,255	
Arrowtooth flounder	2,340	7	2,347	4,128	2,604	6	2,611	587	
Petrale sole	585	7	592	185	685	7	692	105	
Dover sole	1,056	413	1,469	1,210	1,241	379	1,620	1,102	
Longspine thornyhead	221	144	365	380	275	132	407	321	
Shortspine thornyhead	159	71	229	355	193	67	259	432	
Unspecified thornyheads	194	77	271		241	71	312		
Sablefish	4,321	509	4,831	1,814	5,098	374	5,471	1,615	
mortality				907				808	
Bocaccio ¹	52	53	104	27	61	31	92	2	
Chilipepper ¹	17	172	189	141	17	79	97	2	
Canary	221	1	221	36	254	1	254	14	
Cowcod ¹	0	3	3	3	0	2	2	0	
Widow	2	1	3	39	2	1	3	5	
Yellowtail	508	0	508	396	490	0	490	4	
Yelloweye	1	0	1	1	1	0	1	0	
Darkblotched	118	2	120	94	130	2	132	39	
POP	37	0	37	36	39	0	39	14	
Splitnose ¹	136	52	188	21	145	65	210	7	
Lingcod	555	63	619	269	642	65	706	139	
mortality				135				70	
Sum of gross discard	14,871	1,920	16,791	10,975	17,003	1,513	18,515	5,644	
Sum of discard mortality				9,933				4,767	
Black rockfish	3	0	3		3	0	3		
Pacific halibut	102	0	102		117	0	118		
Salmon	97	1	98		114	1	115		
Shark/skates	3,528	846	4,374		4,100	727	4,828		
Total	18,600	2,768	21,368		21,337	2,242	23,579		

Table 4.--Comparison of discard for selected species in the non-whiting groundfish trawl fishery during the 2002 and 2003 fisheries, as estimated by MRAG (2005) and NWFSC (2004).

¹ NWFSC estimates are for the are south of 40°10', only, since this corresponds to the area for which individual ABCs and OYs are set for these species

MRAG estimates obtained from: Table 90: Discards in the Pacific coast groundfish trawl fishery, 2002-2003. *Wasted Resources: Bycatch and discards in U. S. Fisheries*, Harrington, et al., 2005.

GROUNDFISH BYCATCH WORK PLAN

The Council took final action to approve Fishery Management Plan (FMP) Amendment 18 at the November 2005 Council meeting based on the preferred alternative in the Pacific Coast Groundfish Fishery Management Plan Bycatch Mitigation Program Final Environmental Impact Statement (Bycatch Program FEIS). Amendment 18 was submitted to NMFS for review and approval on June 5, 2006. A follow-up task has been to prepare a work plan, which is intended to help the Council plan future bycatch mitigation activities and inform the public about the Council's intentions.

Originally, a draft work plan was initiated by the Council at the March 2005 meeting, based on input from the Groundfish Allocation Committee. At the September 2005 meeting, the Council reviewed the draft work plan. In their report at the September meeting, the Groundfish Management Team (GMT) did not recommend implementing the elements of the work plan proposing sector total catch limits as part of the 2007-2008 groundfish harvest specifications and management measures process. One of the reasons the GMT did not recommend sector total catch limits at that time was because they believed current monitoring programs are not sufficient to monitor harvest against sector total catch limits, and the necessary program enhancements will not occur for the 2007-2008 cycle. At the November 2005 meeting, the Council provided direction to include in the draft work plan a discussion of (1) a permitting system for the open access fishery in order to document the number of vessels and track the landings by permit number and (2) how the frequency of observer data reporting could be increased. Currently observer data is reported on an annual basis, which limits its use in implementing the types of bycatch reduction measures described in Amendment 18, such as sector total catch limits.

The draft work plan was under review and could not be included in the briefing book. The document will be made available as a supplemental item. The Council task is to provide further direction on the document content prior to it being made available for public review. At a future meeting the Council could take action to adopt it in its final form.

Agenda Item C.2.a, Attachment 1 is a letter from the Washington Department of Fish and Wildlife (WDFW) with a comment on the proposed rule implementing Amendment 18. The WDFW recommends allowing the designation of scientific sorting categories in order to facilitate total catch accounting and future stock assessments.

Council Task:

1. Adopt Proposed Groundfish Bycatch Work Plan for Public Review.

Reference Materials:

 Agenda Item C.2.a, Attachment 1: Letter from Mr. Philip Anderson, Assistant Director, Intergovernmental Resource Management, Washington Department of Fish and Wildlife to Mr. Robert Lohn, Regional Administrator, Northwest Region, National Marine Fisheries Service. Agenda Order:

- a. Agenda Item Overview
- b. NMFS Report
- c. Reports and Comments of Advisory Bodies
- d. Public Comment
- e. Council Action: Adopt Proposed Groundfish Bycatch Work Plan for Public Review.

PFMC 08/18/06

 $G: \label{eq:generalized_gen$



Agenda Item C.2.a Attachment 1 September 2006

STATE OF WASHINGTON DEPARTMENT OF FISH AND WILDLIFE

48 Devonshire Road • Montesano, Washington 98563-9618 • (360) 249-4628 FAX (360) 664-0689

July 26, 2006

Dear Mr. Lohn

Mr. D. Robert Lohn, Administrator Northwest Region National Marine Fisheries Service 7600 Sand Point Way N.E. Seattle, Washington 98115-0070

RECEIVED JUL 3 I 2006 PFNIC

Thank you for the opportunity to provide comment upon the proposed rule to implement Amendment 18 to the Pacific Coast Groundfish Fishery Management Plan (FMP).

Specifically, our agency's comments are with regard to expanding species sorting requirements to assist in establishing the total catch reporting methodology described within Section 6.4 of the FMP. We believe expanding sorting requirements beyond the current criteria would assist fishery managers in quantifying total catch for some species included in the FMP but which are not currently required to be sorted. Total catch accounting is key in structuring our management upon the best available science.

Skate (*raja spp.*) serve as an example of species for which broadening sorting requirements could greatly improve total catch accounting. Discarded catch can be estimated to the species level since the West Coast Groundfish Observer Program identifies skate discarded at sea by species. However, since skate species do not have trip limits, optimum yields or harvest guidelines, catches brought to shore are typically identified only as unsorted, generic "skate." This fails to provide sufficient level of detail for total catch accounting or to support stock assessment science. Since skate can be quite large (in excess of 100 pounds), it is difficult for port samplers to conduct adequate species composition sampling of landed catches. Additionally, some skate landings consist of only the removed wings, further complicating accurate species composition sampling. Requiring the catch to be sorted could address this situation.

Therefore, Washington Department of Fish and Wildlife proposes the following specific changes to federal regulations governing the West Coast groundfish fishery:

At §660.306(a)(7), "Fail to sort, prior to the first weighing after offloading, those groundfish species or species groups for which there is a trip limit, size limit, *scientific sorting designation*, quota, harvest guideline, or OY, if the vessel fished or landed in an

Mr. D. Robert Lohn July 26, 2006 Page 2

area during a time when such trip limit, size limit, <u>scientific sorting designation</u>, quota, harvest guideline, or OY applied."

At §660.306(a)(7), it is unlawful for any person to "fail to sort, prior to the first weighing after offloading, those groundfish species or species groups for which there is a trip limit, size limit, *scientific sorting designation*, quota, harvest guideline, or OY, if the vessel fished or landed in an area during a time when such trip limit, size limit, *scientific sorting designation*, OY, or quota applied."

We envision that species determined to fall under the "scientific sorting designation" would be identified through a deliberative process involving the Pacific Fishery Management Council and its advisory bodies.

Again, thank you for this opportunity to provide comment.

Sincerely,

alle

Philip Anderson Assistant Director Intergovernmental Resource Management

cc: Yvonne DeReynier, NMFS Dr. Donald McIsaac, PFMC Capt. Mike Cenci Brian Culver Michele Culver

Agenda Item C.3.e Public Comment September 2006 July 29, 2006

To: D. Robert Lohn Administer NW Region, NMFS
Attn: Jamie Goen 7600 Sandpoint Way NE Seattle, WA 98115-0070

Subject: I.D. 062706B

Re: Inseason Adjustments and Inseason Triggers for Groundfish Management of Darkblotched Rockfish

Dear Mr. Robert Lohn,

I am submitting my comment in reference to the July 1st, 2006 Inseason Adjustments and Inseason Triggers regarding the Darkblotched Rockfish and the Canary Rockfish.

I very much agree with some of the recent management measures that were put in place to curtail the Whiting Trawl Fishery and the Non-Whiting Trawl fishery that impacts the Darkblotched Rockfish. I have been waiting to see fairer PFMC management practices and decisions applied to ALL fishers involved in taking certain species. This recent decision in regards to the Darkblotched Rockfish OY is finally one of those equitable decisions. The persons impacting the species the most certainly are the ones that should endure the consequences the most. It's not right when only one sector of the fishery or only a handful of fishermen severely impact the fishery and the entire coastal fishery has to suffer the consequences for their actions. By implementing the Bycatch and Trip Limit portion of the Inseason Adjustment for the Darkblotched Rockfish OY I can see that the Council has finally taken this into consideration.

I do have some serious concerns though, and they are in regards to where the Council's considerations truly lay. As written in the Federal Register (July 3, 2006 – Volume 71, Number 127), the NMFS Public Notice (July 06 Public Notice), the PFMC recommendations (June 2006 Council Meeting List of Decisions), and the GMT's report to the Council (Agenda Item F.4.b, Supplemental GMT Report, June 2006) - the major consideration for the Inseason Adjustment is to keep the Petrale fishery open in Period 6. There is nothing written stating consideration for keeping the small boat nearshore fishery open in Period 6. On the contrary, in the Inseason Triggers management plan it threatens to close the nearshore fishery down completely if 7.75mt of Canary rockfish are caught, mainly because of boats that move inshore when the seaward RCA line is pushed further seaward. By the Council's own words (or the lack of them), the inequity of the regard and consideration between the harvester groups is obvious.

Quoted from the Federal Register – Volume 71, Number 127:

"However, if Darkblotched rockfish mortality continues to be higher than projected or approaches the OY even with these inseason actions, there will not be an opportunity for a Period 6 Petrale fishery."

"In addition, it (the Inseason Adjustments) should <u>ensure an opportunity for a Period 6</u> <u>Petrale sole fishery</u> by reducing the mortality of Darkblotched rockfish."

PFMC's own words show an obvious preference for the Petrale fishery... and no regard for how that will effect the small boat nearshore fishery. My concerns and questions are these; why does the Council and NMFS place such high regard and consideration on the Petrale fishery (particularly Period 6), when it has absolutely no regard or concern for completely shutting down the small boat nearshore fishery? Why isn't there equal concern and consideration for keeping the nearshore fishery open all year just as there is for the Petrale fishery? Why is the Petrale fishery viewed as more important or valuable to the Council? The nearshore boats have an equal right to fish all year.

As the Council and NMFS are well aware of, there is a trawl fishery sector that is made up of small boats, many of them family owned and operated. Generally these boats are 60' or less in length and are incapable of fishing in deep waters. Many of these boats are not even large enough to carry the wenches and wire that are required to fish seaward of the RCA.

When an OY is met and the coastal fishery is shut down from the seaward RCA line (200 or 250fm) to the shore we are finished fishing until it is opened back up again... which is usually the next year. This means that we have no other alternatives. We can not continue to fish seaward of the RCA line like the larger boats can. We are forced to suffer the impact of no income for several months until the fishery opens back up again.

This is a <u>huge</u> and <u>catastrophic</u> economic hardship for many fishermen and boat owners. We have been suffering through this hardship for the past several years with Period 5 and 6 closures from the RCA shoreward. First it was the Period 6 closures and we did not say anything because this was tolerable for us. But when you began closing October too, that's when the hardship became intolerable. It's not just suffering a 25% loss in our fishing time, but it's that October is a big month for us. For some of us, a third of our income comes from October. I ask anyone who is in favor of these closures to consider losing a third of your income every year. It's not a good situation for anyone to be in. You can't go get another job for only three months every year... no one will hire you for only three months. Now the closures have become a yearly event and have increased from two months to three.

To make this even harder for us to tolerate is the fact that the statistics show that the small boat nearshore fishery does not contribute significantly to the over-fished OY species. Most of the impacts are coming from the sectors that fish deeper than 100fm (PacFin QSM data). Yet, we are the ones forced to suffer the greatest impact by not being allowed to fish for the rest of the year.

When we tried to address our concerns to the Council previously, we were told by the Council that it is not the Council's fault that our boats are small and we can not fish in deep waters... that we would just have to "deal with it". I would like to point out that it is not 'our' fault either. The type of boat that someone owns and operates is no ones 'fault'. It is simply a matter of fact. And each permitted boat whether large or small, has an equal right to participate in the fishery under the laws of the Magnuson Stevens Act... and the right to equal consideration by the PFMC.

The other serious concern I have is that I do not agree with the Inseason Triggers for the LE trawl fishery. I do agree with trip limitations, but I do not agree with moving the shoreward RCA line in to the shoreline. Again, this would only facilitate to force the small boats to bear the brunt of the management actions. The larger boats would simply go back out past the seaward RCA line where they could continue to fish for the remainder of the year and the small nearshore boats would be shut down completely, unable to participate equally in the fishery.

The Council's rationalization for this is, that if the nearshore gets too much pressure... such as catching 7.75mt of Canary rockfish in any month... because boats are moving in-shore when the seaward RCA line gets pushed out, then the shoreward RCA line will be moved in to the shoreline. This is so incongruous. The larger boats that are impacting the nearshore can just move back out past the seaward RCA line and continue fishing for the rest of the year, but the small boats that have not impacted the nearshore are shut down. That is discrimination. It's like the nearshore fishery is being used as a management tool itself... with no regard for the fishermen that depend on it.

Also, as quoted from the PFMC in the Federal Register (Vol. 71, No. 127, July 3, 2006):

"At its June 2006 meeting, the Pacific Council recommended this mechanism (the In-season Triggers) for addressing <u>concern for the potential loss of the period 6 Petrale fishery</u>, and concern over potential effects on Canary rockfish <u>if trawl effort increases in areas shoreward of the RCA."</u>

I ask again, why does the Council place such high regard and concern for the Petrale fishery and it does not share that same regard and concern for the small boat nearshore fishery? Why does one sector have more importance than another does? The Council's concerns should be equal for all sectors. That is how the Council is mandated to operate. But by the Council's own words and actions, it is not doing that. By knowingly allowing a situation to occur (seaward boats move inshore) that could have the potential to shut down an entire sector (small nearshore boats), that is not equal consideration.

The Council should be capable of managing this fishery in a way that is non-discriminatory for ALL fishers. Either manage the fishery in a way that ensures all sectors to have equal opportunity to fish all year or if the fishery needs to be closed, then shut it down to ALL sectors. No preferred harvester groups.

By adopting and implementing the Inseason Trigger portion of these Inseason Adjustments the Council has once again shown it's total disregard and lack of concern for the small boat nearshore fishing fleet. Applying an Inseason Trigger of 7.75mt for Canary rockfish caught in one month is nothing more than a band-aid. It is a band-aid that is beneficial to the fleet that can fish seaward of the RCA only. It will be detrimental to the small boat nearshore fleet. When the 7.75mt of Canary Rockfish is met... mostly because of the large boat pressure, the large boats will simply go back out past the RCA to continue fishing and the small boat nearshore fleet will be forced to stop fishing and tie up their boats. The large boats will move in and take the quota and the small boats will suffer the worst consequence because of it.

I can not stress enough how disastrous any closure in Period 5 is for the small boat nearshore fleet. Period 5 is a very important time of year for us. It is a time for particular abundance of certain species of fish... just like the Petrale fishery is for the larger boats. This is a clean harvest and it helps us make it through the Winter months. A closure in Period 6 is not too bad for most small boats as we are controlled by the bad weather during that time of year. I request that the Council make as much effort to keep Period 5 open for the small boat nearshore fishery that it does to keep Period 6 open for the Petrale fishery. Both sectors should have equal consideration and opportunity to fish when harvest is abundant.

I ask that the Council please DO continue the Bycatch Inseason Adjustment, but I ask that the Council please DO NOT implement the Trigger portion of the Inseason Adjustment or close the area between the RCA and the shoreline during Period 5 for any reason. Give the small boat nearshore fishery the same equal opportunity and consideration that you give to the Petrale fishery. Thank you for your time in reading my letter and I hope you will consider my concerns.

Sincerely,

Lee Ann Hightower 2260 Hastings Ave. W. Port Townsend, WA 98368 F/V Sea Otter



August 20, 2006

To: Pacific Fishery Management Council 7700 NE Ambassador Place, Suite 101 Portland, Oregon 97220-1384

Attn: Mr. Donald K. Hansen, Chairman

Re: Inseason Adjustments to Groundfish Management and Equal Opportunity for All Harvester Sectors

Dear Mr. Hanson and members of the Council,

I would like to submit my concerns in regards to the July 1st, 2006 Inseason Adjustments and Inseason Triggers regarding the Darkblotched Rockfish and the Canary Rockfish for the LE trawl fishery. And my concerns about the Council managing ALL trawl harvest sectors equally and fairly. My husband and I own a small groundfish trawler that we operate in the nearshore fishery off the coast of Washington state. Because of the size of our boat we can not fish in the deep waters seaward of the RCA. We can only fish between the RCA and the Three Mile shore line.

I very much agree with some of the recent management measures that were put in place to curtail the Whiting Trawl Fishery and the Non-Whiting Trawl fishery that impacts the Darkblotched Rockfish. I have been waiting to see fairer PFMC management practices and decisions applied to ALL fishers involved in taking certain species. This recent decision in regards to the Darkblotched Rockfish OY is finally one of those equitable decisions. The persons impacting the species the most certainly are the ones that should endure the consequences the most. It's not right when only one sector of the fishery or only a handful of fishermen severely impact the fishery and the entire coastal fishery has to suffer the consequences for their actions. By implementing this Inseason Adjustment for the Darkblotched Rockfish OY I can see that the PFMC has finally taken this into consideration. As a small, family owned and operated nearshore trawler we appreciate the Council's consideration.

I do have some serious concerns though, and they are in regards to where the Council's considerations truly lay. As written in the Federal Register (July 3, 2006 – Volume 71, Number 127), NMFS Public Notices (July 06 Public Notice), the PFMC recommendations (June 2006 Council Meeting List of Decisions), and the GMT's report to the Council (Agenda Item F.4.b, Supplemental GMT Report, June 2006) - the major consideration for the In-season Adjustment is to keep the Petrale fishery open in Period 6. There is nothing written stating consideration for keeping the small boat nearshore fishery open in Period 6. On the contrary, in the Inseason Triggers management plan it threatens to close the nearshore fishery down completely if 7.75mt of Canary rockfish are caught in any month, mainly because of boats that move inshore when the seaward RCA line is pushed further seaward. By the Council's own words (or the lack of them), the inequity of the regard and consideration between the harvester groups is obvious.

Quoted from the Federal Register:

"However, if Darkblotched rockfish mortality continues to be higher than projected or approaches the OY even with these inseason actions, there will not be an opportunity for a Period 6 Petrale fishery."

"In addition, it (the In-season Adjustments) should <u>ensure an opportunity for a Period 6 Petrale sole</u> fishery by reducing the mortality of Darkblotched rockfish."

PFMC's own words show an obvious preference for the Petrale fishery... and no regard for how that will effect the small boat nearshore fishery. My concerns and questions are these; why does the Council and NMFS place such high regard and consideration on the Petrale fishery (particularly Period 6), when it has absolutely no regard or concern for completely shutting down the small boat nearshore fishery? Why isn't there equal concern and consideration for keeping the nearshore fishery open all year just as there is for the Petrale fishery? Why is the Petrale fishery viewed as more important or valuable to the Council? The nearshore boats have an equal right to fish all year.

As the Council and NMFS are well aware of, there is a trawl fishery sector that is made up of small boats, many of them family owned and operated. Generally these boats are 60' or less in length and are not capable of fishing in deep waters. Many of these boats are not even large enough to carry the wenches and wire that are required to fish seaward of the RCA.

When an OY is met and the coastal fishery is shut down from the seaward RCA line (200 or 250fm) to the shore we are finished fishing until it is opened back up again... which is usually the next year. This means that we have no

other alternatives. We can not continue to fish seaward of the RCA line like the larger boats can. We are forced to suffer the impact of no income for several months until the fishery opens back up again. This is a <u>huge</u> and <u>catastrophic</u> economic hardship for many fishermen and boat owners. We have been suffering through this hardship for the past several years with Period 5 and 6 closures from the RCA shoreward. I ask anyone reading this letter to consider the financial hardship of you not being able to work and generate income for 60 to 90 days every year. The impact is devastating. To make this even harder for us to tolerate is the fact that the statistics show that the small boat nearshore fishery does not contribute greatly to the over-fished OY species. Most of the impacts are coming from the sectors that fish deeper than 100fm (PacFin, QSM data). Yet, we are the ones forced to suffer the greatest impact by not being allowed to fish for the rest of the year.

When we tried to address this concern to the Council previously, we were told by the Council that it is not the Council's *fault* that our boats are small and we can not fish in deep waters... that we would just have to "deal with it". I would like to point out that it is not 'our' fault either. The type of boat that someone owns and operates is no ones 'fault'. It is simply a matter of fact. And each permitted boat whether large or small, has the right to participate equally and fairly in the fishery under the laws of the Magnuson Stevens Act... and the right to equal regard and consideration by the PFMC. Anything that differs from these equal rights should be considered discrimination.

The other serious concern I have is that I do not agree with the Inseason Triggers for the LE trawl fishery. I do agree with trip limitations, but I do not agree with moving the shoreward RCA line in to the shoreline. Again, this would only facilitate to force the small boats to bear the brunt of the management actions. The larger boats would simply go back out past the seaward RCA line where they could continue to fish for the remainder of the year and the small nearshore boats would be shut down completely, unable to participate equally in the fishery.

The Council's rationalization for this is, that if the nearshore gets too much pressure... such as catching 7.75mt of Canary rockfish in any month... because boats are moving in-shore when the seaward RCA line gets pushed out, then the shoreward RCA line will be moved in to the shoreline. This is so incongruous. The larger boats that are impacting the nearshore can just move back out past the seaward RCA line and continue fishing for the rest of the year, but the small boats that have not impacted the nearshore are shut down. That is discrimination.

Also, as quoted from the PFMC in the Federal Register (Vol. 71, No. 127, July 3, 2006):

"At its June 2006 meeting, the Pacific Council recommended this mechanism (the In-season Triggers) for addressing <u>concern for the potential loss of the period 6 Petrale fishery</u>, and concern over potential effects on <u>Canary rockfish if trawl effort increases in areas shoreward of the RCA</u>."

Why does the Council place such high regard and concern for the Petrale trawl fishery and it does not share that same regard and concern for the small boat nearshore trawl fishery? Why does one sector have more importance than another does? The Council's concerns should be equal for all sectors. That is how the Council is mandated to operate. But by the Council's own words, it is not doing that. By knowingly allowing a situation to occur (seaward boats move inshore) that could have the potential to shut down an entire sector (small nearshore boats), that is not equal consideration.

The Council should be capable of managing the trawl fishery in a way that is non-discriminatory for ALL fishers. Either manage the fishery in a way that ensures all trawl sectors to have equal opportunity to fish all year or if the fishery needs to be closed, then shut it down to ALL harvesting sectors. No preferred harvester groups.

Knowing that the Council likes suggested solutions to the problems that we voice, I have a few suggested solutions. The Council already practices sector management, my suggestions are just additional solutions using the same practice.

My first suggested solution is an important one that could greatly lessen the impact of the nearshore trawl fishery from all fishers. Most larger boats will probably not agree with it, but it would even out the playing field of the nearshore fishery and greatly slow down the harvest rate of important species that are always close to reaching their OY.

- Reduce the length of the footrope for the Selective Trawl net to 65 70' for ALL boats fishing shoreward of the RCA line regardless of the boat size. The main boats fishing the nearshore fishery are the smaller ones (for obvious reasons already stated) and most of their Selective Trawl footropes are no longer than 70'. When the larger deep-water boats move in to fish the nearshore area, many of them are using a Small footrope or Selective Trawl net that has a footrope length of 100' or more. This gives a big and uneven advantage to the large boats using large nets and only serves to speed up the rate at which the OY's are reached. Creating a uniform footrope length of 65-70' for <u>ALL</u> nets and for <u>ALL</u> boats fishing shoreward of the RCA would greatly lessen the impact and would provide a longer and more equal fishing opportunity for the nearshore fleet.
- 2) Make trip limits for boats fishing shoreward of the RCA and boats fishing seaward of the RCA separate.

- 3) Make each sector accountable for their own impact on the fishery. If an OY is met by a sector that fishes seaward of the 100fm line then that sector is closed and can not move shoreward to continue harvesting. Equally, if an OY is met be a sector that fishes shoreward of the 100fm line then that sector is closed and can not move seaward to continue harvesting. This makes each sector accountable for their own actions.
- 4) Distinguish between fishing boat capabilities by creating a 60' or 65' limit for nearshore fishers... much like Alaska's 58' Seine limit and the 32' Gillnet limit. Boats fishing between the RCA and the shoreline would be restricted to 60-65' in length.
- 5) Manage the coastal fishery with state boundaries, where each state has it's own quota and OY systems. That way each state is accountable for it's own impacts and fishers can not over-harvest in another state. These lat/long coordinates have already been created and entered into the PFMC and NMFS database.
- 6) Be more diligent in having equal regard and consideration for all trawl fishery harvester sectors. Do not value one sector more than another. Ensure that all trawl fishery harvester sectors have an equal opportunity in order to uphold equal fishing rights as stated in the MSA.

I ask that the Council please DO continue the Bycatch Inseason Adjustment, but I ask that the Council please DO NOT implement the Trigger portion of the Inseason Adjustment. Please DO NOT close the area between the RCA and the shoreline during Period 5 for any reason. Give the small boat nearshore trawl fishery the same equal opportunity and consideration that you give to the Petrale fishery. Thank you for your time in reading my letter and I hope you will consider my concerns and solutions.

Sincerely,

Lee Ann and Alan Hightower F/V Sea Otter 2260 Hastings Ave. W. Port Townsend, WA 98368

Description of the Process for Open Access Limitation FMP Amendment & Draft Timeline

[Note: This is a hypothetical timeline that assumes the Council began work immediately as the number one priority and ignores coordination with other high priority ongoing efforts such as IQ, intersector allocation, response to MSA reauthorization, etc.]

Step	Dates
Phase 1: Planning and Scoping	August 2006 – March 2007
Draft Work Plan	September 2006
Determine type of NEPA (GC)	September 2006
Publish NOI (if EIS)	October 2006
Council meeting: scoping (COP 11)	November 2006
Finalize Work Plan	November 2006
Phase 2: Identification of Alternatives and Document	March – June 2007
Development	A
Interagency Work Group (IWG) develops preliminary range	April 2007
of alternatives for Council consideration, with input from GMT, GAP, etc.	
IWG prepares preliminary analysis of alternatives	April-May 2007
NMFS provides consultation assessment memo (optional)	
Council meeting: adopt preliminary range of alternatives and	April 2007
preliminary preferred alternative (optional) for public review	
IWG prepares preliminary draft EA/EIS	May-June 2007
Phase 3: Council Final Action	June – August 2007
Council meeting: final adoption of preferred alternative	June 2007
Initiate section 7 consultation (optional)	
If EIS, DEIS sent from Council office	August 3, 2007
If EIS, DEIS received by NMFS HQ	August 6, 2007
If EIS, DEIS submitted to EPA	August 10, 2007
If EIS, EPA publishes DEIS NOA, 45-day comment begins	August 17, 2007
Phase 4: Secretarial Review	July 2007 – February 2008
Council transmittal of FMP	July 30, 2007
NMFS transmits NOA/Am. package (Pr. Rule/PRA) to HQ	July 30, 2007
Am. NOA publishes with 60-day comment period	August 3, 2007
Proposed Rule publishes, 30-day comment period	August 29, 2007
End of 30-day comment period on Proposed Rule	September 28, 2007
If EIS, end of 45-day public comment period on DEIS	October 1, 2007
End of 60-day comment period on Am. NOA	October 2, 2007
If EIS, FEIS sent from Council office	October 19, 2007
If EIS, FEIS received by NMFS HQ	October 26, 2007
If EIS, FEIS submitted to EPA	November 2, 2007
If EIS, FEIS NOA published, 30-day cooling off period	November 9, 2007
begins	

If EIS, FEIS 30-day cooling off period ends	December 9, 2007
FONSI /ROD signed	December 12, 2007
NMFS transmits Final Rule package to HQ; PRA clears	December 14, 2007
Secretarial approval of FMP amendment	January 24, 2008
Final rule published, 30-day APA cooling off period	January 31, 2008
APA cooling off periods ends, rule effective	February 29, 2008
Permitting Process/Implementation	January – December 2008
Send out information/permitting applications	
or qualifying letters	January 2008
Deadline for applications	February 2008
Send out 2 nd notice for applications	February 2008
2 nd deadline for applications	March 2008
NMFS decision	April 2008
Appeals process	May-June 2008
NMFS final decision	July 2008
FPO limited entry annual permit renewals	September 1, 2008
Permits issued for 2009	October-December 2008
Permits Issued	January 2009

FMP AMENDMENT 15 (AMERICAN FISHERIES ACT PROVISIONS)

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. The AFA states that if the Council does not recommend such conservation and management measures by January 1, 2001, "the Secretary may by regulation implement adequate measures including, but not limited to, restriction on vessels which harvest pollock under a fishery cooperative which will prevent such vessels from harvesting Pacific groundfish, and restriction on the number of processors eligible to process Pacific groundfish." In September 1999, the Council initiated Amendment 15 to the Pacific Coast Groundfish Fishery Management Plan (FMP) to address this concern. However, because of competing workload and no threatened imminent harm, the Council tabled action on Amendment 15 in 2001.

Currently, it appears that the owners of a large catcher/processor vessel with no history in the West Coast groundfish fishery are acquiring the permits required to enter the catcher/processor sector of the West Coast Pacific whiting fishery. This could be very disruptive to the existing whiting cooperative that has fished cleanly with regard to the incidental catch of depleted rockfish species and salmon; these boats may abandon the cooperative and once again participate in a derby-style fishery if a new entrant does not join the cooperative. This in turn would almost inevitably lead to higher bycatch of the depleted rockfish and salmon, potentially causing the curtailment or closure of other fisheries, including shore based whiting, non-whiting groundfish, and even recreational fisheries.

The Council last addressed Amendment 15 at its September 2001 meeting when the Council reviewed a range of alternatives (Agenda Item C.5.a, Attachment 1) and initial analyses (Agenda Item C.5.a, Attachment 2). Additionally, the Council adopted the recommendations of the Groundfish Advisory Subpanel (Agenda Item C.5.a, Attachment 3) as a preferred alternative and directed Council staff to complete public review drafts of the analysis and proposed management measures. It was at this stage of the process that Amendment 15 was tabled.

At the March 2006 Council meeting, the Legislative Committee discussed a request by staff of the U.S. Senate Committee on Commerce, Science, and Transportation for Council input on draft AFA amendatory language. In turn the Council directed Council staff to send a letter to the U.S. Senate Committee (Agenda Item C.5.a, Attachment 4) recommending that "all AFA qualified vessels (original or replacement) - not just catcher/processor vessels - without West Coast landing history prior to June 29, 2000 [one of two Council approved control dates (Agenda Item C.5.a, Attachment 5)] be prohibited from participating in the Pacific whiting fishery." At the June 2006 meeting, the Legislative Committee and the Council heard testimony regarding participation by AFA qualified vessels in the shore-based sector of the Pacific whiting fishery. Additional public comments stated that Council recommended restrictions on AFA qualified vessels would not go far enough to protect all sectors of the West Coast Pacific Whiting fishery and that sector specific "sideboards" (landing requirements) should be requested and that current efforts to address the issue through federal legislation were unlikely to address all of the

Council's concerns. In response, the Council and the Legislative Committee recommended revisiting Amendment 15 to the groundfish FMP as a potential mechanism for protecting West Coast fisheries from adverse impacts caused by the AFA.

Under this agenda item, the Council is to revisit the issues, alternatives, and prior Council actions regarding Amendment 15 and provide guidance on the need for and feasibility of restarting efforts to further develop the amendment.

Council Action:

1. Review Alternatives and Consider Need and Scope for Further Development.

Reference Materials:

- 1. Agenda Item C.5.a, Attachment 1; September 2001, Excerpts from the Amendment 15 Draft Environmental Assessment, including background materials and a description of alternatives.
- 2. Agenda Item C.5.a, Attachment 2; September 2001, Initial draft analyses of Amendment 15 alternatives.
- 3. Agenda Item C.5.a, Attachment 3; September 2001, Groundfish Advisory Subpanel statement regarding AFA, adopted as the Council's preferred alternative for public review and further analysis.
- 4. Agenda Item C.5.a, Attachment 4; March 17, 2006 letter from Dr. McIsaac to Ms. Spring regarding Council comments on potential amendment of the AFA.
- 5. Agenda Item C.5.a, Attachment 5; November 24, 1999 *Federal Register* notice of a September 19, 1999 control date.
- 6. Agenda Item C.5.a, Attachment 6, September 13, 2000 *Federal Register* notice of a June 29, 2000 control date.
- 7. Agenda Item C.5.e, Public Comment.

Agenda Order:

- a. Agenda Item Overview
- b. Agency and Tribal Comments
- d. Reports and Comments of Advisory Bodies
- e. Public Comment
- f. **Council Action**: Review FMP Amendment 15 Alternatives and Consider Need and Scope for Further Development.

PFMC 08/23/06

Mike Burner

Agenda Item C.5.a. Attachment 1 September 2006

- EXCERPTS FROM (INCLUDING SECTION 1, 2, APPENDIX A) -

Amendment 15

The Pacific Coast Groundfish Fishery Management Plan

Environmental Assessment (EA) / Regulatory Impact Review (RIR) and Determination of the Impact on Small Businesses

September 2001

REVIEW DRAFT

American Fisheries Act EA/RIR/RFA

1.0 INTRODUCTION AND BACKGROUND

1.1 Purpose and Need for Action

The American Fisheries Act of 1998 (AFA) mandates that, "the Pacific Fishery Management Council... shall recommend for approval by the U.S. Secretary of Commerce (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." If the Council does not recommend conservation or management measures to the Secretary, the AFA authorizes the Secretary 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."

The AFA contains several provisions specific to the Bering Sea and Aleutian Islands (BSAI) pollock fishery and requirements for the Pacific Fishery Management Council (Council) to recommend measures to protect against adverse impacts resulting from the AFA. Among the provisions of the AFA that affect vessels and processors in North Pacific fisheries are (1) allocation of the walleye pollock directed fishery allowance among the catcher vessels of the inshore component, catcher-processors of the offshore component, and catcher vessels harvesting pollock for motherships in the offshore component; (2) declaration of eligible vessels and processors – specificallynaming catcher vessels, catcher-processors, and motherships eligible to participate in the offshore component; and (3) specific eligibility requirements for catcher vessels and shoreside processors in the inshore component.

The AFA also contains guidelines for "cooperatives" within each component of the fishery. Through these cooperative arrangements, harvesters and processors may arrange fishing and processing to optimally utilize their respective allocations. The AFA anticipates that, because these AFA entities can arrange their pollock fishery opportunities, these entities may be empowered to increase their participation in non-pollock fisheries (including West Coast fisheries) where they had previously participated only marginally or not at all. At issue is the concern that traditional West Coast groundfish fishery participants could be displaced by AFA entities (catcher vessels, catcher-processors, and motherships) that do not have prior fishing history in West Coast groundfish fisheries. To prevent this harm, the AFA provides the Council the opportunity to recommend management measures to protect fisheries under its jurisdiction and participants in those fisheries.

Protective management measures may be necessary because participants in cooperatives are likely to have increased flexibility to arrange fishing schedules – optimizing participation in their current fisheries and enabling entry into other fisheries. Specifically, historic West Coast groundfish fishery participants could be harmed if AFA vessels participating in pollock fishing cooperatives rearrange their pollock fishing schedules to increase participation in non-pollock fisheries such as the West Coast groundfish fishery. To participate in most limited entry groundfish fisheries, vessels only need to purchase a general limited entry permit, and a permit is not is required to participate in the open access fisheries. Because new limited entry permit holders and entrants into the open access fishery would have access rights that are equal to those who have historically participated in the fishery, entry by AFA entities may occur. Moreover, harm could also occur through the investment of funds derived by benefit of the AFA. That is, investment in the expansion of effort rather than direct transfer of vessels from AFA fisheries to West Coast fisheries. To prevent harm to current participants in West Coast fisheries, the Council is required to recommend protective management measures. Moreover, additional effort entering the groundfish fishery could exacerbate existing management problems and erode the effectiveness of measures recommended by the Council.

The AFA states:

SEC. 211. Protections for other fisheries; conservation measures.

(b) Catcher-processor restrictions.

(5) Fisheries other than the North Pacific.

The [AFA eligible] catcher/processors... and motherships... are hereby prohibited from harvesting fish in any fishery under the authority of any regional fishery management Council... 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.

The AFA explicitly prohibits catcher-processors and motherships named in the law from participating in fisheries other than North Pacific fisheries and the Pacific whiting fishery. The catcher-processor and motherships will be unable to use their AFA-eligibility to increase participation in West Coast groundfish fisheries. However, AFA-eligible catcher-processors and motherships could increase or optimize their participation in the Pacific whiting fishery.

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... 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.

As stated previously, the rationale for establishing protective measures is to restrict AFA entities from using advantages provided by the AFA (and cooperatives) to increase participation in other fisheries.

Section 208 of the AFA (Eligible Vessels and Processors) is scheduled to sunset on December 31, 2004 (AFA, Section 213). However, the North Pacific Council may recommend to the Secretary management measures that "give effect to the measures" thereafter (AFA, Section 213). Because AFA eligibility could affect whether or not these entities receive benefit from the AFA, the Council should state the expected duration of the recommended measures. The duration of the Council's recommended management measures is discussed in Section 2.

In September 1999, the Council began consideration of several proposals for management measures to address impacts of the AFA. These proposals sought to protect existing participants in West Coast fisheries, including harvesters and processors.

The Council requested analysis of the proposed management measures and also requested the National Marine Fisheries Service (NMFS) publish notice of the rules under consideration and a control date of September 16, 1999. The control date applies to participation by catcher vessels in mothership and inshore Pacific whiting fisheries, and in the inshore groundfish fishery for non-whiting species. On November 24, 1999, NMFS published an advance notice of proposed rulemaking and notice of a control date in the *Federal Register*.

At the June 2000 meeting, the Council gave further consideration to management measures aimed at protecting West Coast groundfish fishery participants from harm caused by the AFA. The Council set aside development of measures to restrict participation in the shoreside processing sector. The Council's rationale was that tangible harm to the processing sector as a result of the AFA has not been demonstrated. Moreover, the delay will allow for the North Pacific Fishery Management Council to complete portions of their AFA analysis pertaining to shoreside processors, which could guide the development of West Coast management measures.

The Council also set a control date of June 29, 2000 as notice to the public and potential purchasers of limited entry permits held by AFA entities. This control date provides advance notice 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.

On September 13, 2000, NMFS published notice of the June 29, 2000 control date in the *Federal Register* (65*FR*55214). NMFS also noticed the Council is considering restricting future participation in the whiting fishery by AFA motherships and catcher-processors that do not have a history in the fishery. For motherships, the criterion being considered is a certain level of participation in the regular whiting season in either 1998 or 1999. For catcher-processors, the criterion being considered is whether the catcher-processor was licensed to harvest groundfish in 1997, 1998, or 1999 through September 16, 1999. No new AFA motherships or catcher-processors have entered the groundfish fishery since September of 1999.

1.2 Definitions of Terms Used in this Document

Definitions of several key words are included to help clarify the effect of the proposed management measures.

AFA Vessel

A catcher vessel, catcher-processor, or mothership that, because it is named in the AFA or meets qualifications in the AFA **and** holds an AFA permit issued by NMFS¹, is guaranteed a portion of the directed BSAI pollock fishery quota.

AFA Catcher Vessel

A vessel that holds an AFA catcher vessel permit and harvested and/or delivered BSAI pollock to a shoreside processor, mothership, and/or catcher-processor during the AFA's qualifying years.

AFA Catcher-Processor

A vessel that holds an AFA catcher-processor permit and harvested/processed and/or received/processed BSAI pollock during the AFA's qualifying years.

AFA Mothership

A vessel that holds an AFA mothership permit and received/processed BSAI pollock during the AFA's qualifying years.

AFA Cooperative

^{1/} Beginning January 1, 2000, all vessels wishing to participate in the non-CDQ Bering Sea and Aleutian Islands pollock fishery are required to have valid AFA permits on board the vessel. AFA permits are issued by the Alaska Regional Office of the National Marine Fisheries Service.

A cooperative arrangement between vessels and processors for optimally using the portion of the directed BSAI pollock quota allocated to their sector. For example, an inshore cooperative formed by catcher vessels and shoreside processors would share a portion of the inshore sector's pollock allocation. Similarly, an offshore cooperative formed by catcher-processors would share a portion of the offshore allocation of the pollock quota.

"Spill-Over Vessel."

An AFA vessel that possesses a limited entry permit for West Coast groundfish.

Benefits to Vessels (C/V, C/P, and M/S).

The AFA formalized the ability to form cooperatives and allocated a portion of the directed BSAI pollock fishery quota to each sector in the fishery. Vessels that join cooperatives, or lease their portion of their sector's pollock allocation, gain the advantage of more flexible fishing schedules. This operational advantage could harm West Coast groundfish fisheries, as these vessels would be able to increase their participation in these fisheries.

2.0 PROPOSED ALTERNATIVES

This section discusses issues addressed by the Council in developing management measures to protect West Coast fisheries from harm caused by the AFA. Issues include – qualifying criteria for AFA catcher vessels (**Issue 1**); whether AFA catcher vessel restrictions will be on vessels, permits held by vessels, or both (**Issue 2**); qualifying criteria for AFA catcher processors (**Issue 3**); qualifying criteria for AFA motherships (**Issue 4**); and duration of the restrictions (**Issue 5**).

Non-AFA vessels may participate in all Pacific Coast groundfish fisheries as per their limited entry permit and do not need an eligibility endorsement to do so. These management provisions are not intended to encumber or restrict non-AFA vessels or their limited entry permits.

2.1 Issue 1 – Catcher Vessels

2.1.1 Perspectives on the Need and Objectives for Catcher Vessels Restrictions

This section discusses differences between West Coast groundfish catcher vessels and AFA catcher vessels. Notably, who are the vessels we are protecting; who are we protecting against; and why and how are we proposing to do it? See Section 4 for information on the specific number of vessels.

The goal of the proposed management restrictions is to prevent destabilization of West Coast groundfish fisheries by AFA vessels. The concern stems from the ability of AFA catcher vessels to use advantages gained through the AFA to disadvantage West Coast fishermen dependent on West Coast groundfish.

Approximately 500 vessels participate in limited entry fisheries for West Coast groundfish.² A segment of this fleet also participates in BSAI fisheries, notably the BSAI walleye pollock (*Theragra chalcogramma*) fishery. The most distinct difference between catcher vessels operating in West Coast limited entry groundfish fisheries and AFA catcher vessels is eligibility to participate in the BSAI pollock fishery. The AFA contains specific qualifying requirements for vessels to participate in the BSAI pollock fishery. In addition, allocation provisions in the AFA provide surety to vessels participating in the pollock fishery that they will receive a specific portion of the annual directed fishery allowance of pollock. This certainty allows AFA catcher vessels the opportunity to arrange for optimal participation in the pollock fishery and, because they can schedule their pollock fishing, the opportunity to maximize participation in non-pollock fisheries (including West Coast groundfish). As noted in the introduction, the AFA anticipated that such preemption could occur and, hence, provided for the Pacific Council to recommend protective management measures.

Many AFA catcher vessels hold valid limited entry permits for the West Coast groundfish fishery (see Section 4). The exclusionary provisions proposed by the Council do not seek to restrict or exclude participation of AFA vessels with limited entry permits who have been active in the fishery during the qualifying period. However, AFA catcher vessels with limited participation during the qualifying period could be restricted to the fishery segments in which they participated. As stated previously, the goal of the proposed management measures is to prevent harm to West Coast fishery participants. This would be accomplished by restricting or excluding AFA catcher vessels and/or their limited entry permits that do not meet qualifying criteria for recent participation in the West Coast groundfish fishery. Restrictions could be applied generically across fishery segments or applied to each of three specific fishery segments (at-sea whiting, shoreside whiting, non-whiting groundfish). In summary, the proposed management measures seek to dampen expansion of capacity and effort (by AFA vessels) beyond what is currently active in the fishery.

The potential for capacity expansion stems from the ability of AFA catcher vessels that hold valid limited entry permits, but have not historically participated in the fishery, to enter the West Coast limited entry groundfish fishery. That is, the operational advantage provided to these vessels through the AFA could

^{2/} In 2000, the West Coast groundfish limited entry fleet included 236 fixed gear endorsed permits, 264 trawl endorsed permits held by catcher boats, and 10 trawl endorsed permits held by catcher-processors. (*Draft Report on Overcapitalization in the West Coast Groundfish Fishery*, PFMC, March 2000)

facilitate expanded participation in West Coast fisheries by these vessels, increasing effort and capacity in the fishery,³ dissipating profitability of the fishery, and harming current participants.

The Council adopted a control date of September 16, 1999 as notice to the public of the management measures under consideration. The control date applies to participation by catcher vessels in at-sea and shorebased Pacific whiting fisheries, and in the shorebased groundfish fishery for non-whiting species. On November 24, 1999, NMFS published an advance notice of proposed rulemaking and notice of a control date in the *Federal Register*.

The Council also set a control date of June 29, 2000 as notice to the public and potential purchasers of limited entry permits held by AFA entities. This control date provides advance notice 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. On September 13, 2000, NMFS published notice of the June 29, 2000 control date (65*FR*55214).

Under Issue 1, the Council considered whether to restrict participation in the West Coast groundfish fisheries by AFA catcher vessels. Under Issue 2 (see Section 2.2), the Council considered whether restrictions would be placed on an AFA catcher vessel and/or limited entry permits held by an AFA catcher vessel. Accordingly, qualified AFA catcher vessels could be required to obtain a medallion indicating their eligibility to participate in West Coast groundfish fisheries; and a permit held by an AFA catcher vessel could be "branded" with the specified AFA restrictions.

2.1.2 Options Considered by the Council

Option 1.a AFA Catcher Vessel Qualifies Separately for Each of Three Groundfish Fishery Sectors

An AFA catcher vessel that did not harvest at least the minimum tonnage or number of deliveries during the qualifying period will be restricted. Under Option 1.a, an AFA catcher vessel must qualify separately for each of three sectors in the groundfish fishery, i.e., at-sea whiting, shorebased whiting, and non-whiting groundfish.

Qualifying criteria under Option 1.a include – catch history and qualifying period.

The Council considered the following minimum landings/delivery options and selected a preferred alternative for each sector.

Minimum Landings/Deliveries Options		
At-Sea Whiting Deliveries	Shorebased Whiting Landings	Non-Whiting Groundfish Landings
50 mt	50 mt	50 mt
100 mt	100 mt	100 mt
500 mt	500 mt	500 mt
10 deliveries	10 deliveries	10 deliveries

The Council considered the following time periods during which the catch history must have been obtained and selected a preferred alternative.

^{3/} The groundfish fishery is currently overcapitalized. The Council's Scientific and Statistical Committee concluded "[o]vercapitalization in the groundfish fishery is significantly affecting the manner in which the fishery is managed and the effectiveness of management." (*supra* note 1)

Qualifying Period Options

1994 through 1997

1994 through September 16, 1999

Option 1.b AFA Catcher Vessels Qualify for the Groundfish Fishery (GAP June 2001)

An AFA catcher vessel -

- which had a groundfish permit as of October 1, 1998, and
- which delivered at least 500 mt of groundfish in any year during the period January 1, 1994 to October 1, 1998, would be allowed unrestricted participation in the Pacific groundfish fishery.

An AFA catcher vessel which does not meet these criteria may not participate in the Pacific groundfish fishery. Under this option, AFA catcher vessels would qualify generically for all three segments of the groundfish fishery, i.e., shorebased whiting, at-sea whiting, and non-whiting groundfish.

Option 1.c Status Quo – No restrictions on AFA catcher vessels

Do not recommend management measures to restrict AFA catcher vessel participation. It is possible the Secretary of Commerce, through NMFS, may determine that protective measures are warranted and implement, through regulation, such measures.

2.1.3 Council Preferred Alternative

RESERVED

2.2 **Issue 2** – Restrictions Tied to AFA Catcher Vessels **or** Limited Entry Permit Held by AFA Catcher Vessels, **or** Vessels and Permits.

2.2.1 Perspectives on the Need and Objectives for Restrictions on Catcher Vessels, Permits, or Both

Out of concern about the effectiveness of placing restrictions solely on AFA catcher vessels, the Council considered several alternatives for restricting AFA catcher vessel participation. Under the groundfish FMP, a limited entry permit is required for harvesters to participate in West Coast groundfish trawl fisheries. Currently, the limited entry fleet includes 236 fixed gear endorsements, 264 trawl endorsements held by catcher boats, and 10 trawl permits held by catcher-processor. Many of these permits are held by AFA catcher vessels (see Section 4).

The proposed options seek to restrict catcher vessels that benefit from the AFA from participating in West Coast groundfish fisheries if they did not substantially participate in the past. It has been proposed that this could be accomplished by restricting the participation of an AFA catcher vessel, the limited entry permit held by an AFA catcher vessel, or placing restrictions on both the vessel and permit. With respect to restricting the permit, at issue, is concern that owners of an AFA catcher vessel, excluded from West Coast fisheries, would be able to sell or transfer their limited entry permit. The Council believes that if restrictions are not placed on the permit, it would be possible for a catcher vessel owner to sell the permit to a non-AFA catcher vessel or transfer the permit to a newly built boat. If this produces an increase effort or capacity, current participants could be harmed even though the AFA catcher vessel which originally held the permit has been excluded.

2.2.2 Options Considered by the Council

The Council considered three options: Option 2.a, 2.b, and 2.c. Under each option, the Council considered several subissues (permit requirement; medallion transferability, i.e., substitution; and permit transferability). Depending on the option recommended by the Council, the Council will also act upon several suboptions corresponding to the subissues for that option. For example, if the Council recommends Option 2.c, the

Council will also recommend options to address permit requirements (2.c.1), medallion transferability (2.c.2), and permit transferability (2.c.3).

Option 2.a Vessel restricted (medallions issued)

- if qualifying criteria not met, AFA catcher vessel is prohibited from participating in West Coast groundfish fisheries. However, if the Council selects Suboption 2.a.2.A, a non-qualified AFA catcher vessel could be allowed to substitute for a qualified AFA catcher vessel.
- if qualifying criteria met, AFA catcher vessel receives a medallion. If Council selects Option 1.a, the medallion will indicate the segment of the fishery the vessel is eligible to participate in (at-sea whiting, shorebased whiting, and non-whiting groundfish). If the Council selects Option 1.b, medallion would apply generically to the groundfish fishery.
- if some qualifying criteria met, AFA catcher vessel participation could be restricted to specific fishery segments (if combined with Option 1.a).
- limited entry permits held by non-qualified AFA catcher vessels will not be restricted under Option 2.a. Permits holders will be free to sell or lease these permits.
- an AFA catcher vessel must hold an appropriate groundfish permit and an AFA catcher vessel medallion.

Subissue 1 – Permit Requirement (note: there are no suboptions for the Subissue)

AFA catcher vessel with an AFA medallion must also obtain at least one groundfish limited entry permit. This permit could be any trawl A permit. (GAP June 2000).

Subissue 2 – Medallion transferability (substitution)

- Suboption 2.a.2.A medallions are **transferable**. A non-qualified AFA catcher vessel may substitute for a qualified AFA catcher vessel. (GAP June 2000); or
- Suboption 2.a.2.B medallions are **not transferable**. A non-qualified AFA catcher vessel may not substitute for a qualified AFA catcher vessel. (GAP June 2001).

Option 2.b Limited entry permit restricted

- If qualifying criteria not met, permit held by AFA catcher vessel confers no access to the groundfish fishery (Option 1.a or 1.b).
- If some qualifying criteria met, permit provides restricted access to the groundfish fishery (Option 1.a only). Vessel with restricted permit ("AFA-branded") could acquire additional permits to allow for participation in other fishery sectors. This could be a feature under Option 1.a, where groundfish fishery sectors are separated (at-sea whiting, shorebased whiting, non-whiting groundfish). This feature would not apply under Option 1.b, which does not separate fishery sectors.

Subissue 1 – Permit Requirement – If qualifying criteria met, but AFA catcher vessel does not have a limited entry permit, qualified AFA catcher vessel must obtain at least one groundfish limited entry permit –

- Suboption 2.b.1.A trawl A permit (GAP June 2000); or
- Suboption 2.b.1.B AFA-branded trawl A permit.

Under Option 2.b.1.A, no restrictions are placed on a non-qualified AFA catcher vessel. That is, a nonqualified AFA catcher vessel's limited entry permit could become invalid, but the vessel would not be restricted from obtaining another limited entry permit and continuing to participate in the fishery. Under, Option 2.b.1.B, the Council could specify that non-qualified AFA catcher vessels are only allowed to enter the fishery by obtaining at least one AFA-branded permit from a qualified AFA catcher vessel. Subissue 2 – Permit Transferability

Suboption 2.b.2.A – restricted (AFA-branded) permit is transferable – sale or lease allowed.⁴ (GAP June 2001). The **AFA-brand stays active** and may restrict a non-AFA vessel; or

Suboption 2.b.2.B – restricted (AFA-branded) permit is transferable – sale or lease allowed. The **AFA-brand does not stay active** on a non-AFA vessel. That is, if a permit from an AFA catcher vessel is placed on a non-AFA catcher vessel, the permit will not be encumbered by the AFA-brand while it is on the non-AFA catcher vessel.

Suboption 2.b.2.C – AFA-branded permit is not transferable – sale or lease not allowed. In essence, a permit held by a non-qualified AFA catcher vessel would be revoked. (GAP June 2000).

Option 2.c Vessel and Permit Restricted

- If qualifying criteria not met, AFA catcher vessel is disqualified from participating in West Coast groundfish fisheries and limited entry permit confers no access to the groundfish fishery. However, if the Council selects Suboption 2.c.2.A, a non-qualified AFA catcher vessel could be allowed to substitute for a qualified AFA catcher vessel through transfer of the vessel medallion. Similarly, if the Council selects Suboption 2.c.3.A or 2.c.3.B, permit could be transferred to a non-AFA catcher vessel.
- If qualifying criteria met, vessel receives medallion and permit (held for the vessel as of June 29, 2000⁵) is given an AFA- brand, which indicates the fishery segments they are qualified to participate in. An AFA catcher vessel with a branded permit could acquire additional medallions and permits to allow for participation in other fishery sectors. This could be a feature under Option 1.a, where groundfish fishery sectors are separated (at-sea whiting, shorebased whiting, non-whiting groundfish). This feature would not apply under Option 1.b, which does not separate fishery sectors.

Subissue 1 – Permit Requirement – AFA catcher vessel must hold at least one groundfish limited entry permit –

- Suboption 2.c.1.A trawl A permit (GAP June 2000); or
- Suboption 2.c.1.B AFA-branded trawl A permit.

Subissue 2 – Medallion transferability (substitution)

- Suboption 2.c.2.A medallions are **transferable**. A non-qualified AFA catcher vessel may substitute for a qualified AFA catcher vessel. (GAP June 2000); or
- Suboption 2.c.2.B medallions are **not transferable**. A non-qualified AFA catcher vessel may not substitute for a qualified AFA catcher vessel. (GAP June 2001).

Subissue 3 – Permit transferability

^{4/} Rules for combining permits: If the AFA brands on a permit do not match, the most restrictive brand in terms of number of segments to which the vessel has access will be carried over to the resulting permit. Within this restriction on the number of segments for which a combined permit will be branded, where a choice must be made as to the segment(s) for which a combined permit will be branded, the person combining the permits will be allowed to choose among the segments for which the permits being combined are branded. Once this choice is made the choice may not be changed.

^{5/} This corresponds to the June 29, 2000 control date, which noticed 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. (65*FR*55214).

Suboption 2.c.3.A – restricted (AFA-branded) permit is transferable – sale or lease allowed.⁶ (GAP June 2001). The **AFA-brand stays active** on a non-AFA vessel; or

Suboption 2.c.3.B – restricted (AFA-branded) permit is transferable – sale or lease allowed. The **AFA-brand does not stay active** while the permit is held by a non-AFA vessel. That is, if a permit from an AFA catcher vessel is placed on a non-AFA catcher vessel, the permit will not be encumbered by the AFA-brand while it is on the non-AFA catcher vessel.

Suboption 2.c.3.C – AFA-branded permit is not transferable – sale or lease not allowed. In essence, a permit held by a non-qualified AFA catcher vessel would be revoked. (GAP June 2000).

2.2.3 Council Preferred Alternative

The Council's PREFERRED OPTION is Alternative 2.c. The Council believes restricting participation of AFA vessels (that do not meet qualifying requirements) and limited entry permits held by those vessels would provide the greatest protection against harm. Restricting both the vessel and the limited entry permit associated with that vessel reduces the likelihood that an AFA beneficiary would be able to participate in West Coast groundfish fishery to the detriment of the current fishery participants.

[Preferred alternatives for permit requirements, medallion transferability, and permit transferability have not yet been specified.]

2.3 Issue 3 – AFA Catcher-Processor Restrictions

2.3.1 Perspectives on the Need and Objectives for Catcher-Processor Restrictions

The AFA explicitly prohibits catcher-processors named in the AFA from participating in fisheries other than North Pacific fisheries and the Pacific whiting fishery. Catcher-processors will be unable to use their AFA-eligibility to increase participation in West Coast groundfish fisheries. However, AFA-eligible catcher-processors could increase or optimize their participation in the Pacific whiting fishery.

Therefore, as with catcher vessels, the goal of the proposed management restrictions for catcher-processors is to prevent destabilization of current participation in West Coast groundfish fisheries by AFA vessels. This concern stems from the ability of AFA catcher-processors to use advantages gained through the AFA to disadvantage West Coast fishermen dependent on West Coast groundfish. Moreover, members of the public have expressed concern that, without restrictions on participation, the hard fought Pacific whiting allocation framework could be negated by the entry of AFA vessels that have not traditionally participated in West Coast groundfish fisheries.

The whiting allocation framework was adopted by the Council in October 1996 and implemented by NMFS on May 20, 1999 (62*FR*27519). The allocation framework was developed to address a series of problems identified by the Council in 1996 (*Preliminary Whiting Analysis – Section 1: Allocation and Season Framework*. Supplemental Attachment c.7.a. PFMC. October 18, 1996.):

- Harvest capacity exceeds the amount of whiting available for harvest.
- Processing capacity exceeds the amount of whiting available.
- The allocation regulation expiring at the end of 1996 contributed to industry stability, elimination of federal management would negate previous gains.
- Absent federal regulation, the Council believes there would not be an equitable distribution of economic benefits.

^{6/} Rules for combining permits: If the AFA brands on a permit do not match, the most restrictive brand in terms of number of segments to which the vessel has access will be carried over to the resulting permit. Within this restriction on the number of segments for which a combined permit will be branded, where a choice must be made as to the segment(s) for which a combined permit will be branded, the person combining the permits will be allowed to choose among the segments for which the permits being combined are branded. Once this choice is made the choice may not be changed.

The objectives of the allocation framework were to (*Preliminary Whiting Analysis – Section 1: Allocation and Season Framework*. Supplemental Attachment c.7.a. PFMC. October 18, 1996.):

- Provide for orderly attainment of the annual whiting harvest guideline.
- Provide an equitable opportunity for industry sectors to participate in the fishery.
- Reduce the need for speed in prosecuting the fishery.
- Encourage the industry to work cooperatively to solve its problems.

As described in Section 4, all current participants in the catcher-processor component of the whiting fishery are AFA catcher-processors. However, because of their participation in the West Coast groundfish fishery, these vessels could also be defined as traditional participants and, thus, deserving of protective management measures. This protection could include exclusion of AFA catcher-processors that do not meet the qualifying requirements. However, as defined, these protective measures would only apply to AFA catcher-processors. Non-AFA catcher-processors would still be free to purchase limited entry permits and take up participation in the fishery.

As for AFA catcher vessels, the Council set a control date of June 29, 2000 as notice to the public and potential purchasers of limited entry permits held by AFA entities. This control date provides advance notice that, based on future Council action, groundfish limited entry permits held by an AFA entity (including catcher-processors) may be revoked or restricted.

On September 13, 2000, NMFS published notice of the June 29, 2000 control date in the *Federal Register* (65*FR*55214). The September 13, 2000 notice also notified the public the Council is considering restricting future participation in the whiting fishery by AFA motherships and catcher-processors that do not have a history in the fishery.

- 2.3.2 Options Considered by the Council
 - Option 3.a If an AFA catcher processor was licensed to harvest groundfish in the years 1997, 1998, or 1999 through September 16, 1999 it will be allowed to participate.
 - Option 3.b Status quo Do not recommend management measures to restrict AFA catcher processor participation. It is possible the Secretary of Commerce, through NMFS, may determine that protective measures are warranted and implement, through regulation, such measures.

As written, Option 3.a does not address limited entry permits held by non-qualified AFA catcher processors. Thus, if the Council adopts this as the preferred option an AFA catcher processor will either qualify or not qualify for participation in the groundfish fishery. However, there are no provisions for determining the disposition of limited entry permits held by non-qualified AFA catcher processors. The Council could opt to specify options similar to those under Issue 2 (for AFA catcher vessels) to address whether restrictions under Option 3 apply to catcher processors, or their limited entry permits, or both.

2.3.3 Council Preferred Alternative

RESERVED

2.4 **Issue 4** – AFA Mothership Restrictions

2.4.1 Perspectives on the Need and Objectives for Mothership Restrictions

As for catcher-processors, the AFA explicitly prohibits motherships named in the AFA from participating in fisheries other than North Pacific fisheries and the Pacific whiting fishery. Motherships will be unable to use their AFA-eligibility to increase participation in West Coast groundfish fisheries. However, AFA-eligible motherships could increase or optimize their participation in the Pacific whiting fishery.

Thus, the arguments for management measures to protect the mothership component are essentially the same as for catcher vessels and catcher-processors. As for catcher-processors in the whiting fishery, the mothership sector also worked in good faith to construct the whiting allocation framework. Therefore, it is

also reasonable for this component of the industry to seek to protect that arrangement by restricting entrance of AFA motherships that have not traditionally participated in the West Coast groundfish fishery.

Similar to the catcher-processor sector, all three motherships participating in the whiting fishery are AFA motherships. Because of their participation in the West Coast groundfish fishery, these vessels could also be defined as traditional participants and, thus, deserving of protective management measures. This protection could include exclusion of AFA motherships that do not meet the qualifying requirements. However, as defined, these protective measures would only apply to AFA motherships.

As noted previously, on September 13, 2000, NMFS published notice of a control date (June 29, 2000) in the *Federal Register* (65*FR*55214). This notice notified the public that the Council is considering restricting future participation in the whiting fishery by AFA motherships and catcher-processors that do not have a history in the fishery.

- 2.4.2 Options Considered by the Council
 - Option 4.a If an AFA mothership received at least 1000 mt of Pacific whiting during the regular whiting season in 1998 or 1999 it will be allowed to participate. This option could require issuance of "mothership medallions," which could be operationally similar to catcher vessel medallions.
 - Option 4.b Status quo Do not recommend management measures to restrict mothership participation. It is possible the Secretary of Commerce, through NMFS, may determine that protective measures are warranted and implement, through regulation, such measures.

Currently, there is no permit system for motherships participating in West Coast groundfish fisheries. Option 4.a could entail development of a permit system for motherships.

2.4.3 Council Preferred Alternative

RESERVED

- 2.5 **Issue 5** Duration of Restrictions
- 2.5.1 Perspectives on the Need and Objectives for Duration of Restrictions

The proposed management measures seek to prevent AFA vessels from using benefits derived from the AFA to harm West Coast groundfish fishery participants. If benefits derived through the AFA are perceived to be permanent, then the proposed measures could be permanent features of the West Coast groundfish fishery. Conversely, if benefits derived through the AFA are perceived to be linked to AFA provisions for fishery cooperatives, then protective measures could expire when the measures in the AFA are no longer in effect.

2.5.2 Options Considered by the Council

The Council considered two alternatives for the duration of the proposed management measures: permanent or only in effect for the duration of the AFA.

- Option 5.a Restrictions permanent.
- Option 5.b Restrictions only in effect for the duration of the AFA or measures developed by the NPFMC pursuant to the AFA (i.e., December 31, 2004).⁷

^{7/} As noted above, Section 208 of the AFA (Eligible Vessels and Processors) is scheduled to sunset on December 31, 2004 (AFA, Section 213). However, the North Pacific Council may recommend to the Secretary management measures that "give effect to the measures" thereafter. (AFA, Section 213).

2.5.3 Council Preferred Alternative

RESERVED

2.6 Permit Review Board

For Issues 1 through 5, no role is specified for the Council Permit Review Board. Any appeals of a NMFS decision to issue or not issue a permit would not be dealt with through the Council process. This is similar to what is done for sablefish endorsements and tier assignments. Modifications are proposed to the FMP section covering the permit review board (Appendix A). These modifications will take issues, such as the number of seats on the review board, out of the FMP and specify them as part of Council Operating Procedures. This would be consistent with what is done for Council advisory committees.

Appendix A Proposed Modifications to the Groundfish Fishery Management Plan (FMP)

This appendix contains the changes to the language of the groundfish FMP which would be made to implement the AFA related measures identified in this document. New text is underlined and deleted text is struck through.

Issues 1, 2 and 5

OPTION 1a OR 1b

14.2 Management, Allocation and General Rules on the Issuance and Use of Groundfish LE Permits, Gear Endorsements, Size Endorsements, Fixed Gear Sablefish Endorsements [OPTION 2B OR 2C: <u>and AFA Endorsements ("Brands")]</u> [OPTION 2A OR 2C: <u>and AFA Catcher Vessel Medallions]</u>

14.2.1 Federal LE Permits Required Only for Gears Fishing on the Limited Access Quota

3. Permit Requirements for AFA Catcher Vessels

<u>An AFA catcher vessel⁸ must hold a trawl endorsed groundfish LE permit</u> (Options 2a or 2c: <u>and an</u> AFA medallion (Section 14.6)) in order to participate in the West Coast groundfish fishery.

OPTION 1a and (OPTION 2a or 2c): <u>The AFA medallion will provide access only to particular</u> segments of the West Coast groundfish fishery, as those segments are defined in Section 14.6.

OPTION 2.b.1.B or OPTION 2.c.1.B: <u>The trawl endorsed permit must be AFA branded.</u> (OPTION 1a: <u>The permit brand will provide access only to particular segments of the West Coast groundfish</u> fishery, as those segments are defined in Section 14.5.)

OPTION 1a

4. Holding Multiple Permits

OPTION 2.a.2.A or 2.c.2.A: <u>A catcher vessel may hold multiple medallions in order to access more</u> segments of the groundfish fishery, as those segments are defined in Section 14.2.7. Other rules for holding multiple medallions and the applicable harvest regulations may be determined through regulatory amendments, and subsequent routine management measures, in accordance with paragraph 3 of Section 14.2.4.

OPTION 2.b.2.A OR 2.c.3.A: <u>A catcher vessel may hold multiple permits (branded or unbranded)</u> in order to access more segments of the groundfish fishery, as those segments are defined in <u>Section</u>

An AFA catcher vessel is a vessel that holds an AFA catcher vessel permit and harvested and/or delivered BSAI pollock to a shoreside processor, mothership, and/or catcher-processor during the AFA's qualifying years.

AFA catcher-processor is a vessel that holds an AFA catcher-processor permit and harvested/processed and/or received/processed BSAI pollock during the AFA's qualifying years.

^{8/} An AFA vessel is a catcher vessel, catcher-processor, or mothership that, because it is named in the AFA or meets qualifications in the AFA **and** holds an AFA permit issued by NMFS, is guaranteed a portion of the directed Bering Sea and Aleutian Islands (BSAI) pollock fishery quota.

14.2.7. Restrictions pertaining to the cumulative limits for multiple permits will be determined through regulatory amendments and routine management measures. Other rules for holding multiple permits and the applicable harvest regulations may be determined through regulatory amendments, and subsequent routine management measures, in accordance with paragraph 3 of Section 14.2.4.

. . . .

OPTIONS 2.b OR 2.c

14.2.5 Gear Endorsements

. . . .

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 the designated species "B" gear endorsements, and for fishing for which a fixed gear sablefish endorsement is required (see Section 14.2.6) and for vessels fishing with AFA endorsed ("branded") permits (see Section 14.2.6). Designated species "B" gear endorsements authorize catch of only the designated species specified in the endorsement and bycatch as specified for the joint venture fishery for that species. 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.

....

OPTION 1a OR 1b

14.2.7 AFA Endorsement ("AFA Brands")

1. Permits held for AFA catcher vessels will be branded based on the West Coast catch history of the AFA catcher vessel holding the permit as of June 29, 2000 (see Section 14.5).

OPTION 1a

The AFA brand will restrict the scope of activities authorized under the permit to some combination of the following segments of the fishery: (a) whiting deliveries to motherships, (b) shoreside deliveries of whiting, (c) shoreside deliveries of all groundfish species other than whiting. The permit will be branded for those fisheries for which the vessel holding the permit as of June 29, 2000 meets the minimum landing requirements (see Section 14.5).

OPTION 2.b.2.A. OR 2.c.3.A	The AFA brand restricts the permit regardless of what vessel
	it is associated with.
OPTION 2.b.2.B OR 2.c.3.B	The AFA brand restricts the permit only when the permit is
	registered to an AFA vessel.

It is possible that an AFA catcher vessel will not meet any of the minimum landing requirements, and its permit would be branded such that no groundfish activities would be allowed by the associated AFA catcher vessel. In such a case, the endorsement(s) for the gear(s) used under the AFA by the AFA catcher vessel would be

invalid and expire.
invalid for the duration of the AFA restrictions imposed by
Congress and subsequently the North Pacific Fishery
Management Council.
no longer valid for participation in West Coast fisheries when
the permit is registered to an AFA vessel.

A permit attached to an AFA catcher vessel qualifying for all three segments of the fishery will essentially continue to allow a vessel to take part in the full range of activities typically engaged in by vessels with unbranded permits.

OPTION 1b

The brand will specify that the AFA catcher vessel registered with the permit may participate in any West Coast groundfish fishery in compliance with the associated gear and length endorsements.

OPTION 2.b.2.A. OR 2.c.3.AThe AFA brand restricts the permit regardless of what vesselit is associated with.OPTION 2.b.2.B OR 2.c.3.BThe AFA brand restricts the permit only when the permit is

registered to an AFA vessel.

If Section 14.5 qualifying requirements are not met, the brand will specify the endorsement(s) for the gear(s) used under the AFA by the AFA catcher vessel is (are)

OPTION 2.b.1.a OR 2.c.3.A Option 5.a. invalid and expires. Option 5.b. invalid for the duration of the AFA restrictions imposed by Congress and subsequently the NPFMC. OPTION 2.b.2.b OR 2.c.3.A No longer valid for participation in West Coast fisheries when the permit is registered to an AFA catcher vessel.

OPTION 2.b.1.A OR 2.c.1.A <u>Any AFA vessel that does not hold a West Coast groundfish permit may</u> enter the fishery only by acquiring such a permit.

OPTION 2.b.1.B OR 2.c.1.B <u>Any AFA vessel that does not hold a West Coast groundfish permit may</u> enter the fishery only by acquiring at least one AFA-branded permit. This will limit the number of AFA vessels participating in the fishery to the number of West-Coast qualifying vessels holding permits as of June 29, 2000.⁹¹⁰

OPTION 1a OR 1b

- 2. AFA brands will be affixed to permits.
- 3. Transferability:

OPTIONS 2.b.2.A OR 2.c.3.A <u>The AFA brand will remain with the permit when it is transferred and</u> will restrict the use of the permit as designated in paragraph 1 of this section.

OPTIONS 2.b.2.B OR 2.c.3.B <u>The AFA brand will remain with the permit when it is transferred but</u> will have effect, as specified in paragraph 1 of this section, only when the permit is registered for use with an AFA vessel.

OPTIONS 2.b.2.C OR 2.c.3.C An AFA branded permit is not transferable

4. AFA brands are not separable from the LE permit and therefore may not be transferred separately from the LE permit.

^{9/} Without this language, under Option 2.b, AFA vessels that do not hold a branded permit could enter the fishery by acquiring a branded or nonbranded permit, i.e. without this addition, the only new restrictions would apply to West-Coast/AFA vessels and subsequent holders of AFA branded permits.

^{10/} This language would cause Option 2.b to mimic Option 2.c where both the medallion and the permit are required. Option 2.b would essentially combine the permit and medallion into a single document such that the permit and medallion could not be separated from one another.

- 5. Limitations which apply based on the AFA brand and fishing thereunder shall not restrict the endorsements on LE permits for any gears other than those gears used under the gualifying/nonqualifying vessel's AFA permit. It is expected that the primary gear used under AFA permits will be trawl gear.
- 6. Rules on the branding of West Coast groundfish LE permits and other characteristics of the branded permits are specified in Section 14.5.

(renumber all subsequent sections)

OPTIONS 2.b OR 2.c

. . . .

. . . .

14.2.9 A LE Permit and Necessary Gear and Sablefish Fixed Gear Endorsements Will Be Held by the Owner of Record of the Vessel <u>and the Vessel Will be Fished in Compliance with the</u> <u>Restrictions on the Permit</u>

8. A vessel owner may not use a vessel, or allow a vessel to be used, to catch any Council-managed groundfish where such catch is restricted by an AFA brand on the vessel's permit (see Sections 14.2.7 and 14.5).

14.2.11 Combining LE Permits

. . . .

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. Fixed gear sablefish endorsements will remain valid only if all the longline or fishpot permits being combined have fixed gear sablefish endorsements.

If the permits being combined both have identical AFA brands, the resulting combined permit will have the brand on it. If one permit is branded and the other permit is not, the resulting permit will have the brand on it.

OPTION 1.a: If the AFA brands on a permit do not match, the most restrictive brand in terms of number of segments to which the vessel has access will be carried over to the resulting permit. Within this restriction on the number of segments for which a combined permit will be branded, where a choice must be made as to the segment(s) for which a combined permit will be branded, the person combining the permits will be allowed to choose among the segments for which the permits being combined are branded. Once this choice is made the choice may not be changed.

OPTIONS 2.b OR 2.c

. . . .

14.3.1 "A" Gear Endorsement

14.3.1.2 Description, Use and Transferability of the "A" Endorsement

. . . .

 The vessel for which the LE permit is registered will be allowed to catch all Council-managed groundfish with the gear specified in the "A" endorsement, except for fixed gear sablefish as specified in Section 14.2.6 <u>except as restricted by any AFA brand placed on the permit, as specified in Section</u> <u>14.2.7.</u>

. . . .

14.3.2 Provisional "A" Gear Endorsement

14.3.2.2 Description, Use and Transferability of the Provisional "A" Endorsement

. . . .

. . . .

2. The vessel identified in the provisional "A" endorsement will be allowed to catch all Council-managed groundfish with the gear specified in the provisional "A" endorsement, except for sablefish harvested north of 36°N latitude during times and with gears for which a fixed gear sablefish endorsement is required, and except as restricted by any AFA brand placed on the permit, as specified in Section 14.2.7.

OPTIONS 2.a or 2.c

14.5 AFA Endorsement ("Brand") Qualifying Criteria

1. An AFA brand will be affixed to any LE permit held by an AFA vessel as of June 29, 2000.

OPTION 1a

2. For AFA catcher vessels under 200' in length, the AFA brand minimum landing requirements for each segment of the fishery are as follows (Council to choose one for each sector):

l I	Whiting Delivered At-sea	<u>Whiting Delivered</u> Shoreside	<u>All Other Groundfish</u> Delivered Shoreside
Ι	50 mt	50 mt	50 mt
L	100 mt	100 mt	100 mt
L	500 mt	500 mt	500 mt
I	10 deliveries	10 deliveries	10 deliveries

The period during which these landing must have been made will be (Council to choose one): 1994-1997 or

1994-September 16, 1999

The catch history considered is deliveries or landings of Council managed groundfish.

. . . .

(renumber all subsequent sections)

OPTION 1b

2. For AFA catcher vessels under 200' in length, the AFA brand minimum landing requirement is 500 mt of groundfish caught from January 1, 1994 though October 1, 1998. The catch history considered is deliveries or landings of Council managed groundfish.

14.6 AFA Catcher-Vessel Medallions

1. An AFA medallion will be issued to AFA catcher vessels meeting the landing requirements specified in this paragraph.

OPTION 1a

The AFA medallion will be valid for segments of the fishery for which the vessel meets the specified minimum landing requirements. For AFA catcher vessels under 200' in length, the AFA medallion minimum landing requirements for each segment of the fishery are as follows (Council to choose one for each sector):

l I	Whiting Delivered At-sea	<u>Whiting Delivered</u> <u>Shoreside</u>	<u>All Other Groundfish</u> Delivered Shoreside
Ι	50 mt	50 mt	50 mt
Ι	100 mt	100 mt	100 mt
Ι	500 mt	500 mt	500 mt
I	10 deliveries	10 deliveries	10 deliveries

The period during which these landing must have been made will be (Council to choose one):

<u>1994-1997</u> 1994-September 16, 1999

The catch history considered is deliveries or landings of Council managed groundfish.

OPTION 1b

- For AFA catcher vessels under 200' in length, the AFA medallion minimum landing requirement is 500 mt of groundfish caught from January 1, 1994 though October 1, 1998. The catch history considered is deliveries or landings of Council managed groundfish.
- A medallions is a type of limited entry license that is separate from the groundfish limited entry permit.
 In order to participate in the groundfish fishery an AFA vessel is required to hold at least one medallion in addition to the groundfish limited entry permit it is required to hold.
 - 4. Vessel owners are responsible for acquiring the medallions necessary for their AFA vessels to participate in West Coast fisheries. The owner of an AFA vessel may not use the AFA vessel, or allow the AFA vessel to be used, to catch any Council-managed groundfish where such catch is restricted by an AFA medallion held for the vessel.

OPTION 2.a.2.A OR 2.c.2.A

5. Medallions are transferable. An AFA vessel may hold multiple medallions in order to access more segments of the groundfish fishery, as those segments are defined in Section 14.2.7.

. . . .

OPTION 2.a.2.B OR 2.c.2.B

5. Medallions are not transferable.

OPTION 5.A

6. The medallion system for AFA catcher vessels and requirements for AFA catcher vessel medallions will expire with the expiration of the AFA restrictions imposed by Congress **and** those restrictions subsequently recommended by the NPFMC to extend the duration of effect of the AFA.

OPTION 3.a

14.7	West Coast Catcher-Processor Medallions
1.	A catcher-processor medallion will be issued to catcher-processors with AFA catcher-processor
	permits meeting the following qualifying requirements: the catcher processor must have held an
	LE groundfish permit in the years 1997, 1998, or 1999 through September 16, 1999.
2.	A catcher-processor medallion is a type of limited entry license that is separate from the
	groundfish LE permit.
3.	In order to participate in the groundfish fishery as a catcher-processor an AFA vessel is required
	to hold a catcher-processor medallion in addition to the required groundfish LE permit. NonAFA
	<u>vessels may enter as catcher-processors without a medallion but still require appropriate</u>
	groundfish limited entry permits.(Italicized text needs Council confirmation with respect
	to intent.)
4.	Vessel owners are responsible for acquiring the medallions necessary for their vessels to
	participate in West Coast groundfish fisheries. The owner of an AFA vessel may not use the AFA
	vessel or allow the AFA vessel to be used to catch and process Council-managed groundfish
	without holding an AFA catcher-processor medallion for the vessel.
5.	Medallions are transferable. (This needs Council confirmation with respect to intent.)
6.	There is no size endorsement on the medallions. (This needs Council confirmation with
	respect to intent.)
	h

OPTION 5.b

7. The medallion system for catcher-processor vessels and requirements for catcher-processor medallions will expire with the expiration of the AFA restrictions imposed by Congress **and** those restrictions subsequently recommended by the NPFMC to extend the duration of effect of the AFA.

Issue 4 and 5

OPTION 4a

14.8 West Coast Mothership Medallions

- 1. A mothership medallion will be issued to motherships with AFA permits meeting the following qualifying requirements: The mothership must have received at least 1,000 mt of Pacific whiting during the regular whiting season in 1998 or 1999.
 - 2. A mothership medallion is a type of limited entry license that is separate from the groundfish LE permit.
 - 3. In order to participate in the groundfish fishery as a mothership an AFA vessel is required to hold a mothership medallion. *NonAFA vessels may enter as motherships without acquiring a* <u>medallion. (Italicized text needs Council confirmation with respect to intent.)</u>
 - 4. Vessel owners are responsible for acquiring the medallions necessary for their AFA vessels to participate in West Coast fisheries. The owner of an AFA vessel may not use the AFA vessel, or allow the AFA vessel to be used, to receive any Council-managed groundfish without holding an AFA medallion for the vessel.
 - 5. Medallions are transferable. (This needs Council confirmation with respect to intent.)
 - 6. There is no size endorsement on the medallions. (This needs Council confirmation with respect to intent.)

OPTION 5.b

7. The medallion system for AFA motherships and requirements for AFA mothership medallions will expire with the expiration of the AFA restrictions imposed by Congress and those restrictions subsequently recommended by the NPFMC to extend the duration of effect of the AFA.

Issues 1, 2, 3, and 4 (and Technical Amendment)

14.<u>59</u> LE Permit Issuance Review Board

14.59.4 Nominations, Membership, Terms and Action

Nominations for the board may be made by anyone. Selction will be made by the Counil or its desgnee. Seats, terms, nominations, appointments and procedural rules will be as designated in Council operating procedures.

14.5.5 Membership

- 1. "knowledgeable" fishing industry members.
- 2. 7 to 10 voting members.
- 3 Two-thirds of the members must be present for a quorum.

. . . .

. . . .

I

14.5.6 Majority Vote

A simple majority of those present and voting shall be necessary to take action on a review.

14.5.7 Terms of Members

The term for a board member shall be three years. Terms will be staggered.

. . . .

- 14.9.8
 Review of {OPTION 3a AFA catch-processor medallions; OR 4a AFA mothership medallions; OPTION 2a AFA catcher vessel medallions; OPTION 2b AFA catcher vessel medallions; OPTION 2b AFA catcher vessel brands and medallions}.
- The Council and Council's limited entry permit review board will not take part in the review of appeals of {OPTION 3a <u>AFA catch-processor medallions</u>, OR 4a <u>AFA mothership medallions</u>; OPTION 2a <u>AFA</u> <u>catcher vessel medallions</u>; OPTION 2b <u>AFA catcher vessel brands</u>; OPTION 2c <u>AFA catcher vessel</u> <u>brands and medallions</u>}.

14.6<u>10</u> Implementation, Application and Appeals Process

. . . .

8. NMFS will establish a reasonable application period for the {OPTION 3a_AFA catch-processor medallions, OR 4a AFA mothership medallions; OPTION 2a AFA catcher vessel medallions, OPTION 2b; AFA catcher vessel brands; OPTION 2c AFA catcher vessel brands and medallions}. If an applicant disagrees with the {OPTION 3a AFA catch-processor medallions, OR 4a AFA mothership medallions; OPTION 2a AFA catcher vessel medallions; OPTION 2b AFA catcher vessel brands; OPTION 2c AFA catcher vessel medallions; OPTION 2c AFA catcher vessel medallions; OPTION 2c AFA catcher vessel brands and medallions} issued for the applicants permit, the applicant may appeal to the NMFS regional director. NMFS will set and publish in the Federal Register a date after which requirements for AFA (OPTION 3a AFA catch-processor medallions, OR 4a AFA mothership medallions; OPTION 2c AFA catcher vessel brands for AFA (OPTION 3a AFA catch-processor medallions, OR 4a AFA mothership medallions; OPTION 2c AFA catcher vessel brands for AFA (OPTION 3a AFA catch-processor medallions, OR 4a AFA mothership medallions; OPTION 2c AFA catcher vessel brands for AFA (OPTION 3a AFA catch-processor medallions, OR 4a AFA mothership medallions; OPTION 2c AFA catcher vessel brands and medallions) will be in effect.

The Council authorizes renumbering of sections in the plan and cross references as necessary in order to incorporate this plan amendment.

Appendix A Proposed Modifications to the Groundfish Fishery Management Plan (FMP)

Table of Contents

14.2 Management, Allocation and General Rules on the Issuance and Use of Groundfish LE Permi	its,
Gear Endorsements, Size Endorsements, Fixed Gear Sablefish Endorsements [OPTION 2B OR 2	2C:
and AFA Endorsements ("Brands")] [OPTION 2A OR 2C: and AFA Catcher Vessel Medallions]	
ΑΑ	۱-۱
14.2.5 Gear Endorsements A	۱-2
14.2.7 AFA Endorsement ("AFA Brands")	۱-2
14.2.9 A LE Permit and Necessary Gear and Sablefish Fixed Gear Endorsements Will Be He	əld
by the Owner of Record of the Vessel and the Vessel Will be Fished in Compliance w	ith
the Restrictions on the Permit	
A	∖-4
14.2.11 Combining LE Permits A	∖-4
14.3.1 "A" Gear Endorsement	4-4
14.3.2 Provisional "A" Gear Endorsement A	۰5
14.5 AFA Endorsement ("Brand") A	۰5
14.59 LE Permit Issuance Review Board A	۹-8
14.9.8 Review of {OPTION 3a AFA catch-processor medallions; OR 4a AFA mothersh	nip
medallions; OPTION 2a AFA catcher vessel medallions; OPTION 2b AFA catch	ner
vessel brands; OPTION 2c AFA catcher vessel brands and medallions} A	۸-8
14. <u>610</u> Implementation, Application and Appeals Process	8-٨

ANALYSIS OF MANAGEMENT ALTERNATIVES

The issues and options before the Council are outlined in the decision path provided as Figure 1 (page 5). Options proposed under the AFA agenda item appear to be focused on two primary objectives:

Amendment 15 Objective 1: Protect from adverse impacts of the AFA (as authorized by the AFA) Objective 2: Reduce latent capacity in the groundfish permit system.

Evaluation of the performance of these management options in terms of these two objectives reveals significant performance differences and similarities between the options. In the draft amendment developed for public review, options will also be evaluated in terms of other goals and objectives of the groundfish fishery management plan (FMP), the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act), the Regulatory Flexibility Act and other applicable laws.

The following is the count of each category of AFA permitted vessels; the number of such vessels with some West Coast presence for periods described in Issues 2, 3 and 4 for each respective category; and the number of non-AFA vessels.

	Count of AFA Permitted Vessels	AFA Permitted Vessels with Some West Coast Presence	Number of Non-AFA Vessels In the West Coast groundfish fishery
Catcher Vessels	112	35 (26 held permits as of 06/29/00)	248 (trawl permits held by non-AFA vessels)
Catcher-Processor Vessels	21	10 ^{a/}	0
Motherships	3	3	0

a/ Note there is one additional catcher processor active on the West Coast during the Issue 3 qualifying period, however, that vessel is prohibited from participating in US fisheries under the terms of the AFA.

Catcher Vessel Issues (Issues 1 and 2)

Issue 1 - Qualification Requirements and Subdivision of the Fishery

Under Issue 1, the Council would establish the **qualifying requirements and possible subdivision of the fishery (Option 1.a).** Issue 1 can be divided into three questions as follows.

Question 1. Should Option 1.a	d AFA Catcher Vessel Participation be Limited? Page 6 Limit AFA catcher vessel entry separately for each sector (at-sea whiting, shoreside whiting, non-whiting groundfish)
Option 1.b Option 1.c	Limit AFA catcher vessel entry to the groundfish fishery as a whole No new limit on participation
·	
Quesiton 2. Should	d Qualification Require that a Permit Be Held on a Specific Date?
Option 1.a	no requirement for a vessel to hold a permit on a specific date in order to qualify.
Ontion 1 h	a normit must have been held as of Ostaber 1, 1009

Question 3. What I	_anding/Delivery Requirement	Should be Used? Page 10
Option 1.a	minimum landings/deliveries qualifying periods	50 mt; 100 mt; 500 mt; or 10 deliveries 1994 - 1997; or 1994 - Sept 16, 1999
Option 1.b	minimum landings/deliveries qualifying period	500 mt 1994 - Sept 30, 1998

Resolution of the questions as they pertain to Option 1.a and 1.b may be mixed and matched to some degree. For example, Option 1.a could be selected with the addition of the Option 1.b requirement that a permit be held as of October 1, 1998. Or, Option 1.b might be selected with AFA vessels earning West Coast access privileges by meeting any of the 1.a landing requirements.

Issue 2- Restrictions Imposed for Catcher Vessels Page 14

Under Issue 2 the Council would establish the **restrictions imposed** (vessel restriction, permit restriction, or both vessel and permit restriction). Issue 1 determined which catcher vessels would be restricted. Issue 2 determines how the restrictions will be imposed.

Restriction of AFA vessel participation will involve one of the following (1) the creation of a new type of permit (Option 2a, vessel medallions), (2) modification of the existing permit system (Option 2b, new groundfish limited entry permit restrictions and requirements), or (3) creation of a new type of permit and modification of the existing permit system (Option 2c, vessel medallions and new groundfish limited entry permit restrictions. Regardless of the mechanism used to impose the restrictions, qualification will be based on vessel history and will be determined as part of the consideration of Issue 1. Within each of these options, in most cases choices will need to be made regarding groundfish limited entry permit requirements and transferability.

Option 2a Vessel Restricted (Medallion System Created)

AFA vessels qualifying under the criteria established under Issue 1 would be issued medallions (groundfish permits held by AFA vessels will not be affected).

In order to participate in the West Coast groundfish fishery an AFA vessel must possess an catcher vessel medallion and a groundfish limited entry permit.

If Option 1.a is also selected, the medallions would specify the sector(s) in which the vessel is allowed to participate.

	Groundfish Limited Entry Permit Requirement AFA vessels would have to continue to hold at least one permit in order to enter the fishery.
Subissue 2.a.2	Medallion Transferability
Suboption 2.a.2	.a Medallion can be transferred between AFA vessels (no length or other capacity restriction)
Suboption 2.a.2	b. Medallion cannot be transferred between AFA vessels (the Council may consider allowing substitution if a vessel is completely lost)

Option 2b Limited Entry Permit Restricted and New Permit Requirement

Groundfish limited entry permits would be affixed with an AFA "brand" based on the catch history of the vessel holding the permit as of June 29, 2000. The brand would indicate the qualifying criteria met by the AFA vessel holding the permit or that the AFA vessel did not meet qualifying criteria. The brand on the permit held by an AFA vessel that did not meet the qualifying criteria (see Issue 1) would render the permit invalid on a temporary or permanent basis (depending on permit transferability restrictions and decisions made under Issue 5). If Option 1.a is adopted the brand would indicate the sector(s) in which the vessel may participate (those sectors for which the

vessel met that qualifying requirements)

Subissue 2.b.1 Groundfish Li	mited Entry Permit Requirement
Suboption 2.b.1.a	An AFA vessel would be required to hold at least one groundfish trawl permit (branded or unbranded) in order to participate in the fishery.
Suboption 2.b.1.b	An AFA vessel would be required to hold at least one branded groundfish trawl permit in order to participate in the fishery.
Subissue 2.b.2 Permit Transf	erability
Suboption 2.b.2.a	Permits are transferable and the AFA brand restricts the permit whether it is on an AFA or nonAFA vessel.
Suboption 2.b.2.b	Permits are transferable and the AFA brand restricts the permit only when it is on an AFA vessel.
Suboption 2.b.2.c	Permits with AFA brands are not transferable.

Option 2c Vessel Restricted (Medallion System Created) Limited Entry Permit **Restricted and New Permit Requirement**

This option combines Options 2a and 2b. In doing so it would create a West Coast catcher-vessel medallion system for AFA vessels and restrict permits by placing a brand on permits held by an AFA vessel as of June 29, 2000. AFA vessels would be required to hold an AFA medallion to participate in West Coast fisheries, but may or may not be required to hold an AFA branded permit, depending on the suboption selected.

Subissue 2.c.1 Grour	ndfish Limited Entry Permit Requirement
Suboption 2.c.1.a	An AFA vessel would be required to hold at least one groundfish trawl permit (branded or unbranded) in order to participate in the fishery.
Suboption 2.c.1.b	An AFA vessel would be required to hold at least one
	branded groundfish trawl permit in order to participate in the fishery.
Subissue 2.c.2 Medal	lion Transferability
Suboption 2.c.2.a	Medallion can be transferred between AFA vessels (no length or other capacity restriction)
Suboption 2.c.2.b	Medallion cannot be transferred between AFA vessels (the Council may consider allowing substitution if a vessel is completely lost)
Subissue 2.c.3 Permi	t Transferability
Suboption 2.c.3.a	Permits are transferable and the AFA brand restricts the permit whether it is on an AFA or nonAFA vessel.
Suboption 2.c.3.b	Permits are transferable and the AFA brand restricts the permit only when it is on an AFA vessel.
Suboption 2.c.3.c	Permits with AFA brands are not transferable.

Catcher-Processors (Issues 3) Page 19

Currently, catcher-processors must hold groundfish trawl permits, but there is no separate limited entry system for catcher-processors. Any catcher-processor that can acquire a limited entry permit with a large enough length endorsement may enter the fishery. The Council may consider creating a new program for catcher-processors in order to limit the number of AFA vessels entering as catcher processors. This program would not prevent non-AFA catcher processors from acquiring general limited entry groundfish permits and combining them into a permit large enough to enter the fishery.

Option 3a.	Require that AFA catcher-processors hold West Coast catcher-processor medallions. Issue catcher-processor medallions for any AFA catcher-processor vessel that held a groundfish limited entry permit in 1997, 1998, or 1999, through September 16, 1999. The requirement for the catcher-processor medallion would
	be in addition to the requirement that a groundfish limited entry permit be held. NonAFA catcher-processors could enter the fishery without a medallion. Medallions would not be length specific and would be transferable to other AFA catcher-processors (Council should confirm intent)
Option 3b	Status quo. Place no new restrictions on entry by AFA catcher-processors to the West Coast groundfish fishery.

Motherships (Issue 4) Page 20

Mothership participation in the West Coast groundfish fishery is not restricted by a limited entry program. The Council may consider creating a new program for motherships in order to limit the number of AFA vessels entering the fishery as motherships. This program would not prevent expansion of the mothership fleet through entry of non-AFA motherships.

Option 4a.	Require that AFA vessels operating as motherships hold West Coast mothership medallions. Issue mothership medallions for any AFA vessel that received at least 1000 mt of Pacific whiting during the regular whiting season in 1998 or
	1999. NonAFA motherships could enter the fishery without a medallion.
	Medallions would not be length specific and would be transferable to other
	AFA motherships (Council should confirm intent)
Option 4b	Status quo. Place no entry restriction on AFA vessels operating as motherships
	in the West Coast groundfish fishery.

Duration of Restrictions (Issue 5) Page 21

Many of the restrictions imposed by the AFA will expire December 31, 2004. The North Pacific Fishery Management Council may continue the restrictions set to expire by recommending regulations to NMFS. West Coast restrictions to prevent harm may terminate with termination of the AFA restrictions or continue.

Option 5.a Restrictions would be permanent, until changed by the Council or NMFS Option 5.b Restrictions would automatically expire with the expiration of the AFA or regulations recommended by the AFA which have largely the same impact as the AFA, whichever comes last.

Appeals and Technical Amendment (Issue 6) Page 22

Under Option 6.a, the Council would not be consulted on any appeal of NMFS actions taken under the qualification standards the Council recommends under Issues 1, 3 or 4. Under Option 6.b, NMFS would consult with the Council on any appeals related to the issuance of medallions and permits pursuant to this amendment. To increase Council flexibility to meet its responsibilities for consulting with NMFS on permit appeals, a technical amendment is proposed such that the specifics of the membership and other aspects of the Council's permit review board, currently specified in Section 14.5, would be deleted from that section and maintained as part of the Council operating procedures.

1. AFA CV Restrictions (6) 1.a Restrictions (by sector) 1.b Restrictions (general) 1.c No restrictions	If 1.a or 1.b is preferred alternative	3. AFA C-P Restrictions (19) 3.a Restrictions 3.b No restrictions	 <u>4. AFA MS Restrictions</u> (20) 4.a Restrictions 4.b No restrictions 	 <u>5. Duration of</u> <u>Restrictions</u>(21) 5.a Permanent 5.b Expire
If 1.a is the preferred alternative –	2. AFA CV Restrictions (14) 2.a On Vessel 2.b On Groundfish Permit 2.c On Vessel and Permit			 <u>6. Appeals and Technical</u> <u>Amendment(22)</u> 6.a No Council role 6.b Council role.
	If 2.a preferred	2.a.1 G'fish Permit Requirement Trawl A permit required, does not need to be from another AFA CV.	2.a.2 Medallion Transferable 2.a.2.A Yes, substitution 2.a.2.B No, substitution	
	If 2.b preferred	2.b.1 G'fish Permit Requirement 2.b.1.A Trawl A permit (any) 2.b.1.B One Trawl A permit (AFA)	2.b.2 Permit Transferable 2.b.2.A Yes, AFA brand on 2.b.2.B Yes, AFA brand off 2.b.2.C No	
	If 2.c preferred	2.c.1 G'fish Permit Requirement 2.c.1.A Trawl A permit (any) 2.c.1.B One trawl A permit (AFA)	2.c.2 Medallion Transferable 2.c.2.A Yes, substitution 2.c.2.B No, substitution	2.c.3 Permit Transferable 2.c.3.A Yes, AFA brand on 2.c.3.B Yes, AFA brand off 2.c.3.C No
1.a Qualifying Requirements	•	\checkmark		
Specify qualifying requirements for each of the three sectors.	At-Sea Whiting 50, 100, 500 mt, or 10 deliveries	Shorebased Whiting 50, 100, 500 mt, or 10 deliveries	Non-whiting Groundfish 50, 100, 500 mt, or 10 deliveries	
	1994 - 1997 or 1994 - 9/16/1999	1994 - 1997 or 1994 - 9/16/1999	1994 - 1997 or 1994 - 9/16/1999	

Figure 1. Display of options, page number for analysis in parentheses.

Issue 1 - Question 1. Should AFA Vessel Participation be Limited?

The primary choice for Issue 1 is a decision on

whether or not there is a need to prevent harm caused by the AFA by excluding or limiting AFA vessel participation in the West Coast groundfish fishery (i.e., select 1.a or 1.b, vs. 1.c as preferred alternative).

Once this decision is made, then it can be determined whether there is a need to consider the qualifying requirement options analyzed for Issue 1 options (1.a or 1.b) and other features of the types of restrictions that are considered as part of Issue 2. Supplementary to this question is one of whether and the degree to which the Council wishes to pursue reduction of latent permit capacity (the second objective identified in the introduction). Only Option 1.a could significantly reduce latent permit capacity. The relative performance of Options 1.a and 1.b are summarized in Table 1 and discussed in more detail on the following pages.

Has There Been Harm from the AFA?

The primary impetus for consideration of this amendment is the AFA and its requirement that the Pacific Council recommend regulations to limit harm that AFA firms may cause West Coast firms. This provision does not require that harm be demonstrated but allows preventive action to be taken. However, given the length of time that has now passed since the enactment of the AFA, it is possible to consider whether any of the feared consequences have come to pass. While data is not available for a complete economic analysis and isolation of causes of the changing economic fortunes in the groundfish fishery, a review of changes in catcher vessel (1) gross landings and (2) entry and exit is instructive. For this analysis, two years prior to the 1998 enactment of the AFA (1996-1997) are compared to the two years after enactment of the AFA (1999-2000).

Expanded Participation (Changes in Landings)

		Number of Vessels		Average Annual Vessel Landings (n	
-	Total	With Decreased Landings	With Increased Landings	'96-'97	·99-·00
	West Coast AFA Vessels				
Groundfish and Whiting	22	10	12	2,835	3,104
Whiting	21	10	11	2,931	3,141
Non-whiting Groundfish	13	8	5	62	48
	West Coas	t Non-AFA Vessels of S	ize Similar to AFA Ves	sels (groundfish trawl v	/essels >70')
Groundfish and Whiting	91	69	22	838	633
Whiting	28	20	8	1,714	1,400
Non-whiting Groundfish	91	69	22	280	202

Landings by AFA vessels expanded only moderately after enactment of the AFA. However, non-AFA vessels of similar size experienced a substantial decrease in average landings.

Note: This table is an extract of data presented in Tables 2 and 3 and developed by Dr. James Hastie (GMT, NWFSC-NOAA).

New Entry and Exit

There was only slightly more entry by AFA vessels than by similar sized non-AFA-vessels, however new AFA vessels entering the fishery harvested more than the average AFA vessel while new non-AFA vessels averaged nearly 90% less harvest than vessels already in the fishery. Substantially more West Coast non-AFA vessels left the fishery, as compared to AFA vessels.

Number of Vessels and Average Landings ('99-'00 compared to '96-'97)	West Coast AFA Vessels	West Coast Non-AFA Vessels of Similar Size
New Entrants	3 (3,325 mt)	2 (67 mt)
Exits	2 (1,011 mt)	18 (472 mt)

Of the AFA vessels that did not participate in 1996 or 1997 but participated after enactment of the AFA (1999 or 2000), all three held permits as of October 1, 1998 and had over 500 mt of whiting landings (or 50 mt of non-whiting groundfish) from 1994 through September 30, 1998. Therefore, these vessels would likely qualify to continue participation, regardless of which Option 1.a or Option 1.b qualifying criteria were selected.

Limiting Access of AFA Vessels (Option 1.a and 1.b, vs. Option 1.c)--West Coast Vessels (non-AFA and AFA) vs. non-West Coast AFA Vessels

Option 1.a or 1.b would prevent approximately 80 AFA vessels from acquiring groundfish trawl limited entry permits and entering the West Coast fishery when combined with most of the options under Issue 2.

Both Option 1.a and 1.b may be specified to prevent non-West Coast AFA vessels from using the advantages presented them by the AFA to expand their West Coast activities. However, there are some suboptions such as 2.b.1.a that could nullify this benefit. Under 2.b.1.a, the permit would be permanently restricted to a particular sector but an AFA vessel could enter by acquiring any trawl limited entry permit.

Limiting Access by Sector vs. Limiting Access to the Groundfish Fishery as a Whole (Option 1.a vs. 1.b)--West Coast non-AFA Vessels vs. West Coast AFA Vessels

- Option 1.a could limit the expansion of activity by 11 to 33 AFA vessels (depending on qualifying requirements and choices made under Issue 2).
- Option 1.a may reduce latent permit capacity. Option 1.b does not significantly reduce latent permit capacity.
- Option 1.a is more complex than Option 1.b.

Using a vessel based restriction (see Issue 2) the differences between Option 1.a and 1.b primarily affect up to between 24 to 33 vessels AFA vessels active on the West Coast.

Under Option1.a, access privileges for some AFA vessels may be reduced such that many qualifying AFA vessels could only fish in particular segments of the groundfish fishery, rather than the whole fishery. Thus Option 1.a would make it more difficult for West Coast AFA vessels to use the advantages presented them by the AFA to expand their West Coast activities. That is, future participation could be restricted based on past participation. Thus, for a comparable number of qualifying vessels, under Option 1.a West Coast activities non-AFA vessels would receive more protection from expansion of activity by West Coast AFA vessels than they would under Option 1.b.

AFA vessels qualifying for all three sectors would not experience diminished access to the fishery. Depending on the qualifying criteria, between 0 and 15 AFA vessels may qualify for all three sectors, leaving between 11 and 33 AFA vessels with more restricted access than they would have under Option 1.b. The numbers of vessels allowed in the fishery under Option 1.a would be somewhat less if permits are restricted rather than vessels.

Option 1.a may be specified in such a way that latent (unused) permit capacity could be reduced (see Issue 2). An example of unused permit capacity is an at-sea whiting vessel that never uses its permit to land non-whiting groundfish. Issue 2 suboptions that maintain sector restrictions on permits can permanently reduce latent capacity. However, there are some options such as 2.a.1 that would nullify this benefit. Under 2.a.1 only the medallion would be restricted and an AFA vessel could transfer its permit to a non-AFA vessel that would be able to use it in any sector of the groundfish fishery.

Issue 1 - Question 2. Should Qualification Require that a Permit Be Held on a Specific Date?

Option 1.a has no requirement that a West Coast groundfish trawl permit be held as of any specific date. Option 1.b requires that such a permit be held as of October 1, 1998, the day the AFA became effective.¹

Requiring that a permit be held on a certain date is a criteria that can be used to consider and take into account present participation, historical fishing practices in and dependence on the fishery, and other relevant considerations (MSA Section 303(b)(6)), such as meeting the intent of the AFA. Possession of West Coast groundfish permits represent fishing privileges that are capital assets to the firm holding the permit. The firm or vessel holding the permit is dependent on the fishery to recover revenues in compensation for the cost of keeping the capital asset committed to the fishery. For the qualifying period selected for Option 1.b every vessel must have held a permit in order to participate in the fishery. The specification of October 1, 1998 (the date the AFA became effective) is based on the presumption that any vessel divesting itself of a permit prior to that time had already committed to leaving the fishery and AFA vessels entering the fishery after that time may have done so in anticipation of the flexibility and other benefits that would be forthcoming as a result of the AFA. The AFA specifies that the Pacific Council consider management measures to prevent harm resulting from the AFA. It is therefore relevant to consider permit ownership on this date as a qualifying requirement.

Another date which might be used in combination with this date or as a substitute for the date is June 29, 2000. An advance notice of proposed rulemaking was published specifying that permits held by AFA vessels as of this date may be restricted or invalidated.

In considering whether to use a requirement that a permit be held as of a certain date as part of the qualifying requirements, it is relevent to consider changes that may have occurred in the fishery between the specified date and a more recent date that might be used to define current participation. For purposes of this analysis June 29, 2000 will be used as the more recent date. Between October 1, 1998 and June 29, 2000 four AFA vessels changed their permits. Two AFA vessels that had no permit as of October 1, 1998 acquired a permit by June 29, 2000 and two AFA vessels that had a permit on October 1, 1998 divested themselves of permits by June 29, 2000. One permit transferred from one AFA vessel to another and the other permit changes involved transfers between AFA and non-AFA vessels.

The following are the number of vessels meeting the permit holding and landing/delivery qualifying requirements for Option 1.b. Comparable information is displayed for Option 1.a to provide a comparison between an October 1, 1998 permit holding requirement and an June 29, 2000 permit holding requirement. Six vessels that met the Option 1.b landing/delivery requirement, are disqualified because they did not meet the permit holding requirement.

^{1/} The effective date for the AFA is October 1, 1998. This is the start of the '98/'99 fiscal year. The effective date was established when the AFA was signed into law on October 21, 1998 (Public Law 105-277).

Option 1.a (based applying the specified	Number of <i>i</i>	AFA Vessels		
landing requirement to all 3 sectors and a '94-9/16/99 qualifying period)	50 mt Lndg/Del Requirement	500 mt Lndg/Del Requirement	Option 1.b	Number of AFA Vessels
Met Landing/Del Requirement but Does Not Have a Permit as of 6/29/00	7	6	Met Only Landing/Del Requirement (Did not have a permit as of 10/1/98)	6 (2 of these have since acquired permits)
Vessel Had a Permit as of 6/29/00 but Meets No Landing/Del Requirements	0	0	Met Only Permit Requirement (held a permit on 10/1/98)	0
Vessel Met Landing/Del Requirement and Has a Permit as of 6/29/00	26 (two of these vessels entered after 10/1/98)	26 (two of these vessels entered after 10/1/98)	Met Permit and Landing Requirement	26 (two of these vessels have since divested themselves of their permit)
Did Not Meet Landing/Del Requirement and Did Not Hold Permit as of 6/29/00	2	3	Met Neither Lndg/Del nor Permit Requirement	3

The effects of the permit holding date would be modified further by options selected under Issue 2, specifically whether the vessel would be restricted (a medallion required), the permit would be restricted (the permit branded), or the vessel and permit would be restricted (both medallion and permit). The first column in the following table shows the number of vessels qualifying under each Issue 2 option with Option 1.b as specified. The second column shows the number of vessels that would qualify if Option 1.b did not include the permit holding requirement.

Number of Qualifying Vessels	Option 1.b as specified		Option 1.b without the permit holding requirement (10/1/98) Option 2b
Option 2a - vessels restricted by medallions		26	32
Option 2b - permits restricted by brands		24	26
Option 2c - permits and vessels restricted		24	24

Issue 1 - Question 3. What Landing/Delivery Requirement Should be Used?

Under Option 1.a, there are 128 possible combinations of landing/delivery requirements. Under Option 1.b there is one. The number of vessels qualifying under Option 1.b is adequately described in the discussion of Question 2 above (see page 9). This section will focus first on vessels qualifying under Option 1.a and then discuss issues related to leasing, geographic distribution, and biological impacts.

Option 1.a Qualifying Requirement Choice

Narrowing the Option 1.a Qualifying Requirements

Where two or more landing requirements result in the same vessels qualifying, the landing requirements can be collapsed into a single requirement. The analysis in Appendix A identifies the landing requirements that can be collapsed. On the basis of this analysis, the following is the matrix of remaining landing/delivery requirement options to be applied for each of the two qualifying periods. The result is that the number of landing/delivery requirement options can be narrowed to 24 (12 landing/delivery requirement combinations times 2 qualifying periods).

	At-Sea Whiting	Shoreside Whiting	Non-Whiting Groundfish
50 mt	Х	Х	Х
100 mt			Х
500 mt		Х	Х
10 deliveries		Х	Х

Note that the at-sea whiting landing/delivery requirement could be specified as 50 mt, 100 mt, 500 mt, or 10 deliveries and the same vessels would qualify. Similarly the 50 mt shoreside whiting landing/delivery requirement could be specified as 50 mt or 100 mt and the same vessels would qualify.

Vessels Qualifying Under Option 1.a²

For the 1994-1997 qualifying period, there were **32** AFA catcher vessels that took part in West Coast fisheries.

For the 1994-1999 qualifying period, there were **35** AFA catcher vessels that took part in West Coast fisheries.

Two of the AFA vessels landed only albacore on the West Coast.

For the 1994 through 1997 qualifying period, every AFA vessel with some West Coast groundfish participation during the period could qualify for participation in at least one segment of the fishery, so long as the shoreside whiting and groundfish qualifying requirements are not raised above 100 mt and the 10 delivery requirement is not used for the shoreside whiting landing requirement. Table 4 shows the number of vessels qualifying for each of the relevant³ combinations of qualifying requirements for each segment of the fishery. Dashed lines divide the table into twelve sections. As an example of how to read the table, the first (left) box on the top row shows the number of qualifiers when the requirements are set at 50 mt for shoreside groundfish (other than whiting), 50 or 100 mt of shoreside whiting, and 50 mt of at-

^{2/} AFA catcher vessels participating in West Coast harvest (including tribal harvest allocations) are included in this analysis. The analysis is based on a June 2000 extract of PacFIN landing receipt data for 1994-September 16, 1999 and a May 4 tabulation of data on the offshore fishery. The tabulation for the offshore fishery includes all of 1999 less the tribal fishery occurring after September 16, 1999.

^{3/} Options for different levels of qualification for the at-sea catcher vessel segment of the fishery are not displayed because the same vessels qualify under all the options specified by the Council.

sea whiting.⁴ There are 14 AFA vessels that qualify only for at-sea whiting participation, 5 that qualify for at-sea whiting and shoreside whiting participation, 2 that qualify for at-sea whiting and shoreside groundfish participation, one that qualifies only for shoreside whiting participation, one the qualifies only for shoreside whiting participation, one the qualifies only for shoreside groundfish (other than whiting) participation, and 9 that qualify for participation in all three segments. All together, 30 vessels qualify for at-sea whiting, 15 for shoreside whiting, and 12 for shoreside groundfish. Many vessels qualify for more than one segment. The total number of vessels qualifying for at least one endorsement is 32.

Similar information is displayed in Table 5 for a 1994 through 1999 qualifying period. For the 1994 through 1999 qualifying period, there are 2 vessels with some participation on the West Coast that would not have sufficient landings to qualify under any of the landing requirement options specified by the Council.

Permits Held by Qualifying Vessels Under Option 1.a

While the vessel landing/delivery history may be the basis for qualifying, under Issue 2 the qualifying basis may be used to restrict the vessel (through issuance of a medallion, Option 2a), restrict the permit held by the vessel as of June 29, 2000 (through the branding of the permit, Option 2b), or restrict both the vessel and permit (Option 2c). Therefore, discriminating between the landing/delivery history options requires consideration of some of the Issue 2 choices. If Option 2a is selected, the number of medallions issued and the sectors for which the medallions provided access would mirror the number of qualifying vessels, described in the previous section. If Option 2b is selected, the permits held by AFA vessels as of June 29, 2000 would be branded. Tables 6 and 7 provide information on the number of permits that would qualify under each combination of landing/delivery requirements, as determined by the landing/delivery history of the vessels holding those permits. While between 31 and 33 AFA vessels would qualify for at least one segment of the West Coast groundfish fishery, only between 24 and 26 of these vessels held permits. Only those vessels holding permits would be initially granted some access to the West Coast groundfish fishery.

Summary of Option 1.a AFA Catcher Vessel Access Privileges as Modified by Issue 2 Choices

Qualifying requirements cannot be set independently of Issue 2 choices. The following summarizes the modification of access privileges that would occur as a result of Option 1.a qualification choices, as affected by Issue 2 option choices.

Option 1.a	Number of access privileges modified
Option 2a - vessels restricted by medallions	If the 1994-1997 qualifying period is used 31-32 medallions would be issued to AFA vessels (sector combinations as per Table 4) If the 1994-1999 qualifying period is used 32-33 medallions would be issued to AFA vessels (sector combinations as per Table 5)
Option 2b - permits restricted by brands	If the 1994-1997 qualifying period is used 24-25 permits held by AFA vessels would be branded (sector combinations as per Table 6) 1-2 permits held by AFA vessels would be rendered invalid If the 1994-1999 qualifying period is used 26 permits held by AFA vessels would be branded (sector combinations as per Table 7) No permits would be rendered invalid
Option 2c - permits and vessels restricted	The number of medallions would be as per Option 2a The number of permits branded would be as per Option 2b For either qualifying period 6-7 medallions would be issued to vessels without branded permits

^{4/} Or 100 mt, or 500 mt, or 10 deliveries of at-sea whiting.

Geographic Distribution of Ownership and Vessels

Option 1.a

Under Option 1.a, the residence of the vessel owners affected by the choice of qualification requirements are all in the Seattle area (Table 8). There are 21 AFA vessel owners in the Seattle area. Of these, between 16 and 19 have vessels that meet Option 1.a qualifying requirements for at least one sector. The primary delivery areas of the affected vessels are Astoria, Newport, Coos Bay and at-sea.

Considering only vessels for which permits were held as of June 29, 2000, again all affected permits were held for vessels with owners that lived in the Seattle area (Table 9). A comparison of Table 8 and 9 shows that vessel owners outside the Seattle area held permits for their vessels as of June 29, 2000. Nine Seattle residents would be excluded from qualifying because they held no permit for their AFA vessel as of June 29, 2000. An additional 1 or 2 (also from the Seattle area) could be excluded on the basis of the landing requirements selected.

Option 1.b

Under Option 1.b the number of vessels qualifying also varies by Options selected in Issue 2.

Number of Qualifying Vessels	Option 1.b as specified
Option 2a - vessels restricted by medallions	26
Option 2b - permits restricted by brands	24
Option 2c - permits and vessels restricted	24

The geographic distribution of these vessels in terms of the residence of the vessel owners and the areas in which the vessels fish is shown in Table 10. The residence of all owners of AFA vessels affected by the choice between Option 1.a and 1.b is in the Seattle area (compare Table 8 and 10).

Vessels that Did Not Hold Permits as of June 29, 2000

Of the 35 AFA vessels with some participation from 1994 through 1999, 26 held permits as of June 29, 2000. Of the 9 AFA vessels that did not hold permits as of June 29, 2000:

- 2 never held groundfish permits, making only tuna landings on the West Coast
- 4 vessels last held permits in 1997 or earlier, and the permits have since been transferred. Three of these permits were transferred to other AFA vessels.
- 1 vessel held a permit through 1999. The permit appears to have been transferred to a different owner and has not yet been registered for use with a new vessel.
- 1 vessel held a "B" permit, which has since expired.
- 1 vessel held a permit that has been combined with another permit.

The Leasing Complication

When permits are to be restricted and a permit is associated with a vessel through a lease arrangement, equity concerns can arise as to whether a non-AFA entity should be penalized because that entity had leased its permit to an AFA vessel.

As of June 29, 2000, 26 permits were held by AFA vessels. Only one of these permits appears to have been held in a lease arrangement. That AFA vessel leased its permit from the owner of another AFA qualified vessel. Both the lessee and the lessor owned vessels that would qualify for at-sea whiting participation on the West Coast. Therefore, it appears leasing arrangements will not present equity complications with respect to qualifying requirements and the possible restriction or revocation of permits.

Biological Impacts

Discards. Subdivision of the AFA vessel fishery (Option 1.a) could create a situation in which vessels not qualifying for both a whiting and nonwhiting sector might be forced to discard species in the sector they did not qualify for. It appears only one AFA vessel might receive a "nonwhiting groundfish" endorsement and not a "whiting" endorsement. About half or more of the AFA fleet would receive whiting endorsements and not endorsements for "nonwhiting groundfish" species.

Number of useeds such the for	Qualifyir	ng Period
Number of vessels qualifying for	1994-1997	1994-1999
Other groundfish	1-15 of 31-32	1-18 of 32-33

Roughly, ond-third to one-half of the fleet would qualify only for the at-sea whiting sector. Option 1.b would not subdivide the fishery and have no appreciable effects on discards.

Issue 2- Restrictions to be Imposed

The primary decision under Issue 2 is whether to restrict

- the vessel (Option 2a: create a medallion system which would act as a permit system for AFA vessels in parallel with the current groundfish permit system);
- the permit (Option 2b: brand the groundfish limited entry permits held by AFA vessels as of June 29 2000); or
- the vessel and permit (Option 2c: create a medallion system and brand permits held by AFA vessels).

Within the primary options there are three subissues which may need to be addressed, depending on the primary option:

- Permit Requirement
- Medallion Transferability
- Permit Transferability

Permit Requirement Subissue

To participate in the West Coast groundfish fishery all catcher vessels, including AFA catcher vessels, must hold a groundfish limited entry permit. Suboptions for the permit requirement issue are provided only for Options 2.b and 2c. The suboptions address the question of whether the AFA vessel can hold any groundfish permit or must hold an AFA branded permit.

For Option 2.b, the only way to address the objective of reducing harm from the AFA would be to require that an AFA vessel hold a branded limited entry groundfish permit in order to participate in the West Coast groundfish fishery (Option 2.b.1.B). Otherwise (Option 2.b.1.A), any of the 112 AFA catcher vessels could acquire an unbranded permit (e.g. from a nonAFA vessel) and enter the fishery. Thus, under Option 2.b.1.A the brand would only be of benefit to the degree that it reduces latent capacity (Objective 2).

For Option 2c, AFA vessel participation is limited, and AFA harm reduced, by the medallion requirement. To require that an AFA vessel also hold an AFA branded permit (Option 2.c.1.B) makes a small reduction in the total number of AFA vessels that may participate. Under Option 2.c.1.A (a vessel may enter with any groundfish permit) a maximum of 33 vessels may qualify in, when this option is implemented in combination with Option 1.a (26 in combination with Option 1.b). Under Option 2.c.1.B (a vessel must hold an AFA branded groundfish permit) a maximum of 26 vessels may qualify, when this option is implemented in combination with Option 1.a (24 in combination with Option 1.b).

Medallion Transferability

The subissue on medallion transferability pertains only to Options 2.a and 2.c and addresses whether one AFA catcher vessel may be allowed to substitute for another at the vessel and medallion owners. Even if medallions are not transferable (Option 2.a.2.B or 2.c.2.B) it is expected that vessel substitution would still be allowed if a vessel is totally lost. Medallions would not have size endorsements therefore, if medallions are transferable (Option 2.a.2.A), larger AFA catcher vessels could be substituted for smaller ones. However, vessels would still be required to hold a groundfish permit and the groundfish permit would constrain the size of the vessel.

Permit Transferability

The subissue on permit transferability pertains only to Options 2.b and 2.c. If permits are to be transferable (Options 2.b.2.A, 2.b.2.B, 2.c.3.A, or 2.c.3.B), then the question is whether or not the AFA brand will stay active when the permit is associated with a non-AFA vessel. When combined with Option 1.a (brands for three sectors), the AFA brand may substantially constrain the activity of the permit for between 18 and 33 permits. When combined with Option 1.b, there are up to two permits that could be rendered inactive by their AFA brands. Under Option 1.b, all other branded permits would provide access to all three sectors of the West Coast groundfish fishery. By keeping the restrictions of the brand active

when the permit is attached to a non-AFA vessel (Options 2.b.2.A or 2.c.3.A), the reduction in latent permit capacity achieved by the branding process is maintained. Alternatively, the brands and their constraining effect on permit latent capacity can be maintained by prohibiting permit transfers (Option 2.b.2.C or 2.c.3.C).

Releasing the brand constraint when a permit is transferred to a nonAFA vessel (Option 2.b.2.B or 2.c.3.B) will on the one hand allow permit latent capacity to be re-established, which would reduce progress toward Objective 2. However, on the other hand, relief of the constraint would be more likely to induce the transfer of permits from AFA to nonAFA vessels (i.e., permits would be relieved of the sector constraints when transferred to a nonAFA vessel). The transfer from an AFA to a nonAFA vessel could increase the achievement of Objective 1 so long as the nonAFA vessel is not more active than the AFA vessel would have been. If the nonAFA vessel is bidding the permit away from the AFA vessel because the nonAFA vessel anticipated a greater profitability than the AFA vessel, then the transfer to the nonAFA vessel could reactivate latent capacity, presuming that greater profitability comes from catching more fish and not other types of efficiencies. However, compared to the status quo, there would still be less active capacity than if this amendment had not been implemented (i.e. if the nonAFA vessel could generate more profit from catching more fish than the AFA vessel, then the nonAFA vessel would bid the permit away from the AFA vessel even in the absence of this proposed plan amendment.)

Option 2c and Interaction of Medallion and Permit Transferability Subissues

Depending on the transferability options selected, Option 2c may perform in a fashion qualitatively similar to Option 2a or 2b with respect to the primary objectives. While Option 2c may, in some cases, appear qualitatively identical to either Option 2a or 2b with respect to performance in meeting the two primary objectives, there may be differences in the number of AFA vessels able to participate under each option. The differences in number of participating vessels is summarized in the following section ("Summary of Main Impacts").

Performance of Option 2c relative to Options 2.a and 2.b, assuming the same number of vessels would be able to participate under any of the options.

	Medallion Transferability									
Permit Transferability	Yes (Option 2.c.2A)	No (Option 2.c.2.B)								
Yes, brand active (Option 2.c.3.A)	Same as 2.a for Objective 1 Better performance on Objective 2	Same as 2.a for Objective 1 Better performance on Objective 2								
Yes, brand inactive (Option 2.c.3.B)	Same as 2.a for Objectives 1 and 2	Same as 2.a for Objectives 1 and 2								
No (Option 2.c.3.C)	For Objectives 1 and 2 performs the same as requiring AFA vessels to hold a nontransferable AFA branded permit under Option 2.b	For Objectives 1 and 2, performs the same as requiring AFA vessels to hold nontransferable AFA branded permit under Option 2.b for Objectives 1 and 2								

Summary of Main Impacts

The following is a general summary of how the primary options would address the two objectives:

Objective 1: prevention of AFA harm and Objective 2: removal of latent permit capacity

The degree to which the primary options meet the objectives often depend on suboptions selected. In the following text tables, suboptions that substantially influence the result are indicated (and in some cases provided a separate summary line). Separate tables are provided for consideration of Issue 2 options in combination with Issue 1 options (Option 1.a and 1.b).

Option 1.a	Licenses required for AFA vessels to participate (groundfish limited entry permit and/or medallion)	Objective 1 Prevent AFA Harm	Objective 2 Remove Latent Capacity
Option 2a restrict vessel	Must hold a groundfish permit (any) and AFA medallion	 30-33 AFA vessels would receive medallions. See tables 5 & 6. 79-82 AFA vessels would not be able to participate in the fishery 	0 AFA vessels could exit the West Coat groundfish fishery, transferring permits to nonAFA vessels and eliminating any gain from the sector restrictions on the permit.
Option 2b restrict permit	Must hold a groundfish permit (any) (Option 2.b.1.A)	0 Does not prevent AFA vessels from entering the fishery 24-26 permits would be branded. See Tables 6 & 7.	+ (performance, net zero if brand becomes inactive with transfer, Option 2.b.2.B) 0-15 permits would be branded for all sectors, 0-2 permits would be branded for no sectors (and become invalid).
	Must hold an AFA branded groundfish permit (Option 2.b.1.B)	 + 24-26 permits would be branded and available for use by AFA vessels, 84-86 AFA vessels would not be able to participate in the fishery. See Tables 6 & 7. 	+ (net zero if brand becomes inactive with transfer, Option 2.b.2.B) 0-15 would be branded for all three sectors, 0-2 permits would be branded for no sectors (and become invalid).
Option 2c restrict vessel and permit	Option 2.c.1.A Must hold a groundfish permit (any) (Option 2.c.1.A) and an AFA medallion	 30-33 AFA vessels would receive medallions 79-82 AFA vessels would not be able to participate in the fishery for lack of a medallion. See Tables 4 & 5. 	+ (net zero if brand becomes inactive with transfer, Option 2.c.3.B) 0-15 medallions would be endorsed for all three sectors, the remainder. 0-2 permits would be branded for no sectors (and become invalid).
	Must hold an AFA branded groundfish permit (Option 2.c.1.B) and an AFA AFA medallion	 + 24-26 permits would be branded and available for use by AFA vessels, 84-86 AFA vessels would not be able to participate in the fishery. Some vessels would have permits but no AFA medallions. See Tables 6 & 7. 	+ (net zero if brand becomes inactive with transfer, Option 2.c.3.B) 0-15 permits would be branded for all sectors, 0-2 permits would be branded for no sectors (and become invalid).

Option1.a (Limit AFA catcher vessel entry separately for each sector) performance with respect to primary objectives

In the above table it can be seen that Option 2.b combined with suboption 2.b.1.B (i.e. vessel and permit restricted, must hold an AFA branded permit) has effects virtually identical to Option 2.c combined with suboption 2.c.1.B (i.e. permit restricted, must hold an AFA branded permit).

Option 1.b	Licenses required for AFA vessels to participate (groundfish Imited entry permit and or medallion)	Objective 1 Prevent AFA Harm	Objective 2 Remove Latent Capacity
Option 2a restrict vessel	Any groundfish permit AFA medallion	+ 26 AFA vessels would receive medallions. 86 AFA vessels would not be able to participate in the fishery	0
Option 2b restrict vessel	Option 2.b.1.A Any groundfish permit	0 Does not prevent AFA vessels from entering the fishery 24 permits would be branded.	Slightly positive 2 permits could be rendered inactive (Option 2.b.2.A and 2.b.3.C) OR No effect if brand becomes in inactive when permit is transferred to a non-AFA vessel (Option 2.b.2.B)
	Option 2.b.1.B AFA branded groundfish permit	+ 24 permits would be branded and available for use by AFA vessels, 88 AFA vessels would not be able to participate in the fishery.	Slightly positive 2 permits could be rendered inactive (Option 2.b.2.A and 2.b.3.C) OR No effect if brand becomes i inactive when permit is transferred to a non-AFA vessel (Option 2.b.2.B)
Option 2c restrict vessel and permit	Option 2.c.1.A Any groundfish permit AFA medallion	+ 26 AFA vessels would receive medallions, 24 permits would be branded, 86 AFA vessels would not be able to participate in the fishery for lack of a medallion. See Tables 6 & 7.	Slightly positive 2 permits could be rendered inactive (Option 2.b.2.A and 2.b.3.C) OR No effect if brand becomes i inactive when permit is transferred to a non-AFA vessel (Option 2.b.2.B)
	Option 2.c.1.B AFA branded groundfish permit AFA medallion	+ 26 AFA vessels would receive medallions, 24 permits would be branded and available for use by AFA vessels, 88 AFA vessels would not be able to participate in the fishery for land of a branded permit. See Tables 6 & 7.	Slightly positive 2 permits could be rendered inactive (Option 2.b.2.A and 2.b.3.C) OR No effect if brand becomes i inactive when permit is transferred to a non-AFA vessel (Option 2.b.2.B)

Option 1.b (Limit AFA catcher vessel entry to the groundfish fishery as a whole) performance with respect to primary objectives

Under Option 1.b, up to 2 vessels would have their permits branded as nonqualifying permits. These permits would become invalid, temporarily (Options 2.b.2.B, 2.c.3.B, or 5.b) or permanently (Options 2.b.2.A, 2.b.2,C, 2.c.3.A, 2.c.3.C combined with Option 5.a). The vessels holding the permits that would be invalidated met the 500 mt landing requirement but did not hold a permit as of October 1, 1998 (acquired a permit after that date).

The effects of the primary decisions on which type of asset will be restricted (vessel, permit or both vessel and permit) are strongly impacted by other decisions having to do with exactly what licenses (permit and/or medallion) would be required for participation in the fishery and the degree of transferability of those assets.

Catcher-Processors (Issues 3)

Under Issue 3, the Council will determine whether or not there is a need to protect West Coast catcher-processors from AFA catcher processors. The West Coast groundfish fishery does not require catcher-processor permits. Appropriately sized trawl permits are required for trawl catcher-processor vessels. There are currently only 10 appropriately sized trawl permits but more can be created by the combination of permits for smaller trawl vessels.

Number of Permits by Size Class												
<100'	100'-125'	125'-150'	150'-175'	175'-200'	200'-225'	225'-250'	250'-275'	275'-300'	>300'			
250	12	2	0	0	0	0	2	3	5			

As of June 29, 2000, 9 of the catcher-processor sized permits were held by AFA permitted catcher-processor vessels that meet the qualifying requirements and one permit was not registered to a vessel. One of the nine permits appeared to be the subject of an internal lease (a firm leasing the permit to another incarnation of itself). All other permits were registered to vessels owned by the permit owner.

Number	Number of Catcher-Processor Vessels Participating on the West Coast by Year												
1994	1995	1996	1997	1998	1999								
9	9	10	10	7	6								

Traditionally, catcher-processors have participated only in the Pacific Whiting portion of the groundfish fishery. Relatively small cumulative limits generally make participation in other segments of the groundfish fishery economically infeasible. Currently, the catcher-processor segment of the whiting harvest is taken under a producers cooperative. All catcher-processors holding West Coast licenses participate in the cooperative and all are AFA vessels. Under the arrangements of the cooperative, not all of the catcher-processors fish the West Coast fishery while all cooperative catcher-processors take part in the profits.

Under Option 3a new vessel entry would be restricted through a license system that parallels the groundfish permit system: a catcher-processor medallion system. Issuance of medallions to vessels meeting the qualification requirement would result in medallions issued for all 10 catcher processors active on the West Coast from 1997 though September 16, 1999. Even with the medallion system, catcher-processor vessels would still be required to hold groundfish limited entry licenses.

If instead of issuing medallions, groundfish limited entry permits held by qualifying vessels were given AFA catcher-processor brands then only 9 of the 10 permits would receive the needed brands. The 10th permit could only be used with a non-AFA vessel. A non-AFA catcher processor might still enter the fishery with the unbranded permits or combine a number of smaller permits into a larger permit. However, at present there are a very limited number of non-AFA catcher-processors that are domestically owned and could be made available for West Coast groundfish fishery.

As it is presently specified it is presumed that AFA catcher-processor medallions would be transferable between AFA catcher-processors, providing a market for the permit of any AFA catcher-processor that may wish to leave the fishery.

Motherships (Issue 4)

Mothership participation in the West Coast groundfish fishery is not restricted by a limited entry program. There are 21 AFA catcher processors and 3 AFA motherships. Because there is not a limited entry system for motherships, all of these vessels could potentially participate as motherships in the West Coast groundfish fishery. Of these 24 vessels, there are 6 catcher-processors/motherships that would meet the participation requirements specified for a mothership limited entry system (mothership medallions, Option 4.a). Of these vessels 3 are AFA licensed motherships and 3 are licensed as catcher-processors under the AFA.

	Number of Motherships Participating on the West Coast by Year										
	1994	1995	1996	1997	1998	1999					
Catcher-Processors Acting as Motherships	8	5	5	3	3	3					
AFA Motherships	3	3	3	3	3	3					
Total Motherships	11	8	8	6	6	6					

Duration of Restrictions (Issue 5)

The duration of the West Coast provisions to prevent harm for the AFA could be linked to the duration of management measures benefitting AFA vessels (Option 5a, an automatic sunset provision) or be established as permanent until revised or revoked (Option 5b). One rationale for linking the measure to the duration of the AFA is that any harm flowing from the AFA will likely be substantially dimished if the AFA related measure expire. On the other hand, the West Coast fleet is overcapitalized and once the measures are implemented there may be some progress made in reduction of latent permit capacity. Making permanent the measures to protect the West Coast fleet from the AFA (Option 5b) may help achieve needed reduction in capacity.

Appeals and Technical Amendment (Issue 6)

Issue 6 is primarily technical in nature.

Option 6a. The Council will not advise NMFS on appeals. Option 6.b. The Council will advise NMFS on appeals.

Regardless of whether or not the Council takes a role in the qualification appeals process certain technical changes in the FMP may be made to make administration of the Council role in groundfish permit appeals more efficient.

The main item of substance under this issue is the recommendation that the Council would not have a formal role in any appeal over a NMFS decision on whether or not to issue or modify limited entry access privileges in conjunction with Council recommendations made for Issues 1, 3 or 4. The Council Limited Entry Review Board was established to hear appeals generated in conjunction with the implementation of the groundfish license limitation program. Since that time there have been two major modifications to the license limitation program, the first was the issuance of sablefish endorsements for fixed gear vessels and the second was the categorization of those endorsements into tiers. The Council did not include itself in the appeals process for either of these modifications. Similarly, no proposal has been made for a Council role in appeals related to the issuance of AFA medallions or the branding of permits held by AFA vessels.

Related to exclusion of the Council review board from hearing appeals related to this amendment are some adjustments to the language of the FMP in order to provide the Council with procedural flexibility that is more in line with the flexibility the Council has with respect to its other advisory committees. Specifically, it is proposed that a number of details related to the composition of the review board and other such issues be removed from the language of the FMP. These specifications for the review board are covered by a Council operating procedure. Maintaining the specification as part of the groundfish FMP is unnecessarily cumbersome, making it difficult for the Council to modify procedures related to the review board to take into account the changing needs of the groundfish limited entry system. For example, now that the program has been implemented for several years, this board's function as an appeals board has become obsolete. It might make sense to assign review board responsibilities to the groundfish advisory panel, however, a plan amendment would be required to do this. The proposed modification will give the Council the flexibility to change the composition and rules governing the review board to meet the changing needs of the groundfish limitation program.

TABLE 1. Summary comparison of Options 1.a and 1.b.

1.a Restrictions by Sector 1.b Restrictions (general)		Comparisons a no action	are to status quo
	Primary Impact	Obj 1 Prevent AFA Harm	Obj 2 Remove Latent Permit Capacity
1.a Restrictions (by Sector)	 Prevention of AFA harm (Objective 1). For comparable qualifying requirements, 1.a would do a better job of reducing competition from AFA vessels than 1.b because vessels would only be allowed into the segments of the fishery for which the qualifying requirements were met. Unless vessels were allowed to enter through acquisition of any groundfish trawl permit (Option 2.b.1.A), Options under 1.a would constrain participation to 24-33 AFA vessels, depending on the qualifying requirements. These vessels would be further constrained in the sectors of the fishery in which they could participate. See Tables 4-7. Up to 112 AFA catcher vessels could participate the fishery if no action is taken. 	← or O if Option 2.b.1.a is selected (AFA vessels can enter with any permit)	+ or 0 if Option 2.a.1 is selected (medallions, AFA vessells may exit and transfer permits to non-AFA vessels)
1.b Restrictions (general)	 If qualifying requirements were comparable between 1.a and 1.b (i.e. similar numbers of vessels qualifying, in the short term), 1.b would do less to prevent AFA harm because the segments in which AFA vessels participate would not be restricted. 24-26 AFA vessels would qualify for access to all segments of the fishery. Up to 2 permits would be rendered invalid on a permanent or temporary basis, depending on options to be specified under Issue 2. 	+	0 or small effect

101 1994-1997.							Qualifying Requirements for Shoreside Whiting Deliveries									
Qualifying	-		50	or 100 mt					500 mt			10 Deliveries				
Requirements																
for Shoreside			Sho	reside		1	1	Shore	Based		1		Shore	e Based		1
Groundfish		At-Sea			• • • • • ==•		At-Sea			•		At-Sea				
Deliveries	Endorsement			Groundfish	All Three		Whiting	Whiting	Groundfish	All Three		Whiting		Groundfish /	All Three	Tot
50 mt	At-Sea Whiting		5	2		30	15	4	2		30	16	3	2		30
	Shore Whiting		1	0		15		0	0		13		0	0		12
	Shore Groundfis			1	_	12			1	_	12			1	_	12
	All Three				9	32				99	31	L			9	31
							<u>г</u>									- <u> </u>
100 mt	At-Sea Whiting	14	10	2		30	15	9	2		30	16	8	2		30
	Shore Whiting		1	0		15		0	0		13		0	0		12
	Shore Groundfis			1		7	Ì	-	1		7		-	1		7
	All Three				4	32	i			4	31				4	31
							L			· — — —		<u> </u>				
500		45					10	40				47	40			0.0
500 mt	At-Sea Whiting		14	1		30	16	13	1		30	17	12 0	1		30
	Shore Whiting		1	0		15		0	0		13		0	0		12
	Shore Groundfis			0	0	1			0	0	1			0	•	1
	All Three				0	31				00	30	L			0	30
						I	1				1					ĺ
10 Deliveries	At-Sea Whiting	14	2	2		30	15	1	2		30	15	1	2		30
	Shore Whiting		1	0		15	i i	0	0		13		0	0		12
	Shore Groundfis			1		14	i		1		14	İ		1		14
	All Three				11	32	i			11	31				11	31

TABLE 4. Number of vessels meeting qualification requirements for the indicated segment of the fishery (at-whiting, shoreside whiting, and or shoreside groundfish other than whiting) for 1994-1997.

							Qualifying	Requiremer	nts for Shore	side Whitin	eries					
Qualifying			50	or 100 mt			500 mt					10 Deliveries				
Requirements for Shoreside						11 [1						I				
Groundfish	AFA Vessel	At-Sea	Sho	reside			At-Sea	Sho	reside			At-Sea	Sho	reside		
Deliveries		Whiting	Whiting (Groundfish A	All Three	Tot	Whiting	Whiting	Groundfish	All Three	Tot	Whiting	Whiting	Groundfish A	ll Three	Tot
50 mt	At-Sea Whiting		6	1		31	13	5	1		31	15	3	1		31
	Shore Whiting		1	1		20	İ	0	1		18		0	1		16
	Shore Groundfis			0		14	I		0		14			0		14
	All Three				12	33	i			12	32	i i			12	32
							<u> </u>		- — — —			<u>+</u>				· — —
100 mt	At-Sea Whiting	12	11	1		31	13	10	1		31	15	8	1		31
100 111	Shore Whiting		1	1		20	10	0	1		18	10	0	1		16
	Shore Groundfis			0		9		Ū	0		9		Ū	Ö		9
	All Three			Ū	7	33	1		Ũ	7	32			Ũ	7	32
							<u> </u>		- — — —			+			· — —	ユ
500 mt	At-Sea Whiting	12	18	1		31	13	17	1		31	15	15	1		31
500 mi	Shore Whiting		2	0		20	15	1	0		18	15	1	0		16
	Shore Groundfis		2	0		1	ł		0		10		1	0		1
	All Three			0	0	33			0	0	32			0	0	32
	7.11 111100						<u> </u>		- — — —	`_		<u> </u>			- <u> </u>	02
												ļ				
10 Deliveries	At-Sea Whiting		2	1		31	13	1	1		31	14	0	1		31
	Shore Whiting		1	1		20	1	0	1		18		0	1		16
	Shore Groundfis			0		17	1		0		17			0		17
	All Three				15	33				15	32				15	32

TABLE 5. Number of vessels meeting qualification requirements for the indicated segment of the fishery (at-whiting, shoreside whiting, and or shoreside groundfish other than whiting) for 1994-September 16, 1999.

							Qualifying	g Requirem	ents for Sho	oreside Whi	ting Deli	veries				
Qualifying			50 o	r 100 mt					500 mt					10 Deliveries	8	
Requirements for Shoreside		 	0 1 · 1					0 · · ·	NI 14/1 /				Shoresid	N. 144.		
Groundfish		At-Sea		Non-Whtg		- T - 1	At-Sea	Shore side	Non-Whtg			At-Sea	e	Non-Whtg	A 11 Thursday	T .,
Deliveries	Endorsement At-Sea Whiting	Whiting 9		Groundfish		24	Whiting 10		Groundfish		1 ot 24	Whiting 11	-	Groundfish	All Inree	<u>Tot</u> 24
50 mt	Shore Whiting		5 0			24 13	10	4 0			24 12	11	3 0	2		24 11
	Non-whtg Groundfis	l	0	1		11		0	1		12		0	1		11
	All Three				8	25				8	25				8	25
100 mt	At-Sea Whiting	9	10	2		24	10	9			24	11	8			24
	Shore Whiting		0	0		13		0	0		12		0	0		11
	Non-whtg Groundfis			1		6			1		6			1		6
	All Three	ł			3	25				3	25				3	25
500 mt	At-Sea Whiting		13	1		24	11	12			24	12	11	1		24
	Shore Whiting		0	0		13		0	-		12		0	0		11
	Non-whtg Groundfis			0		1			0		1			0		1
	All Three	1			0	24				0	24				0	24
10 Deliveries	At-Sea Whiting		2			24	10	1	2		24	10	1	3		24
	Shore Whiting		0	0		13		0	0		12		0	0		11
	Non-whtg Groundfis			1		14			1		14			1		14
	All Three				11	25				11	25				10	25

TABLE 6. Number of vessels meeting qualification requirements for the indicated segment of the fishery (at-whiting, shoreside whiting, and or shoreside groundfish other than whiting) for 1994-1997 and holding permits as of June 29, 200.

							Qualifying	g Requirem	ents for Shor	eside Wl	hiting Deli	veries				
Qualifying			50 0	or 100 mt					500 mt				10 [Deliveries		
Requirements						l	1				1	l				
for Shoreside			.													
Groundfish	AFA Vessel			Non-Whtg					Non-Whtg	All	1	At-Sea		Non-Whtg		-
Deliveries		Whiting		Groundfish	Ihree		Whiting	Whiting	Groundfish	Ihree	Tot	Whiting		Groundfish	Ihree	Tot
50 mt	At-Sea Whiting		5	1		25	9	4	1		25	10	3	1		25
	Shore Whiting		0	1		17		0	1		16		0	1		15
	Non-whtg Groundfis			0		13			0		13			0		13
	All Three				11	26				11	26				11	26
100 mt	At-Sea Whiting	8	10	1		25	9	9	1		25	10	8	1		25
	Shore Whiting		0			17		0	1		16		0	1		15
	Non-whtg Groundfis			0		8			0		8			0		8
	All Three				6	26				6	26				6	26
500 mt	At-Sea Whiting	8	16	5 1		25	9	15	1		25	10	14	1		25
	Shore Whiting		1	0		17		1	0		16		1	0		15
	Non-whtg Groundfis			0		1			0		1			0		1
	All Three				0	26				0	26				0	26
10 Deliveries	At-Sea Whiting	8	1	1		25	9	0	1		25	9	0	2		25
	Shore Whiting		0	1		17	-	0	1		16	-	0	1		15
	Non-whtg Groundfis		•	0		17		Ū	0		17		0	0		17
	All Three			Ũ	15	26			0	15	26			Ŭ	14	26

TABLE 7. Number of vessels meeting qualification requirements for the indicated segment of the fishery (at-whiting, shoreside whiting, and or shoreside groundfish other than whiting) for 1994-September 16, 1999 and holding permits as of June 29, 200.

Landing Area	Kodiak	Seattle	Neah Bay	<u>ner's City of Re</u> Astoria	Newport	Half Moon Bay	Total
Editality Area	Rodiak	Counte	Reall Buy	All Vessels	Newport	Than Woon Bay	Total
Northern Puget Sound		1					1
Coastal Washington		1					1
Astoria		3	1		3		7
Newport		2	·	1	2		5
Coos Bay		1		•	-		1
Crescent		•			1		1
Offshore	1	13			3	2	19
Total	1	21	1	1	9	2	35
lotal		21		97 Qualifying I		2	00
			50 mt or 100 mt	l anding/Deliver	v Requireme	nt	
Northern Puget Sound		1		24.14.19, 2 0.1101) . to qui o i i o		1
		1					1
Coastal Washington			4		2		1
Astoria		2	1	4	3		6
Newport		1		1	2		4
Coos Bay		1					1
Crescent		10			1		1
Offshore	1	12			3	2	18
Total	1	18	1	1	. 9	2	32
			500 mt Land	ling/Delivery Re	quirement		
Northern Puget Sound		1					1
Coastal Washington		1					1
Astoria		2	1		3		6
Newport		0		1	2		3
Coos Bay		0					0
Crescent					1		1
Offshore	1	12			3	2	18
Total	1	16	1	1	9	2	30
			10 Del	iveries Require	ment		
Northern Puget Sound		1					1
Coastal Washington		1					1
Astoria		2	1		3		6
Newport		0		1	2		3
Coos Bay		1					1
Crescent					1		1
Offshore	1	12			3	2	18
Total	1	17	1	1	9	2	31
				99 Qualifying I			
		į	50 mt or 100 mt	Landing/Deliver	y Requireme	nt	
Northern Puget Sound		1					1
Coastal Washington		1					1
Astoria		2	1		3		6
Newport		1		1	2		4
Coos Bay		1					1
Crescent					1		1
Offshore	1	13			3	2	19
Total	1	19	1	1	9	2	33
			mt or 10 deliver	ies Landing/Del	ivery Require		
Northern Puget Sound		1	-	0			1
Coastal Washington		1					1
Astoria		2	1		3		6
Newport		0	·	1	2		3
Coos Bay		1		•	2		1
Crescent					1		1
Offshore	1	13			3	2	19
<u>Total</u>	1	18	1	1	9		32
Total	I	10	I	1	9	۷.	52

TABLE 8. Number of AFA vessels by principle area if landing and vessel owner's home port for different Option 1.a qualifying periods and landing/delivery requirements applied uniformly across all three sectors (offshore landing area is specified only when there were **no** shoreside landings made).

-				wner's City of R					
Landing Area	Kodiak	Seattle	Neah Bay	Astoria	Newport	Half Moon Bay	Total		
				All Vessels					
Northern Puget Sound		1					1		
Coastal Washington		1					1		
Astoria		1	1			3	5		
Newport		0		1		2	з		
Coos Bay		1					1		
Crescent						1	1		
Offshore	1	8				3 2	14		
Total	1	12	1	1		9 2	26		
			1994-19	997 Qualifying	Period				
		10	mt or 50 mt, or			nent			
Northern Puget Sound		1					1		
Coastal Washington		1					1		
Astoria		1	1			3	5		
Newport		0		1		2	3		
Coos Bay		1					1		
Crescent						1	1		
Offshore	1	7				3 2	13		
Total	1	11	1	1		9 2	25		
	500 mt Landing/Delivery Requirement								
Northern Puget Sound		1		0 ,	•		1		
Coastal Washington		1					1		
Astoria		1	1			3	5		
Newport		0		1		2	3		
Coos Bay		0					0		
Crescent						1	1		
Offshore	1	7				3 2	13		
Total	1	10	1	1		9 2	24		
	1994-1999 Qualifying Period								
	50 mt, 100 mt, 500 mt, or 10 Landing/Delivery Requirement								
Northern Puget Sound		1		.			1		
Coastal Washington		1					1		
Astoria		1	1			3	5		
Newport		0		1		2	3		
Coos Bay		1					1		
Crescent		•				1	1		
Offshore	1	8				3 2	14		
Total	1	12	1	1		9 2	26		

TABLE 9. Number of AFA vessels **with permits** by principle area if landing and vessel owner's home port for different Option 1.a qualifying periods and landing/delivery requirements applied uniformly across all three sectors (offshore landing area is specified only when there were **no** shoreside landings made).

			Vessel Ov	wner's City of Re	esidence				
Landing Area	Kodiak	Seattle	Neah Bay	Astoria	Newport	Half Moon Bay	Total		
				All Vessels					
Northern Puget Sound		1					1		
Coastal Washington		1					1		
Astoria		3	1		3		7		
Newport		2		1	2		5		
Coos Bay		1					1		
Crescent					1		1		
Offshore	1	13			3	2	19		
Total	1	21	1	1	9	2	35		
	Vessels Meeting Option 1.b Requirements								
			50 mt or 100 mt		-				
Northern Puget Sound		1		-			1		
Coastal Washington		0					0		
Astoria		1	1		3		5		
Newport		0		1	2		3		
Coos Bay		1					1		
Crescent					1		1		
Offshore	1	9			3	2	15		
Total	1	12	1	1	9	2	26		

TABLE 10. Number of AFA vessels by principle area if landing and vessel owner's home port for different Option 1.b qualifying requirements ("offshore" landing area is specified only when there were **no** shoreside landings made).

Appendix

Qualifying Requirements for the At-Sea Whiting Sector

The Council specified four landings level options for consideration as qualifying requirements: 50 mt, 100 mt, 500 mt, or 10 deliveries. The following are the number of vessels that would qualify under each combination of landing requirement and qualifying period.

	Qualifyin	g Period
Number of AFA Vessels Qualifying for At-Sea Whiting	1994-1997	1994-1999
50 mt	30	31
100 mt	30	31
500 mt	30	31
10 deliveries	30	31

For the 1994 through 1997 qualifying period, **all** of the 30 AFA catcher vessels that participated in the atsea whiting fishery landed over 1,000 mt and had more than 20 deliveries (Table A-1). **Two** of the 32 AFA catcher vessels that participated on the West Coast did not participate in the at-sea fishery. There were **6** at-sea whiting AFA catcher vessels that had between 20 and 50 deliveries. The remainder had 50 deliveries or more.

For the 1994 through 1999 qualifying period, **all** of the 31 AFA catcher vessels that participated in the atsea whiting fishery landed over 1,000 mt and had more than 20 deliveries (Table A-1). **Four** of the 35 AFA catcher vessels that participated on the West Coast did not participate in the at-sea whiting fishery (two of which participated in the shoreside groundfish fishery). There were **7** at-sea whiting AFA catcher vessels that had between 20 and 50 deliveries. The remainder had 50 deliveries or more.

Conclusion: On the basis of these results for the remainder of the analysis for each qualifying period (1994 through 1997, and 1994 through 1999), only two categories of at-sea whiting AFA vessels will be evaluated, those that would qualify for the at-sea whiting fishery and those that would not qualify.

Qualifying Requirements for the Shoreside Whiting Sector

The Council specified the same four landings level options for shoreside whiting as it did for the at-sea catcher vessels. The following are the number of vessels that would qualify under each combination of landing requirement and qualifying period.

	Qualifyir	ng Period
Number of AFA Vessels Qualifying for Shoreside Whiting	1994-1997	1994-1999
50 mt	15	20
100 mt	15	20
500 mt	13	18
10 deliveries	12	16

For the 1994 through 1997 qualifying period, there were **15** AFA catcher vessels with no participation in the shoreside whiting fishery (Table A-2). There were **2** vessels that participated in the shoreside whiting

fishery but would not qualify under any of the four landing requirement options. **All** vessels that landed at least 50 mt landed at least 100 mt. **Three** vessels with more than 100 mt had fewer than 10 deliveries.

For the 1994 through 1997 qualifying period, there were **14** AFA catcher vessels with no participation in the shoreside whiting fishery (Table A-2). There was **1** vessel that participated in the shoreside whiting fishery but would not qualify under any of the four landing requirement options. **All** vessels that landed at least 50 mt landed at least 100 mt. **Four** vessels with more than 100 mt had fewer than 10 deliveries.

Conclusion: For each qualifying period (1994 through 1997, and 1994 through 1999) two of the landing requirement options yield the same results (50 mt and 100 mt), therefore of the four specified for analysis, only three landing requirement options need be evaluated in the remainder of the analysis:

100 mt 500 mt 10 deliveries

Qualifying Requirements for the Non-Whiting Groundfish Vessels

The Council specified the same four landings level options for shoreside groundfish as it did for the whiting catcher vessels. The following are the number of vessels that would qualify under each combination of landing requirement and qualifying period.

	Qualifyin	g Period
Number of AFA Vessels Qualifying for Shoreside Groundfish	1994-1997	1994-1999
50 mt	12	14
100 mt	7	9
500 mt	1	1
10 deliveries	15	18

For both qualifying periods, there were **10** AFA catcher vessels with no participation in the shoreside groundfish fishery (Table A-3). There were **7** vessels that participated in the shoreside groundfish fishery but would not qualify under any of the four landing requirement options.

For 1994 through 1997 there were **3** vessels that would qualify only on the basis of the number of deliveries.

For 1994 through 1999 there were **4** vessels that would qualify only on the basis of the number of deliveries.

For both periods, every vessel that would qualify on the basis of a poundage requirement made more than 10 deliveries (i.e., every vessel that landed at least 50 mt made at least 10 deliveries).

Conclusion: The four landing requirements would each qualify a different group of vessels and need to be evaluated in the remainder of the analysis.

		Number of Landings/Deliveries ^ы								
Mt Delivered	0°/		1-4	5-9	10-14	15-19) 2	20-49	<u>></u> 50	Total
					199	4-1997				
$0^{c, b/}$ 0-24 25-49 50-99 100-250 250-500 500-700 700-1,000 $\ge 1,000$ Total	2		0		0	0	0	6 6	24 24	2 0 0 0 0 0 0 30 32
					1994-Septe	mber 16,	1999			
0 ^{c, b/} 0-24 25-49 50-99 100-250 250-500 500-700 700-1,000 ≥1,000		4						7	24	4 0 0 0 0 0 0 31
Total	4		0		0	0	0	7	24	35

TABLE A-1. AFA catcher vessel count for largest number of at-sea whiting landings (mt) and at-sea	ł
whiting deliveries in any one year for the indicated period.	

Deliveries are approximated by hauls for offshore landings and by the highest number of fish tickets issued for a single species for onshore landings. This column/row is for vessels which did not have offshore landings out of the total that had either offshore or onshore landings. b/

c/

		Number of Landings/Deliveries ^a								
Mt Delivered	0 ^{b/}		1-4	5-9	10-14	15-19)	20-49	<u>></u> 50	Total
					199	4-1997				
0 ^{c, b/}		15			100	1 1007				15
0-24		10								0
25-49			2							2
50-99										0
100-250			1							1
250-500					1					1
500-700					1					1
700-1,000)									0
<u>></u> 1,000						1		3	8	12
Total	15		3		2	1	0	3	8	32
					1994-Septe	mber 16.	1999			
0 ^{c, b/}		14				,				14
0-24										0
25-49			1							1
50-99										0
100-250			1							1
250-500					1					1
500-700					1					1
700-1,000)				1					1
<u>></u> 1,000						1		6	9	16
Total	14		2		3	1	0	6	9	35

TABLE A-2.	AFA catcher vesse	el count for lar	gest number o	of onshore whiting	landings (mt) and
onshore whi	ting deliveries in an	y one year durii	ng the analysis	period.	

a/ Deliveries are approximated by hauls for offshore landings and by the highest number of fish tickets issued for a single species for onshore landings.

b/ This column/row is for vessels which did not have onshore landings out of the total that had either offshore or onshore landings.

	Number of Landings/Deliveries ^{a/}									
Mt Delivered	0 ^{b/}	1-4	5-9	10-14	15-19	20-49	<u>></u> 50	Total		
				1994	-1997					
0 ^{c, b/}	10							10		
0-24	-	5	2					7		
25-49				1		2		3		
50-99						3	2	5		
100-250				1	1	2	1	5		
250-500							1	1		
500-700					1			1		
700-1,000								0		
<u>></u> 1,000								0		
Total	10	5	2	2	2	7	4	32		
			19	94-Septen	nber 16, 199	9				
0 ^{c, b/}	10			•	-			10		
0-24		5	2	1		1		9		
25-49				1		1		2		
50-99						2	3	5		
100-250						4	3	7		
250-500							1	1		
500-700					1			1		
700-1,000								0		
<u>></u> 1,000								0		
Total	10	5	2	2	1	8	7	35		

TABLE A-3. AFA catcher vessel count for largest number of **onshore groundfish** (other than whiting) landings (mt) and **onshore groundfish** deliveries in any one year during the analysis period.

a/ Deliveries are approximated by hauls for offshore landings and by the highest number of fish tickets issued for a single species for onshore landings.

b/ This column/row is for vessels which did not have onshore groundfish (other than whiting) landings out of the total that had either offshore or onshore landings.

GROUNDFISH ADVISORY SUBPANEL REPORT ON AMENDMENT 15 TO THE GROUNDFISH FISHERY MANAGEMENT PLAN -AMERICAN FISHERIES ACT

The Groundfish Advisory Subpanel (GAP) reviewed options for a fishery management plan (FMP) amendment to address impacts of the American Fisheries Act (AFA). A majority of the GAP supported the following as preferred alternatives for public review. Our comments are based on the issues and analysis laid out in Exhibit C.9, Attachment 2. The majority GAP opinion reflects a presentation made by whiting fishermen and offshore processors.

Issue 1 - Qualification and Subdivision

Question 1: Should AFA catcher vessel participation be limited?

The majority of the GAP prefers Option 1.a, limit vessels by sector (at-sea, shore-side, non-whiting).

Question 2: Should qualification require that a permit be held on a specific date?

The GAP supports Option 1.a, no date requirement.

Question 3: What landing requirement should be used?

The qualifying landings must have occurred during the period of January 1, 1994 to September 16, 1999.

In regard to landing requirements, the GAP believes that one additional piece of analysis needs to be done in order to determine whether a 50 ton or a 500 ton requirement is most appropriate. The GAP requests that a simple analysis be done for vessels that qualify for non-whiting groundfish using the 50 ton criterion. The analysis should list: the length of the vessels qualified; the years that those vessels delivered non-whiting groundfish; the number of trips by each vessel per year during the qualifying period; and the poundage of non-whiting groundfish delivered per vessel per year. This will help determine if the 50 ton limit is sufficient to provide the protections required under the American Fisheries Act.

Issue 2 - Catcher Vessel Restrictions

The majority of the GAP supports Option 2.a, which requires issuance of a medallion. Vessels qualifying by virtue of having met landing requirements would be issued a medallion which restricts the vessel to participation in the sectors for which the vessel qualifies. Medallions would be transferable under the same conditions and restrictions as apply to limited entry permits. However, medallions would be transferable only as a whole. In other words, a vessel qualifying for more than one sector cannot subdivide its medallion among those sectors.

Issue 3: Catcher - Processors

The GAP supports Option 3.a

Issue 4: Motherships

The GAP supports option 4.a

Issue 5: Duration

The GAP supports Option 5.b

Issue 6: Appeals and Technical Amendment

The GAP supports Option 6.b and the technical amendments regarding permit review proposed by Council staff.

PFMC 09/13/01

Agenda Item C.5.a Attachment 4 September 2006

EXECUTIVE DIRECTOR

Donald O. McIsaac

PACIFIC FISHERY MANAGEMENT COUNCIL

CHAIRMAN Donald K. Hansen 7700 NE Ambassador Place, Suite 200 Portland, Oregon 97220-1384

> Telephone: 503-820-2280 Toll Free: 866-806-7204 Fax: 503-820-2299 www.pcouncil.org

> > March 17, 2006

Ms. Margaret Spring U.S. Senate Committee on Commerce, Science, and Transportation 508 Dirksen Office Building Washington, DC 20510

Re: Pacific Fishery Management Council recommendations on potential amendment of the American Fisheries Act.

Dear Ms. Spring:

The Pacific Fishery Management Council (Council) appreciates the opportunity to comment on legislative proposals regarding modifications of the American Fisheries Act (AFA). I provided some initial comments to U.S. Senate staff on February 2, 2006 in order to meet the then presumed deadline on conference committee action on the U.S. Coast Guard authorization bill. Because of that timing constraint, those comments were made without the full Council having the opportunity to review them. Please take the content of this letter as a supplementation of the prior comments provided on the behalf of the Council.

On March 6, 2006, the Council's Legislative Committee (Committee) undertook a formal review of proposed AFA amendments and considered how they might affect fisheries under the Council's jurisdiction. The Committee's primary focus was on the effect of potential new entry into the Pacific whiting fishery by AFA vessels. After public comment and Committee discussion, the Committee recommended to the Council that our initial comments be amended to request that all AFA qualified vessels (original or replacement) - not just catcher/processor vessels - without West Coast landing history prior to June 29, 2000 be prohibited from participating in the Pacific whiting fishery. This would conform with the statutory obligations of the Council to prevent increasing capacity as a result of enactment of the AFA and would be consistent with the control date adopted by the Council in 2000. The Committee's recommendation was adopted unanimously by the Council on March 10, 2006.

Currently, it appears that the owners of a large catcher/processor vessel with no history in the West Coast groundfish fishery is acquiring the permits required to enter the catcher/processor sector of the West Coast whiting fishery. If this were to occur, it could be very disruptive to the existing whiting cooperative that has so responsibly fished cleanly with regard to the incidental catch of depleted rockfish species and salmon; these boats may abandon the cooperative and once again participate in a derby-style race for fish if a new entrant does not join the cooperative. This in turn would almost inevitably lead to higher bycatch of the depleted rockfish that have stringent quotas (canary, widow, and darkblotched rockfish) and salmon, which would

Ms. Margaret Spring March 17, 2006 Page 2

consequently shut other fisheries down, including shore based whiting, non-whiting groundfish, and even recreational fisheries. This is a potentially catastrophic scenario that has generated great concern on the West Coast given the razor-thin margins of incidental take of depleted species in the various groundfish fisheries and the recent U. S. Ninth Circuit Court decision on minimizing those incidental takes.

Please let me know if you have any questions regarding the Council's actions on this matter or if there are other issues on which Council comment is requested.

Sincerely,

D. O. McIsaac, Ph.D. Executive Director

MDB:rdd

c: Council Members

66158 Federal Register/Vol. 64, No. 226/Wednesday, November 24, 1999/Proposed Rules

SUPPLEMENTARY INFORMATION: In a notice of proposed rulemaking (NPR) served July 13, 1992 (published in the Federal Register on July 14, 1992, at 57 FR 31165), the Interstate Commerce Commission (Commission) proposed to expand the scope of its 49 CFR 1180.2(d)(2) class exemption. That exemption, as it existed in 1992 and as it continues to exist today, exempts from the otherwise applicable prior approval requirements the acquisition or continuance in control of a nonconnecting railroad or one of its lines where (i) the railroads would not connect with each other or any railroads in their corporate family, (ii) the acquisition or continuance in control is not part of a series of anticipated transactions that would connect the railroads with each other or any railroad in their corporate family, and (iii) the transaction does not involve a Class I railroad. In the NPR, the Commission proposed to expand the 49 CFR 1180.2(d)(2) exemption so that it would embrace any transaction that required approval and authorization under former 49 U.S.C. 11343, provided that the transaction did not involve (i) the merger or control of at least two Class I railroads, (ii) a reduction in the number of noncommonly-controlled railroads conducting operations between any two points, or (iii) a reduction from three to two in the number of noncommonly-controlled railroads serving any interchange point.

The ICC Termination Act of 1995, Public Law 104-88, 109 Stat. 803 (ICCTA), which was signed into law by President Clinton on December 29, 1995, abolished the Commission, established the Board, reenacted (with certain changes not presently of consequence) the relevant statutory provision, and transferred to the Board responsibility for the performance of functions respecting that statutory provision. See ICCTA section 101 (abolition of the Commission); new 49 U.S.C. 701(a), as enacted by ICCTA section 201(a) (establishment of the Board); new 49 U.S.C. 11323, as enacted by ICCTA section 102(a) (this is the post-1995 version, as respects railroads, of what had been 49 U.S.C. 11343); new 49 U.S.C. 702, as enacted by ICCTA section 201(a) (except as otherwise provided, the functions previously performed by the Commission shall henceforth be performed by the Board); ICCTA section 204(b)(1) (any proceeding pending before the Commission at the time of the enactment of ICCTA shall be transferred to the Board, insofar as that proceeding concerns functions transferred to the

Board). In accordance with the mandate of ICCTA section 204(b)(1), the Ex Parte No. 282 (Sub-No. 15) rulemaking proceeding, which had been instituted by the Commission in the 1992 NPR, was transferred to the Board.

We have decided to withdraw the rule proposed by the Commission in the 1992 NPR and to discontinue the Ex Parte No. 282 (Sub-No. 15) rulemaking proceeding. Our experience with the administration of cases handled under new 49 U.S.C. 11323 has led us to conclude that there is no pressing necessity for the expansion of the 49 CFR 1180.2(d)(2) class exemption. Any 49 U.S.C. 11323 transaction that is not embraced by any of the existing 49 CFR 1180.2(d) class exemptions but that would be embraced by the expanded 49 CFR 1180.2(d)(2) class exemption proposed by the Commission can be handled under the individualized exemption procedures now codified at 49 CFR part 1121, and appropriate determinations can be made on a caseby-case basis.

Small Entities

The Board certifies that the action taken in this proceeding will not have a significant economic impact on a substantial number of small entities.

Environmental and Energy Considerations

The action taken in this proceeding will not significantly affect either the quality of the human environment or the conservation of energy resources.

Board Releases Available Via the Internet

Decisions and notices of the Board, including this notice, are available on the Board's website at "WWW.STB.DOT.GOV."

Decided: November 17, 1999.

By the Board, Chairman Morgan, Vice Chairman Clyburn, and Commissioner Burkes.

Vernon A. Williams,

Secretary. [FR Doc. 99–30542 Filed 11–23–99; 8:45 am] BILLING CODE 4915–00–P

SILLING CODE 4915-00-

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Part 660

[Docket No. 991118308-9308-01; I.D. 101899C]

RIN 0648-AN33

Fisheries off West Coast States and in the Western Pacific; Pacific Coast Groundfish Fishery; Control Date

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

ACTION: Advance notice of proposed rulemaking; notice of control date for the Pacific Coast groundfish fishery; request for comments.

SUMMARY: This document announces a control date of September 16, 1999, after which vessels eligible for benefits under the American Fisheries Act (AFA) may be subject to restrictions on participation in the Pacific Coast groundfish fisheries. The intended effect of announcing this control date is to discourage speculative entry into the Pacific coast groundfish fisheries by AFA-qualified vessels while the Pacific Fishery Management Council (Council) develops recommendations to protect the Pacific Coast groundfish fisheries from adverse impacts caused by the AFA.

DATES: Comments may be submitted in writing by December 27, 1999.

ADDRESSES: Comments may be mailed to Jerry Mallet, Chairman, Pacific Fishery Management Council, 2130 SW Fifth Avenue, Suite 224, Portland, OR 97201.

FOR FURTHER INFORMATION CONTACT: The Pacific Fishery Management Council at 503–326–6352; or Bill Robinson at 206–526–6140; or Svein Fougner at 562–980–4000.

SUPPLEMENTARY INFORMATION: The Pacific Fishery Management Council (Council) established under section 302(a)(1)(F) of the Magnuson-Stevens Fishery Conservation and Management Act (16 U.S.C. 1852(a)(1)(F)) is considering recommendations for approval by NMFS of conservation and management measures to protect fisheries under its jurisdiction and the participants in those fisheries from adverse impacts caused by the AFA (Pub.L. 105-277, Div. C, Title II, October 21, 1998, 112 Stat. 2681-616; 16 U.S.C. 1851 note; 46 U.S.C. 101 note, 12102, 31322; 46 App. 1274 note), or by any

fishery cooperatives in the Alaska pollock fishery, as required by section 211(c)(3)(A) of the AFA. Pursuant to the AFA, the Council's recommendations are due to NMFS not later than July 1, 2000. The AFA at section 211(b)(5) also provides that catcher/processors and motherships eligible under the AFA are prohibited from harvesting or processing fish in any U.S. fishery outside Alaska, except the Pacific whiting fishery, unless harvesting or processing by those catcher-processor motherships is specifically authorized under a fishery management plan. Pacific whiting is a major component of the species aggregate in the Pacific Coast groundfish fisheries.

Conservation and management measures under consideration by the Council to offset adverse impacts of the AFA include possible restrictions on participation in the Pacific coast groundfish fisheries by vessels eligible for benefits under the AFA (AFAqualified vessels). During its September 13-17, 1999, meeting in Portland, Oregon, the Council adopted September 16, 1999, as a control date to be used in placing restrictions on participation in the Pacific Coast groundfish fisheries by AFA-qualified vessels. In making this announcement, NMFS and the Council intend to prevent speculative entry into the fisheries after the control date by AFA-qualified vessels, while the Council develops and analyzes its recommendations. The control date applies to catcher vessels in the mothership and shore-based sectors of the Pacific whiting fishery, and to all other non-whiting groundfish fisheries in which catch is landed shoreside. The control date provides notice to AFAqualified vessels that might seek to participate in the Pacific Coast groundfish fisheries that current requirements for accessing these fisheries may change. Vessels entering the fisheries after the control date may be subject to new restrictions that do not problems and erode the effectiveness of

currently exist, and they may not receive credit for fishing after the control date.

The Pacific Coast Groundfish Fishery Management Plan (FMP) was approved on January 4, 1982 (47 FR 43964, October 5, 1982), and has been amended 10 times. Implementing regulations for the FMP and its amendments are codified at 50 CFR part 660, Subpart G.

The AFA, enacted in 1998, reduced the harvest capacity in the Alaska pollock fishery by retiring nine Bering Sea catcher/processors. It also redistributed pollock allocations between the inshore and offshore sectors, and defined conditions for creating fishery cooperatives in the pollock fleet. Vessels that participate in such cooperatives are likely to have increased flexibility in arranging their fishing schedules and could consider entering additional fisheries.

At its September 13-17, 1999, meeting, the Council and its Groundfish Advisory Panel heard proposals from West Coast fishers and processors concerned that some AFA-qualified vessels with no previous or low levels of participation in the Pacific groundfish fishery will increase their fishing effort in the Pacific Coast groundfish fishery. A particular problem is posed if AFA-qualified vessels participating in pollock fishing cooperatives rearrange their pollock fishing schedules to allow them time to fish in non-pollock fisheries such as the Pacific Coast groundfish fishery. To participate in most limited entry groundfish fisheries vessels only need to purchase a general limited entry permit. No permit is required to participate in the open access fisheries. Because new permit holders and entrants into the open access fishery currently have access rights that are equal to those who have historically participated in the fishery, speculative entry may be encouraged. Additional effort could exacerbate existing management

future measures recommended by the Council.

The Council unanimously voted to establish a control date of September 16, 1999, and to initiate the development of recommendations to restrict AFAqualified 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 fisherv).

Implementation of any management measures for the fishery will require amendment of the regulations implementing the FMP and may also require amendment of the FMP itself. Any action will require Council development of a regulatory proposal with public input and a supporting analysis, NMFS approval, and publication of implementing regulations in the Federal Register. If catch history is used as basis for participation, it is likely that AFA-qualified vessel participation in the fishery after the control date will receive little or no credit. Fishers are not guaranteed future participation in the groundfish fishery, regardless of their date of entry or level of participation in the fishery.

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

Authority: 16 U.S.C. 1801 et seq.; Pub. L. 105-277, Div. C, Title II, October 21, 1988.

Dated: November 18, 1999.

William Fox.

Acting Assistant Administrator for Fisheries, National Marine Fisheries Service.

[FR Doc. 99-30657 Filed 11-23-99; 8:45 am] BILLING CODE 3510-22-F

55214 Federal Register/Vol. 65, No. 178/Wednesday, September 13, 2000/Proposed Rules

paragraphing) make the rule easier to understand?

• Would more (but shorter) sections be better?

• Could we improve clarity by adding tables, lists, or diagrams?

• What else could we do to make the rule easier to understand?

If you have any responses to these questions, please include them in your comments on this document.

B. Review Schedule

In conjunction with our section 610 reviews, we will be performing plain language reviews over a ten-year period on a schedule consistent with the section 610 review schedule. We will review Parts 571.131, 571.217, and 571.220 through 571.222 to determine if these regulations can be reorganized and/or rewritten to make them easier to read, understand, and use. We encourage interested persons to submit draft regulatory language that clearly and simply communicates regulatory requirements, and other recommendations, such as for putting information in tables, that may make the regulations easier to use.

Comments

How do I prepare and submit comments?

Your comments must be written and in English. To ensure that your comments are correctly filed in the Docket, please include the docket number of this document in your comments.

Your comments must not be more than 15 pages long. (49 CFR 553.21.) We established this limit to encourage you to write your primary comments in a concise fashion. However, you may attach necessary additional documents to your comments. There is no limit on the length of the attachments.

Please submit two copies of your comments, including the attachments, to Docket Management at the address given above under **ADDRESSES**.

Comments may also be submitted to the docket electronically by logging onto the Docket Management System website at http://dms.dot.gov. Click on "Help & Information" or "Help/Info" to obtain instructions for filing your comments electronically.

How can I be sure that my comments were received?

If you wish Docket Management to notify you upon its receipt of your comments, enclose a self-addressed, stamped postcard in the envelope containing your comments. Upon receiving your comments, Docket Management will return the postcard by mail. How do I submit confidential business information?

If you wish to submit any information under a claim of confidentiality, you should submit three copies of your complete submission, including the information you claim to be confidential business information, to the Chief Counsel, NHTSA, at the address given above under FOR FURTHER INFORMATION **CONTACT.** In addition, you should submit two copies, from which you have deleted the claimed confidential business information, to Docket Management at the address given above under ADDRESSES. When you send a comment containing information claimed to be confidential business information, you should include a cover letter setting forth the information specified in our confidential business information regulation. (49 CFR Part 512.)

Will the agency consider late comments?

We will consider all comments that Docket Management receives before the close of business on the comment closing date indicated above under **DATES.** To the extent possible, we will also consider comments that Docket Management receives after that date.

How can I read the comments submitted by other people?

You may read the comments received by Docket Management at the address given above under **ADDRESSES.** The hours of the Docket are indicated above in the same location.

You may also see the comments on the Internet. To read the comments on the Internet, take the following steps:

(1) Go to the Docket Management System (DMS) Web page of the Department of Transportation (http:// dms.dot.gov/).

(2) On that page, click on "search." (3) On the next page (http:// dms.dot.gov/search/), type in the fourdigit docket number shown at the beginning of this document. Example: If the docket number were "NHTSA-1998-1234," you would type "1234." After typing the docket number, click on "search."

(4) On the next page, which contains docket summary information for the docket you selected, click on the desired comments. You may download the comments. However, since the comments are imaged documents, instead of word processing documents, the "pdf" versions of the documents are word searchable.

Please note that even after the comment closing date, we will continue to file relevant information in the Docket as it becomes available. Further, some people may submit late comments.

Accordingly, we recommend that you periodically check the Docket for new material.

William H. Walsh,

Associate Administrator for Plans and Policy. [FR Doc. 00–23520 Filed 9–12–00; 8:45 am] BILLING CODE 4910-59–P

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Part 660

[Docket No.; 000830248-0248-01; I.D. 080400A]

RIN 0648-AN38

Fisheries off West Coast States and in the Western Pacific; Pacific Coast Groundfish Fishery; Advance Notice of Proposed Rulemaking to Establish a Control Date

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

ACTION: Advance notice of proposed rulemaking; notice of control date for the Pacific Coast groundfish fishery; request for comments.

SUMMARY: The Pacific Fishery Management Council (Council) as authorized by the American Fisheries Act (AFA) is considering management measures to recommend to the Secretary of Commerce (Secretary) to protect the Pacific Coast groundfish fisheries from adverse impacts caused by the AFA. This document announces 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. Additionally, participation by AFAqualified catcher/processors and motherships not previously active in the at-sea whiting fishery may be restricted. 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 AFAqualified vessel owners and registered for use with AFA-qualified vessels.

DATES: Comments may be submitted in writing by October 13, 2000. ADDRESSES: Comments may be mailed to Jim Lone, Chairman, Pacific Fishery Management Council, 2130 SW Fifth Avenue, Suite 224, Portland OR 97201. FOR FURTHER INFORMATION CONTACT: The Pacific Fishery Management Council at 503-326-6352; or Bill Robinson at 206-526-6140; or Svein Fougner at 562-980-4000.

SUPPLEMENTARY INFORMATION: The Pacific Council which was established under section 302(a)(1)(F) of the Magnuson-Stevens Fishery Conservation and Management Act (16 U.S.C. 1852 (a)(1)(F) is considering conservation and management measures to recommend to the Secretary to protect fisheries under its jurisdiction and the participants in those fisheries from adverse impacts caused by the AFA (Pub.L. 105-277, Div. C, Title II, October 21, 1998, 112 Stat. 2681-616; 16 U.S.C. 1851 note; 46 U.S.C. 101 note, 12102, 31322; 46 App. 1274 note), or by any fishery cooperatives in the Alaska pollock fishery, as required by section 211(c)(3)(A) of the AFA. Section 211(b)(5) of the AFA prohibits catcher/ processors and motherships eligible under the AFA from harvesting or processing fish in any U.S. fishery outside Alaska, except the Pacific whiting fishery, unless harvesting or processing by those catcher/processors and motherships is specifically authorized under a fishery management plan. The Pacific Coast Groundfish Fishery Management Plan (FMP) was approved on January 4, 1982 (47 FR 43964, October 5 1982), and has been amended 11 times. Implementing regulations for the FMP and its amendments are codified at 50 CFR Part 660, subpart G.

Under the AFA, only certain vessels are eligible to participate in the Bering Sea pollock fishery. This eligibility provides greater operational flexibility in when and how these vessels participate in the pollock fishery. Because these AFA-qualified vessels are better able to arrange their schedules, they could potentially increase participation in other fisheries, including Pacific Coast groundfish fisheries. The concern is that AFAqualified vessels will use benefits gained by the AFA to move into Pacific Coast groundfish fisheries, increase effort, and cause negative impacts on current participants. To prevent any

negative impact or "adverse impact", the AFA provides the Council the opportunity to recommend management measures to the Secretary to protect fisheries under its jurisdiction and participants in those fisheries.

To harvest fish in the limited entry groundfish fisheries, vessels only need to purchase a Federal limited entry permit. Currently, no Federal permit is required to participate as a mothership. Because new permit holders and motherships currently have access rights that are equal to those who have open access fishery currently have access rights that are equal to those who have historically participated in the fishery, speculative entry may be encouraged. Additional effort could exacerbate existing management problems and erode the effectiveness of future measures recommended by the Council. As a result, the Council is considering measures that would restrict the use of AFA-qualified vessels and their limited entry trawl permits in segments of the fishery in which the vessel had not been previously active, as determined by minimum participation requirements.

At its September 1999 meeting, the Council adopted September 16, 1999, as a control date to be used in placing restrictions on participation in the Pacific Coast groundfish fisheries by AFA-qualified catcher vessels in the mothership and shore-based sectors of the Pacific whiting fishery, and to all other non-whiting groundfish fisheries in which catch is landed shoreside (64 FR 66158, November 24, 1999), At the April 2000 meeting, the Council reviewed alternatives for providing protection to Pacific Coast groundfish fisheries and its participants from AFAqualified vessels and processors that failed to meet minimum participation requirements in the Pacific Coast groundfish fisheries. In addition, the Council considered whether to restrict, suspend, or void permits registered to AFA-qualified vessels if the vessels did not meet the participation requirements.

At its June 2000 meeting, the Council gave further consideration to management measures aimed at protecting Pacific Coast groundfish fishery participants from impacts caused by the AFA. The Council voted to establish 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

5

(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.

The Council is also considering restricting future participation in the whiting fishery by AFA-qualified motherships and catcher/processors that do not have a history in the fishery. For motherships, the criterion being considered is a certain level of participation in the regular whiting season in either 1998 or 1999. For catcher/processors, the criterion being considered is whether the catcher/ processor was licensed to harvest groundfish in 1997, 1998, or 1999 through September 16, 1999. No new AFA-qualified motherships or catcher processors have entered the groundfish fishery since September of 1999.

This document notifies the public that the Council is considering measures to protect the Pacific Coast groundfish fisheries from adverse impacts caused by the APA. The intended effect of this document is to discourage speculative entry or increased effort in the Pacific Coast groundfish fisheries by entities eligible for AFA benefits or revocation to purchasers or lessees of limited entry permits owned by AFA-qualified vessel owners and registered for use with AFAqualified vessels on June 29, 2000.

Implementation of any management measures for the fishery will require amendment of the regulations implementing the FMP, and may require amending the FMP. Any action will require Council development of a regulatory proposal with public input and a supporting analysis, NMFS approval, and publication of implementing regulations in the **Federal Register.** This advance notice of proposed rulemaking has been determined to be not significant for purposes of Executive Order 12866.

Authority: 16 U.S.C. 1801 *et seq.*; Pub. L. 105-277, Div. C, Title II, October 21, 1988.

Dated: September 7, 2000.

William T. Hogarth,

Deputy Assistant Administrator, National Marine Fisheries Service. [FR Doc. 00–23536 Filed 9–12–00; 8:45 am] BILLING CODE 3510–22–S

55215

Agenda Item C.5.e Public Comment September 2006

Friday, August 11, 2006

Mr. Donald K. Hansen, Chairman Pacific Fishery Management Council 7700 NE Ambassador Place, Suite 101 Portland, Oregon 97220-1348 RECEIVED AUG 1 4 2006 PFMC

Dear Chairman Hansen:

I am a crewman on the F/V Miss Berdie. The vessel has fished shore side whiting for 16 years. We used to fish whiting through the month of September. But with the development of shore side whiting the season has been a little shorter every year. What really concerns us now is the introduction of new large AFA vessels into the whiting fishery.

These vessels have no historical participation in this fishery. Everyone of these vessels due to their large size, has a very significant impact on the shore side whiting fishery. When one of these vessels enter the fishery it shortens the season by a week. I've lost 30% of my shore side whiting income this year alone because of new large vessels entering the fishery.

It is my understanding that the American fisheries act required the Pacific Fisheries Management Council to protect fisheries under its jurisdiction and the participants in these fisheries from adverse impacts caused by the AFA fishing Cooperatives. These AFA vessels that have no history in the shore side whiting fishery are causing a direct adverse affect on the historical participants of this fishery. They are using the benefits of AFA & Coops by either leasing Pollock quota or delaying their entry into the Bearing Sea Pollock Bea season to make it possible to be on the West Coast this time of year.

We ask that you immediately implement regulations as required by the American Fisheries Act that will protect the historical participants. Restrict these new large AFA vessels to their historical participation as required by law.

There are a lot more of these vessels capable of entering the fishery. It may not matter to them if the fishery gets reduced down to a couple of weeks. But us the have relied on this fishery for years it significantly affects our livelihood.

Please Help now.

Sincerely, Jeremy Kosydar

RECEIVEL

Dear Mr. Hansen

AUG 1 4 2006

PFMC I am co-owner leaptain of F/U NICOLE. I have been involved in shore-side whiting almost from the beginning. We have been faithful to our fish plant through good times and some very bad times in the whiting fishery. Now that whiting ex-vessel price is high enough to make serious money it would be devostating to NICOLF Fisheries LLC to loose this fishery to large outside boats. whiting has become almost 50% of my annual income. I personally lost 13 deliveries this year compared to last year with only a few large boats entering this fightry. If more large boats come on line next year we are looking at a shorter season and huge loss of income. Your help would be lite saving to many of us smaller local whiting fishermen.

Sincerely,

Hary O. Wintersteen

Agenda Item C.5 FMP Amendment 15

RECENED

AUG 1 4 2006

PFMC

Friday, August 04, 2006

Mr. Donald K. Hansen, Chairman Pacific Fishery Management Council 7700 NE Ambassador Place, Suite 200 Portland, Oregon 97220-1348

Dear Chairman Hansen:

NICOLE

13

I am a crewman on the F/V . The vessel has fished shore side whiting for 15 years. We used to fish whiting through the month of September. But with the development of shore side whiting the season has been a little shorter every year. What really concerns us now is the introduction of the new large AFA vessels into the whiting fisheries.

These vessels have no historical participation in this fishery. Every one of these vessels, due to their large size, has a very significant impact on the whiting fisheries. When one of these vessels enters the fishery it shortens the season by a week. I've lost 30% of my whiting income this year because of these new large vessels entering the fishery.

It is my understanding that the American Fisheries Act required the Pacific Fisheries Management Council to protect fisheries under its jurisdiction and the participants in these fisheries from adverse impacts caused by the AFA fishing Cooperatives. These AFA vessels that have no history in the shore side whiting fishery are causing a direct adverse affect on the historical participants of this fishery. They are using the benefits of AFA & Coops by either leasing Pollock quota or delaying their entry into the Bering Sea Pollock B season to make it possible to be on the West Coast at this time of year.

We ask that you immediately implement regulations as required by the American Fisheries Act that will protect the historical participants. Restrict these new large AFA vessels to their historical participation as required by law.

There are a lot more of these vessels capable of entering this fishery. It may not matter to them if the fishery gets reduced down to a couple of weeks. But for us that have relied on this fishery for years it significantly affects our livelihood.

Please Help Now. - Party Hum Browner, Toppdore retrock of the WO VIEW Inform Longing and the United and a new product of the second product of the second product of the second of the second second second second second product of the second second second second product of the second s

Friday, August 04, 2006

Mr. Donald K. Hansen, Chairman Pacific Fishery Management Council 7700 NE Ambassador Place, Suite 200 Portland, Oregon 97220-1348

AUG 1 4 2006

Dear Chairman Hansen:

Co-owner / captain NICOLE 13 I am a crewman on the F/V . The vessel has fished shore side whiting for 15 years. We used to fish whiting through the month of September. But with the development of shore side whiting the season has been a little shorter every year. What really concerns us now is the introduction of the new large AFA vessels into the whiting fisheries.

RECEIVEL

These vessels have no historical participation in this fishery. Every one of these vessels, due to their large size, has a very significant impact on the whiting fisheries. When one of these vessels enters the fishery it shortens the season by a week. I've lost 30% of my whiting income this year because of these new large vessels entering the fishery.

It is my understanding that the American Fisheries Act required the Pacific Fisheries Management Council to protect fisheries under its jurisdiction and the participants in these fisheries from adverse impacts caused by the AFA fishing Cooperatives. These AFA vessels that have no history in the shore side whiting fishery are causing a direct adverse affect on the historical participants of this fishery. They are using the benefits of AFA & Coops by either leasing Pollock quota or delaying their entry into the Bering Sea Pollock B season to make it possible to be on the West Coast at this time of year.

We ask that you immediately implement regulations as required by the American Fisheries Act that will protect the historical participants. Restrict these new large AFA vessels to their historical participation as required by law.

There are a lot more of these vessels capable of entering this fishery. It may not matter to them if the fishery gets reduced down to a couple of weeks. But for us that have relied on this fishery for years it significantly affects our livelihood.

Please Help Now. Sincerely, August O and the term of the property of the proper

o a milio presidente a la base passante da gatoro en y debite securito españala dos ordeas).

Friday, August 04, 2006

Mr. Donald K. Hansen, Chairman Pacific Fishery Management Council 7700 NE Ambassador Place, Suite 200 Portland, Oregon 97220-1348

RECEIVEL AUG 1 4 2006 PFNIC

Dear Chairman Hansen:

Pac Future I am a crewman on the F/V. The vessel has fished shore side whiting for 15 years. We used to fish whiting through the month of September. But with the development of shore side whiting the season has been a little shorter every year. What really concerns us now is the introduction of the new large AFA vessels into the whiting fisheries.

These vessels have no historical participation in this fishery. Every one of these vessels, due to their large size, has a very significant impact on the whiting fisheries. When one of these vessels enters the fishery it shortens the season by a week. I've lost 30% of my whiting income this year because of these new large vessels entering the fishery.

It is my understanding that the American Fisheries Act required the Pacific Fisheries Management Council to protect fisheries under its jurisdiction and the participants in these fisheries from adverse impacts caused by the AFA fishing Cooperatives. These AFA vessels that have no history in the shore side whiting fishery are causing a direct adverse affect on the historical participants of this fishery. They are using the benefits of AFA & Coops by either leasing Pollock quota or delaying their entry into the Bering Sea Pollock B season to make it possible to be on the West Coast at this time of year.

We ask that you immediately implement regulations as required by the American Fisheries Act that will protect the historical participants. Restrict these new large AFA vessels to their historical participation as required by law.

There are a lot more of these vessels capable of entering this fishery. It may not matter to them if the fishery gets reduced down to a couple of weeks. But for us that have relied on this fishery for years it significantly affects our livelihood.

Sincerely, And Lindstrom ange as property to the part of the second states of the second stat

the and submission that that the characteristic that evaluated that that is that is the law

A STATE RECENT OF THE SECTION OF THE RECENT OF A STATE AND A DEPENDENT OF A DEPENDENT A DEPENDENT OF gan electric carrie que grande programme que enciente de la conserva presidente de

Please Help Now.

Friday, August 04, 2006

Mr. Donald K. Hansen, Chairman Pacific Fishery Management Council 7700 NE Ambassador Place, Suite 200 Portland, Oregon 97220-1348 RECEIVED AUG 1 4 2006 PENAC

Dear Chairman Hansen:

I am a crewman on the F/V . The vessel has fished shore side whiting for 15-years. We used to fish whiting through the month of September. But with the development of shore side whiting the season has been a little shorter every year. What really concerns us now is the introduction of the new large AFA vessels into the whiting fisheries.

These vessels have no historical participation in this fishery. Every one of these vessels, due to their large size, has a very significant impact on the whiting fisheries. When one of these vessels enters the fishery it shortens the season by a week. I've lost 30% of my whiting income this year because of these new large vessels entering the fishery.

It is my understanding that the American Fisheries Act required the Pacific Fisheries Management Council to protect fisheries under its jurisdiction and the participants in these fisheries from adverse impacts caused by the AFA fishing Cooperatives. These AFA vessels that have no history in the shore side whiting fishery are causing a direct adverse affect on the historical participants of this fishery. They are using the benefits of AFA & Coops by either leasing Pollock quota or delaying their entry into the Bering Sea Pollock B season to make it possible to be on the West Coast at this time of year.

We ask that you immediately implement regulations as required by the American Fisheries Act that will protect the historical participants. Restrict these new large AFA vessels to their historical participation as required by law.

There are a lot more of these vessels capable of entering this fishery. It may not matter to them if the fishery gets reduced down to a couple of weeks. But for us that have relied on this fishery for years it significantly affects our livelihood.

Please Help Now.

Sincerely, Mening a margin provide the providence of the providenc

альной и славно ник была синания и простояния инборматира синаний ник ней сонолог. Наласти сонология прости прости и сиранские ник ассология раст македот у сакторые сонолог. В поста постоя и достоя прости на синанские избалист на настоя синания прости на сонология и сонолог. Постоя постоя и достоя постоя на синанские избалист на синанские и прости на сонология и сонология на сонология Friday, August 04, 2006

Mr. Donald K. Hansen, Chairman Pacific Fishery Management Council 7700 NE Ambassador Place, Suite 200 101 Portland, Oregon 97220-1348

RECEIVED AUG 1 4 2006 PFMC

Dear Chairman Hansen: Pac Future

I am a crewman on the F/V . The vessel has fished shore side whiting for 15 years. We used to fish whiting through the month of September. But with the development of shore side whiting the season has been a little shorter every year. What really concerns us now is the introduction of the new large AFA vessels into the whiting fisheries.

These vessels have no historical participation in this fishery. Every one of these vessels, due to their large size, has a very significant impact on the whiting fisheries. When one of these vessels enters the fishery it shortens the season by a week. I've lost 30% of my whiting income this year because of these new large vessels entering the fishery.

It is my understanding that the American Fisheries Act required the Pacific Fisheries Management Council to protect fisheries under its jurisdiction and the participants in these fisheries from adverse impacts caused by the AFA fishing Cooperatives. These AFA vessels that have no history in the shore side whiting fishery are causing a direct adverse affect on the historical participants of this fishery. They are using the benefits of AFA & Coops by either leasing Pollock quota or delaying their entry into the Bering Sea Pollock B season to make it possible to be on the West Coast at this time of year.

We ask that you immediately implement regulations as required by the American Fisheries Act that will protect the historical participants. Restrict these new large AFA vessels to their historical participation as required by law.

There are a lot more of these vessels capable of entering this fishery. It may not matter to them if the fishery gets reduced down to a couple of weeks. But for us that have relied on this fishery for years it significantly affects our livelihood.

Please Help Now.

- Reef Fir Pacific Future Sincerely,

n on transing that the construct fahrafes out during the battle Fisca for an optimized to protect fahrances made fahrandistan saint far partition in defaying grander and an and the mark have deviced out of the partition fa

and Estimate Prairie adverse instance managed by the Aliv Helpite Control and the A winnigenten virgenen is product frencrige ander its jurisdictive, and the restriction is a to an anti-manifold shar the transition from the second Agenda Item C.5 FMP Amendment 15 NER GER -

the production and the second s

AUG 1 4 2006

Friday, August 04, 2006

Mr. Donald K. Hansen, Chairman Pacific Fishery Management Council 7700 NE Ambassador Place, Suite 200 Portland, Oregon 97220-1348

Dear Chairman Hansen: Pacific Future

I am a crewman on the F/V . The vessel has fished shore side whiting for 15 years. We used to fish whiting through the month of September. But with the development of shore side whiting the season has been a little shorter every year. What really concerns us now is the introduction of the new large AFA vessels into the whiting fisheries.

These vessels have no historical participation in this fishery. Every one of these vessels, due to their large size, has a very significant impact on the whiting fisheries. When one of these vessels enters the fishery it shortens the season by a week. I've lost 30% of my whiting income this year because of these new large vessels entering the fishery.

It is my understanding that the American Fisheries Act required the Pacific Fisheries Management Council to protect fisheries under its jurisdiction and the participants in these fisheries from adverse impacts caused by the AFA fishing Cooperatives. These AFA vessels that have no history in the shore side whiting fishery are causing a direct adverse affect on the historical participants of this fishery. They are using the benefits of AFA & Coops by either leasing Pollock quota or delaying their entry into the Bering Sea Pollock B season to make it possible to be on the West Coast at this time of year.

We ask that you immediately implement regulations as required by the American Fisheries Act that will protect the historical participants. Restrict these new large AFA vessels to their historical participation as required by law.

There are a lot more of these vessels capable of entering this fishery. It may not matter to them if the fishery gets reduced down to a couple of weeks. But for us that have relied on this fishery for years it significantly affects our livelihood.

Sincerely,

Friday, August 11, 2006

RECEIVEL AUG 1 4 2006 PFNIC

Mr. Donald K. Hansen, Chairman Pacific Fishery Management Council 7700 NE Ambassador Place, Suite 101 Portland, Oregon 97220-1348

Dear Chairman Hansen:

I am the captain of the F/V Miss Berdie. The vessel has fished shore side whiting for 16 years. We used to fish whiting through the month of September. But with the development of shore side whiting the season has been a little shorter every year. What really concerns us now is the introduction of new large AFA vessels into the whiting fishery.

These vessels have no historical participation in this fishery. Everyone of these vessels due to their large size, has a very significant impact on the shore side whiting fishery. When one of these vessels enter the fishery it shortens the season by a week. I've lost 30% of my shore side whiting income this year alone because of new large vessels entering the fishery.

It is my understanding that the American fisheries act required the Pacific Fisheries Management Council to protect fisheries under its jurisdiction and the participants in these fisheries from adverse impacts caused by the AFA fishing Cooperatives. These AFA vessels that have no history in the shore side whiting fishery are causing a direct adverse affect on the historical participants of this fishery. They are using the benefits of AFA & Coops by either leasing Pollock quota or delaying their entry into the Bearing Sea Pollock Bea season to make it possible to be on the West Coast this time of year.

We ask that you immediately implement regulations as required by the American Fisheries Act that will protect the historical participants. Restrict these new large AFA vessels to their historical participation as required by law.

There are a lot more of these vessels capable of entering the fishery. It may not matter to them if the fishery gets reduced down to a couple of weeks. But us the have relied on this fishery for years it significantly affects our livelihood.

Sincerely, Nom Z & Thomas L Stam

Friday, August 11, 2006

Mr. Donald K. Hansen, Chairman Pacific Fishery Management Council 7700 NE Ambassador Place, Suite 101 Portland, Oregon 97220-1348

RECEIVED AUG 1 4 2006 PFNIC

Dear Chairman Hansen:

I am a crewman on the F/V Miss Berdie. The vessel has fished shore side whiting for 16 years. We used to fish whiting through the month of September. But with the development of shore side whiting the season has been a little shorter every year. What really concerns us now is the introduction of new large AFA vessels into the whiting fishery.

These vessels have no historical participation in this fishery. Everyone of these vessels due to their large size, has a very significant impact on the shore side whiting fishery. When one of these vessels enter the fishery it shortens the season by a week. I've lost 30% of my shore side whiting income this year alone because of new large vessels entering the fishery.

It is my understanding that the American fisheries act required the Pacific Fisheries Management Council to protect fisheries under its jurisdiction and the participants in these fisheries from adverse impacts caused by the AFA fishing Cooperatives. These AFA vessels that have no history in the shore side whiting fishery are causing a direct adverse affect on the historical participants of this fishery. They are using the benefits of AFA & Coops by either leasing Pollock quota or delaying their entry into the Bearing Sea Pollock Bea season to make it possible to be on the West Coast this time of year.

We ask that you immediately implement regulations as required by the American Fisheries Act that will protect the historical participants. Restrict these new large AFA vessels to their historical participation as required by law.

There are a lot more of these vessels capable of entering the fishery. It may not matter to them if the fishery gets reduced down to a couple of weeks. But us the have relied on this fishery for years it significantly affects our livelihood.

Sincerely, Junh Conn KEVIN Conn

Friday, August 11, 2006

Mr. Donald K. Hansen, Chairman Pacific Fishery Management Council 7700 NE Ambassador Place, Suite 101 Portland, Oregon 97220-1348

RECEIVED AUG 1 4 2006 PF

Dear Chairman Hansen:

I am a crewman on the F/V Miss Berdie. The vessel has fished shore side whiting for 16 years. We used to fish whiting through the month of September. But with the development of shore side whiting the season has been a little shorter every year. What really concerns us now is the introduction of new large AFA vessels into the whiting fishery.

These vessels have no historical participation in this fishery. Everyone of these vessels due to their large size, has a very significant impact on the shore side whiting fishery. When one of these vessels enter the fishery it shortens the season by a week. I've lost 30% of my shore side whiting income this year alone because of new large vessels entering the fishery.

It is my understanding that the American fisheries act required the Pacific Fisheries Management Council to protect fisheries under its jurisdiction and the participants in these fisheries from adverse impacts caused by the AFA fishing Cooperatives. These AFA vessels that have no history in the shore side whiting fishery are causing a direct adverse affect on the historical participants of this fishery. They are using the benefits of AFA & Coops by either leasing Pollock quota or delaying their entry into the Bearing Sea Pollock Bea season to make it possible to be on the West Coast this time of year.

We ask that you immediately implement regulations as required by the American Fisheries Act that will protect the historical participants. Restrict these new large AFA vessels to their historical participation as required by law.

There are a lot more of these vessels capable of entering the fishery. It may not matter to them if the fishery gets reduced down to a couple of weeks. But us the have relied on this fishery for years it significantly affects our livelihood.

Sincerely. BLASAV Clayton

Friday, August 11, 2006

Mr. Donald K. Hansen, Chairman Pacific Fishery Management Council 7700 NE Ambassador Place, Suite 101 Portland, Oregon 97220-1348 RECEIVED AUG 1 5 2006 PFMC

Dear Chairman Hansen:

My name is Tom Ludwig. I live in Toledo Oregon and have worked on the F/V Raven for 12 years. The vessel has fished shore side whiting for 15 years. We used to fish whiting through the month of September. But with the development of shore side whiting, the season has been a little shorter every year. What really concerns us now is the introduction of new large AFA vessels into the whiting fisheries.

These vessels have no historical participation in this fishery. Every one of these vessels, due to their large size, has a very significant impact on the whiting fisheries. When one of these vessels enters the fishery it shortens the season by a week. I've lost 30% of my whiting income this year because of these new large vessels entering the fishery.

It is my understanding that the American Fisheries Act required the Pacific Fisheries Management Council to protect fisheries under its jurisdiction and the participants in these fisheries from adverse impacts caused by the AFA fishing Cooperatives. These AFA vessels that have no history in the shore side whiting fishery are causing a direct adverse affect on the historical participants of this fishery. They are using the benefits of AFA & Coops by either leasing Pollock quota or delaying their entry into the Bering Sea Pollock B season to make it possible to be on the West Coast at this time of year.

We ask that you immediately implement regulations as required by the American Fisheries Act that will protect the historical participants. Restrict these new large AFA vessels to their historical participation as required by law.

There are a lot more of these vessels capable of entering this fishery. It may not matter to them if the fishery gets reduced down to a couple of weeks. But for us that have relied on this fishery for years it significantly affects our livelihood.

Sincerely, Journ A Zahag

Friday, August 11, 2006

Mr. Donald K. Hansen, Chairman Pacific Fishery Management Council 7700 NE Ambassador Place, Suite 101 Portland, Oregon 97220-1348

Alic 1 5 2005

Dear Chairman Hansen:

My name is Brian Junes. I live in Astoria Oregon and have worked on the F/V Raven for 4 years. The vessel has fished shore side whiting for 15 years. We used to fish whiting through the month of September. But with the development of shore side whiting, the season has been a little shorter every year. What really concerns us now is the introduction of new large AFA vessels into the whiting fisheries.

These vessels have no historical participation in this fishery. Every one of these vessels, due to their large size, has a very significant impact on the whiting fisheries. When one of these vessels enters the fishery it shortens the season by a week. I've lost 30% of my whiting income this year because of these new large vessels entering the fishery.

It is my understanding that the American Fisheries Act required the Pacific Fisheries Management Council to protect fisheries under its jurisdiction and the participants in these fisheries from adverse impacts caused by the AFA fishing Cooperatives. These AFA vessels that have no history in the shore side whiting fishery are causing a direct adverse affect on the historical participants of this fishery. They are using the benefits of AFA & Coops by either leasing Pollock quota or delaying their entry into the Bering Sea Pollock B season to make it possible to be on the West Coast at this time of year.

We ask that you immediately implement regulations as required by the American Fisheries Act that will protect the historical participants. Restrict these new large AFA vessels to their historical participation as required by law.

There are a lot more of these vessels capable of entering this fishery. It may not matter to them if the fishery gets reduced down to a couple of weeks. But for us that have relied on this fishery for years it significantly affects our livelihood.

Please Help now.

Sincerely,

Bin D Junes

AUG 1 5 2006

Friday, August 11, 2006

Mr. Donald K. Hansen, Chairman Pacific Fishery Management Council 7700 NE Ambassador Place, Suite 101 Portland, Oregon 97220-1348

Dear Chairman Hansen:

My name is Ishmel Nava. I live in Newport Oregon and have worked on the F/V Raven for 4 years. The vessel has fished shore side whiting for 15 years. We used to fish whiting through the month of September. But with the development of shore side whiting, the season has been a little shorter every year. What really concerns us now is the introduction of new large AFA vessels into the whiting fisheries.

These vessels have no historical participation in this fishery. Every one of these vessels, due to their large size, has a very significant impact on the whiting fisheries. When one of these vessels enters the fishery it shortens the season by a week. I've lost 30% of my whiting income this year because of these new large vessels entering the fishery.

It is my understanding that the American Fisheries Act required the Pacific Fisheries Management Council to protect fisheries under its jurisdiction and the participants in these fisheries from adverse impacts caused by the AFA fishing Cooperatives. These AFA vessels that have no history in the shore side whiting fishery are causing a direct adverse affect on the historical participants of this fishery. They are using the benefits of AFA & Coops by either leasing Pollock quota or delaying their entry into the Bering Sea Pollock B season to make it possible to be on the West Coast at this time of year.

We ask that you immediately implement regulations as required by the American Fisheries Act that will protect the historical participants. Restrict these new large AFA vessels to their historical participation as required by law.

There are a lot more of these vessels capable of entering this fishery. It may not matter to them if the fishery gets reduced down to a couple of weeks. But for us that have relied on this fishery for years it significantly affects our livelihood.

Sincerely, Jesmae Mara G

Friday, August 11, 2006

Mr. Donald K. Hansen, Chairman Pacific Fishery Management Council 7700 NE Ambassador Place, Suite 101 Portland, Oregon 97220-1348

RECEIVED AUG 1 5 2006 PFMC

Dear Chairman Hansen:

My name is Corey Vance. I live in Siletz Oregon and have worked on the F/V Raven for 10 years. The vessel has fished shore side whiting for 15 years. We used to fish whiting through the month of September. But with the development of shore side whiting, the season has been a little shorter every year. What really concerns us now is the introduction of new large AFA vessels into the whiting fisheries.

These vessels have no historical participation in this fishery. Every one of these vessels, due to their large size, has a very significant impact on the whiting fisheries. When one of these vessels enters the fishery it shortens the season by a week. I've lost 30% of my whiting income this year because of these new large vessels entering the fishery.

It is my understanding that the American Fisheries Act required the Pacific Fisheries Management Council to protect fisheries under its jurisdiction and the participants in these fisheries from adverse impacts caused by the AFA fishing Cooperatives. These AFA vessels that have no history in the shore side whiting fishery are causing a direct adverse affect on the historical participants of this fishery. They are using the benefits of AFA & Coops by either leasing Pollock quota or delaying their entry into the Bering Sea Pollock B season to make it possible to be on the West Coast at this time of year.

We ask that you immediately implement regulations as required by the American Fisheries Act that will protect the historical participants. Restrict these new large AFA vessels to their historical participation as required by law.

There are a lot more of these vessels capable of entering this fishery. It may not matter to them if the fishery gets reduced down to a couple of weeks. But for us that have relied on this fishery for years it significantly affects our livelihood.

Sincerely, Coney Vance

Friday, August 11 2006

Dr. Donald McIsaac, Executive Director Pacific Fisheries Management Council 7700 NE Ambassador Place Suite 101 Portland, OR 97220

RECEIVED AUG 1 5 2006 PFNic

Dear Dr. McIsaac:

My name is Ishmal Nava. I live in Newport Oregon and have worked on the F/V Raven for 4 years. The vessel has fished shore side whiting for 15 years. We used to fish whiting through the month of September. But with the development of shore side whiting, the season has been a little shorter every year. What really concerns us now is the introduction of new large AFA vessels into the whiting fisheries.

These vessels have no historical participation in this fishery. Every one of these vessels, due to their large size, has a very significant impact on the whiting fisheries. When one of these vessels enters the fishery it shortens the season by a week. I've lost 30% of my whiting income this year because of these new large vessels entering the fishery.

It is my understanding that the American Fisheries Act required the Pacific Fisheries Management Council to protect fisheries under its jurisdiction and the participants in these fisheries from adverse impacts caused by the AFA fishing Cooperatives. These AFA vessels that have no history in the shore side whiting fishery are causing a direct adverse affect on the historical participants of this fishery. They are using the benefits of AFA & Coops by either leasing Pollock quota or delaying their entry into the Bering Sea Pollock B season to make it possible to be on the West Coast at this time of year.

We ask that you immediately implement regulations as required by the American Fisheries Act that will protect the historical participants. Restrict these new large AFA vessels to their historical participation as required by law.

There are a lot more of these vessels capable of entering this fishery. It may not matter to them if the fishery gets reduced down to a couple of weeks. But for us that have relied on this fishery for years it significantly affects our livelihood.

Sincerely, Ismael Maur G

Friday, August 11 2006

Dr. Donald McIsaac, Executive Director Pacific Fisheries Management Council 7700 NE Ambassador Place Suite 101 Portland, OR 97220

RECEIVED AUG 1 0 2006 PFNIC

Dear Dr. McIsaac:

My name is Corey Vance. I live in Siletz Oregon and have worked on the F/V Raven for 10 years. The vessel has fished shore side whiting for 15 years. We used to fish whiting through the month of September. But with the development of shore side whiting, the season has been a little shorter every year. What really concerns us now is the introduction of new large AFA vessels into the whiting fisheries.

These vessels have no historical participation in this fishery. Every one of these vessels, due to their large size, has a very significant impact on the whiting fisheries. When one of these vessels enters the fishery it shortens the season by a week. I've lost 30% of my whiting income this year because of these new large vessels entering the fishery.

It is my understanding that the American Fisheries Act required the Pacific Fisheries Management Council to protect fisheries under its jurisdiction and the participants in these fisheries from adverse impacts caused by the AFA fishing Cooperatives. These AFA vessels that have no history in the shore side whiting fishery are causing a direct adverse affect on the historical participants of this fishery. They are using the benefits of AFA & Coops by either leasing Pollock quota or delaying their entry into the Bering Sea Pollock B season to make it possible to be on the West Coast at this time of year.

We ask that you immediately implement regulations as required by the American Fisheries Act that will protect the historical participants. Restrict these new large AFA vessels to their historical participation as required by law.

There are a lot more of these vessels capable of entering this fishery. It may not matter to them if the fishery gets reduced down to a couple of weeks. But for us that have relied on this fishery for years it significantly affects our livelihood.

Sincerely, Coney Vance

Friday, August 11 2006

Dr. Donald McIsaac, Executive Director Pacific Fisheries Management Council 7700 NE Ambassador Place Suite 101 Portland, OR 97220

RECEIVED AUG 1 5 2006 PFMC

Dear Dr. McIsaac:

My name is Brian Junes. I live in Astoria Oregon and have worked on the F/V Raven for 4 years. The vessel has fished shore side whiting for 15 years. We used to fish whiting through the month of September. But with the development of shore side whiting, the season has been a little shorter every year. What really concerns us now is the introduction of new large AFA vessels into the whiting fisheries.

These vessels have no historical participation in this fishery. Every one of these vessels, due to their large size, has a very significant impact on the whiting fisheries. When one of these vessels enters the fishery it shortens the season by a week. I've lost 30% of my whiting income this year because of these new large vessels entering the fishery.

It is my understanding that the American Fisheries Act required the Pacific Fisheries Management Council to protect fisheries under its jurisdiction and the participants in these fisheries from adverse impacts caused by the AFA fishing Cooperatives. These AFA vessels that have no history in the shore side whiting fishery are causing a direct adverse affect on the historical participants of this fishery. They are using the benefits of AFA & Coops by either leasing Pollock quota or delaying their entry into the Bering Sea Pollock B season to make it possible to be on the West Coast at this time of year.

We ask that you immediately implement regulations as required by the American Fisheries Act that will protect the historical participants. Restrict these new large AFA vessels to their historical participation as required by law.

There are a lot more of these vessels capable of entering this fishery. It may not matter to them if the fishery gets reduced down to a couple of weeks. But for us that have relied on this fishery for years it significantly affects our livelihood.

Please Help now.

Sincerely,

Friday, August 11 2006

Dr. Donald McIsaac, Executive Director Pacific Fisheries Management Council 7700 NE Ambassador Place Suite 101 Portland, OR 97220

Dear Dr. McIsaac:

My name is Tom Ludwig. I live in Toledo Oregon and have worked on the F/V Raven for 12 years. The vessel has fished shore side whiting for 15 years. We used to fish whiting through the month of September. But with the development of shore side whiting, the season has been a little shorter every year. What really concerns us now is the introduction of new large AFA vessels into the whiting fisheries.

These vessels have no historical participation in this fishery. Every one of these vessels, due to their large size, has a very significant impact on the whiting fisheries. When one of these vessels enters the fishery it shortens the season by a week. I've lost 30% of my whiting income this year because of these new large vessels entering the fishery.

It is my understanding that the American Fisheries Act required the Pacific Fisheries Management Council to protect fisheries under its jurisdiction and the participants in these fisheries from adverse impacts caused by the AFA fishing Cooperatives. These AFA vessels that have no history in the shore side whiting fishery are causing a direct adverse affect on the historical participants of this fishery. They are using the benefits of AFA & Coops by either leasing Pollock quota or delaying their entry into the Bering Sea Pollock B season to make it possible to be on the West Coast at this time of year.

We ask that you immediately implement regulations as required by the American Fisheries Act that will protect the historical participants. Restrict these new large AFA vessels to their historical participation as required by law.

There are a lot more of these vessels capable of entering this fishery. It may not matter to them if the fishery gets reduced down to a couple of weeks. But for us that have relied on this fishery for years it significantly affects our livelihood.

Sincerely, Showin it Julley

SEADAWN FISHERIES, INC. P. O. Box 352 Newport, Oregon 97365 (541) 867-3911

August 14, 2006

Mr. Donald K. Hansen, Chairman Pacific Fisheries Management Council 7700 NE Ambassador Place, Suite 101 Portland, Oregon 97220-1384

RECEIVED AUG 1 2006 PFMC

RE: Agenda Item C.5 (American Fisheries Act Provisions)

Dear Chairman Hansen and Council Members:

I am the managing owner of the F/V Seadawn which is a 124 foot AFA Inshore Catcher vessel with a hold capacity of 640,000 pounds (285 mt). In addition, the Seadawn currently participates in the Mothership Whiting Fishery, and has a history in that fishery extending back to the joint venture days. As a result the Seadawn, like a substantial number of other AFA Catcher Vessels, is currently licensed and fully equipped to enter the Inshore Whiting Fishery without further investment if that entry is lawful in the future. I am also a member of both the United Catcher Boats (UCB) and Midwater Trawlers Cooperative (MTC) Trade Associations

Prior to AFA, the Seadawn and other large vessels similarly situated, normally did not participate in the Inshore Whiting Fishery because of the low value of the whiting and because the Inshore Whiting Fishery extended generally late enough into the summer so that a commitment would conflict with participating in the Bering Sea Pollock B Season when it was an Olympic fishery. Initially after adoption of AFA the Seadawn, and I expect others similarly situated, did not participate because it was generally thought that based on the terms of AFA the Council would establish sideboards preventing us from increasing participation in this fishery. Furthermore, the Council adopted control dates in the Federal Register of September 15, 1999 and June 20, 2000 indicating its intent to prevent AFA catcher vessels from increasing participation in the West Coast groundfish fishery so it looked like the Council was going to follow the mandate of the Act and we would be out. Now, however, it seems unclear as to whether the PFMC intends to limit further entry into the Inshore Whiting Fishery or open the doors and give large AFA Catcher Vessels such as the Seadawn an opportunity to participate. The PFMC allowed new AFA CVs into the fishery in 2006 which caused the 2006 Inshore Season to close 16 days earlier than in 2005. This is a benefit to the new entrants and an obvious hardship on those historically dependent on the fishery but as the managing owner of the Seadawn, ready and able to enter this fishery in 2007, I am interested in what the policy of this Council is to be. Can we enter or not?

As a member of an Inshore Pollock Cooperative and because of AFA, I can make arrangements to delay my entry into the Bering Sea Pollock B Season until mid-August and still have opportunity to fully harvest our pollock quota. This would allow the Seadawn plenty of opportunity to secure an inshore market and to fully participate in the Inshore Whiting Fishery. The economic incentive exists since a vessel such as the Seadawn can easily gross upwards of \$175,000 per week. Each new entrant such as the Seadawn may shorten the season by as much

as a week but even if the whiting fishery becomes an Olympic derby of only 10-14 days per year it is certainly worth our while to engage in this new fishery if regulations permit.

Before the Bering Sea crab was rationalized, the Seadawn and many of the other AFA catcher vessels which are currently eligible for the whiting fishery, regularly participated in the Red King crab derby even though it had a duration of only 4 or 5 days per year. We will happily participate in a whiting derby no matter how short it gets simply because as AFA vessels we are fully equipped, able to delay our participation in the pollock fishery and as a result it costs us nothing to participate. Allowing vessels such as the Seadawn to participate is probably beneficial in the sense that it maximizes efficiency in that one vessel like the Seadawn can easily displace 3 of the traditional coastal whiting trawlers simply because of its size. The economic savings will include less fuel, groceries, supplies and gear that will be purchased from local vendors. Also, substantially fewer crewmembers will be needed. The Inshore Whiting Fishery could easily be converted to a 2 week fishery (or less depending on quota) consisting primarily of large pollock trawlers, which obviously to many is the right way to go.

Personally I hope the Council does follow the mandate of the Act and protect the Inshore Whiting Fishery and its traditional participants from large AFA predatory vessels like the Seadawn, because there are so many smaller vessels truly dependent on this fishery that will ultimately be displaced with nowhere else to go and also because I have partners and family invested in some of these traditional vessels that have a long term dependency on the fishery. However, if the door is left open this is a capitalistic and competitive business and if my large AFA vessel owner friends from Seattle are going to be allowed to convert this fishery to a derby, I intend to enter the derby also. Do we need the money? No, because since AFA, with the increase in efficiency and utilization of the product along with rationalization of crab, we are making more money than we ever dreamed of. This is true of all these AFA guys who want to crowd into the Inshore Whiting Fishery but they will never admit it. They will have a story that sounds like "Motherhood and Apple Pie" and they will be supported by UCB because UCB has no members with long term and consistent catch history dating back before AFA (because they were engaged in the summertime Olympic B Season Pollock fishery before AFA). As a result, UCB and its AFA members have everything to gain by creating a new derby fishery and nothing to lose. As I said, this is a capitalistic and competitive business and if you open the doors to AFA predators they will come in and steal the history from those who don't have the same protections as they do.

It is our hope that the Council will make a clear and definitive statement as to its policy, so that if there are to be no restrictions on AFA Catcher Vessels without prior history entering the Inshore Sector, that processors will have adequate time to increase further their capitalization in this fishery and we can make our plans to participate in this new derby fishing.

Thank you.

Sincerely,

Paper

August 17, 2006

Mr. Donald K. Hansen, Chairman Pacific Fishery Management Council 7700 NE Ambassador Place, Suite 101 Portland, Oregon 97220-1348

Dear Chairman Hansen:

We are crewmen on the F/V Pegasus. This vessel has been a participant in the shore side whiting industry for the past decade. It has provided our families with a good source of income.

We urge you in the strongest voice possible to curb the erosion of the season by the introduction into the fishery of the large AFA vessels (from Alaska) with no history in shore side whiting.

The Pacific Fisheries Management Council is mandated to protect fishery participants from adverse impacts caused by AFA fishing cooperatives. Our season and income has been shortened by three weeks is more than a significant impact to vessels with <u>years</u> of history in the whiting industry. To allow the influx of these large Alaska boats in the face of a 40 million dollar buy-back program that cost our crew shares by 5% of our income seems to us that we are heading in the wrong direction.

We ask you only to do what is required by law; implementing the regulations by the American Fisheries Act that will protect historical participants; restricting these new large AFA vessels to their historical participation!

Thank you for your time and consideration of this critical issue. Help us now!

ARTURAS' FUSKENS' Sincerely:

Crew Men F/V Pegasus

Cc: Dr. Donald McIsaac, Executive Director PFMC Mr. Curt Melcher, Assistant Division Administrator ODF&W Mr. Phil Anderson WDF&W Ms. Marija Vojkovich CDF&W Fax# 808-329-8971

Yaquina Trawlers Inc. Lyle C. Yeck Pres. 1676 N. E. Yaquina Hts. Dr. Newport, Oregon 97365

F/V Raven

Ph# 808-938-6226

AUG 1 2006 AUG 1 2006 AUG 1 Agenda Item C.5 FMP Amendment 15

Friday, August 04, 2006

Mr. Donald K. Hansen, Chairman Pacific Fishery Management Council 7700 NE Ambassador Place, Suite 101 Portland, Oregon 97220-1348

Dear Chairman Hansen:

I am managing owner of the vessel F/V Raven. The Raven has participated in the whiting fisheries since 1981 in the early joint venture days. We have been fishing the offshore and inshore for the last 15 years. Our primary market has been delivering shoreside to Pacific Seafoods in Warrenton, Ore. The Raven is an AFA vessel that has traditionally fished Alaska in the first part of the year, and then we have returned to Oregon and participated in the Whiting Fisheries. We have been doing this prior to the enactment of the American Fisheries Act.

What concerns me now is the recent participation of new large AFA vessels that had never been engaged in the Inshore Fisheries. These vessels have no historical participation in this fishery. Every one of these vessels, due to their large size, has a very significant impact on the whiting fisheries. When one of these vessels enters the fishery it shortens the season by at least a week. I've lost 25% of my whiting catch this year because of these new large vessels entering the fishery. This loss has occurred with just the new recent participation of a couple of large new AFA vessels. What will it be like with 6 or 8 new boats the size of AFA vessel which packs upwards of 600,000 lbs per trip?

This fishery will become a "whiting opening" for a couple of weeks rather than a reliable fisheries for the historical users if protection is not enacted soon. I have heard that the plants "needed" these vessels. But the truth is that the processors greed to get a little more market share than their competitors is what drives this race for fish. That may work for the processors but does nothing to preserve "market share" for the fisherman.

It is my understanding that the American Fisheries Act required the Pacific Fisheries Management Council to protect fisheries under its jurisdiction and the participants in these fisheries from adverse impacts caused by the AFA fishing Cooperatives. These AFA vessels that have no history in the shore side whiting fishery are causing a direct adverse affect on the historical participants of this fishery. They are using the benefits of AFA & Coops by either

F/VRaven

Ph# 808-938-6226

Yaquina Trawlers Inc. Lyle C. Yeck Pres. 1676 N. E. Yaquina Hts. Dr. Newport, Oregon 97365

leasing Pollock quota or delaying their entry into the Bering Sea Pollock B season to make it possible to be on the West Coast at this time of year.

We ask that you immediately implement regulations as required by the American Fisheries Act that will protect the historical participants. Prohibit entry by these new large AFA vessels that have no pre AFA Inshore Whiting history as required by law.

What we need is rationalization of these fisheries so that we can extract the most and best product out of this fishery rather than the current Olympic system which, by its nature, reduces recovery rates, restricts product forms, encourages waste and makes managing the bycatch difficult. The first step in this rationalization should be restricting new entrants into the inshore whiting fishery by prohibiting AFA catcher vessels without pre AFA history in the fishery from entering and establishing the historical participants. Make no mistake about it; this point is not lost on these new AFA vessels. Most of them politic to rationalize the fisheries their in and then use this advantage to gain entrance into new fisheries. The large AFA catcher vessels are members of a group which with its members have successfully rationalized the Pollock fishery (via AFA) and the crab fishery (via Individual Quotas). Their major fisheries are now in the bank so other fisherman cannot steal it. So now this group and its large AFA vessel owners are on the prowl to steal history from other fisherman who are not protected by their council. The North Pacific Fishery Council protected its non AFA fisheries but the Pacific Fisheries Council has not yet acted. The PFMC needs to be decisive now or the Inshore Whiting Fisheries will be converted to a short Derby.

There are a lot more of these vessels capable of entering this fishery. It may not matter to them if the fishery gets reduced down to a couple of weeks. But for us that have relied on this fishery for years it significantly affects our livelihood.

Sincerely flil year

P. 1

AUG 1 7 2006 PFMC

August 14, 2006



Donald Hansen, Chair Pacific Fishery Management Council 7700 Ambassador Place, Suite 100 Portland, OR 97220

Re: AFA and Amendment 15

Dear Don:

The Fishermen's Marketing Association represents commercial groundfish and shrimp trawl fishermen in Washington, Oregon, and California.

I am writing to express our conditional support for the Council in moving forward with an amendment to the Groundfish Fishery Management Plan to limit fishing opportunities by those vessels which were granted access privileges in the Pollock fishery in the North Pacific by the passage of the American Fisheries Act. This is an action that Congress directed the Council to undertake; however, if the Council could not develop such an amendment then the Secretary was instructed to develop such an amendment.

The Council began this process in the late 1990's with Amendment 15, but the effort was delayed indefinitely when the amendment began to become overly complex and other important issues, such as rebuilding plans for overfished species, were given greater priority. Additionally, at the time it did not appear that a substantial effort shift was eminent; however, improving markets for whiting and anticipated reductions in North Pacific Pollock, have resulted in several AFA boats entering into the whiting fishery this year.

As stated above, our support for this effort is conditional. We believe that a fully implemented IFQ program for the groundfish trawl fishery should have work load priority. In fact, if the IFQ program was in place today, this issue of AFA boats entering into the groundfish fishery for whiting would be academic. The solution for these types of issues of access to the resource is the implementation of the IFQ program.

Thank you for the opportunity to provide these comments and I would be glad to provide additional comments or information if you or staff has questions.

Sincerely,

CC:

Peter Leipzig Executive Director

FMA Board of Directors Dave Jincks, MTC Brent Paine, UCB



F/V Raven

Raven Enterprises Inc. Robert Smith Pres. 1676 N.E. Yaquina Hts Dr. Newport, Oregon 97365



RECEIVED

AUG 1 8 2006

Pagenda item C.5 FMP amendment 15

Thursday, August 17, 2006

Mr. Donald K. Hansen, Chairman Pacific Fishery Management Council 7700 NE Ambassador Place, Suite 101 Portland, Oregon 97220-1348

Dear Chairman Hansen:

I am captain and co-owner of the F/V Raven. The Raven has been involved in the whiting fishery for the past 25 years. First in the early joint venture days then for the last 15 years in the inshore and offshore sectors. My vessel is an AFA vessel that has historically fished Alaska in the winter months and then comes home to the west coast and participates in the whiting fishery. We have done this for many years prior to the American Fisheries Act.

This year several large AFA vessels have entered the inshore whiting fishery that has never been involved in the fishery before. These boats have no historical participation in the inshore fishery. Because of there large carrying capacity they have had a big impact on the length of the whiting season this year. My 2006 season has been decreased by 25% this year compared to 2005 when we had the same quota. There are many more AFA boats that have the permits to fish on the west coast, many of them pack in excess of 500,000 lbs. How short will the season be then?

This fishery will soon turn into a "derby" for just a few weeks rather than a reliable fishery that we have historically had. This is of no concern to the large AFA vessels because after they mop up the inshore whiting fishery they can go on to another one or return back to Alaska where there Pollock is waiting for them protected by the American Fisheries Act. Also please consider the spillover from a shorter whiting season into the traditional groundfish sector. Many of the whiting vessels will be forced back into an already overburden groundfish sector because there will be nothing else to do.

It is my understanding the American Fisheries Act required the Pacific Management Council to protect the fisheries under there jurisdiction. These new AFA boats, that have no historical history, are causing a direct adverse effect on the boats that have been here for a long time. They are using the perks of there AFA fishery to be here on the west coast Page 2 August 17, 2006

this time of year to harvest whiting while either leasing there Pollock or going up later to catch their fish. Please support Admendment 15 and give us the protection we deserve under the American Fisheries Act

Sincerely,

Robert E.S.



MIDWATER TRAWLERS COOPERATIVE

P.O. Box 2352 NEWPORT, OREGON PHONE: 541-265-9317 FAX: 541-265-4557 jincks@pioneer.net

Date: August 17, 2006

RECEIVED AUG 2 I 2006 PFNIC

To: Mr. Donald K. Hansen, Chairman Pacific Fisheries Management Council 7700 NE Ambassador Place, Suite 101 Portland, Oregon 97220-1384

Re: Agenda Item C.5 (American Act Provisions, Amendment 15)

Dear Chairman Hansen and Council Members

Midwater Trawlers Cooperative's has fifteen members that have participated in the shoreside whiting fishery since 1991, and have relied on this fishery for a large part of their income. 2006 was a disaster, we knew in June that we were going to lose a huge part of our shoreside whiting season. In June we told the Council we would lose three weeks off the Shoreside season if all these large Pollock vessels that had never fished shoreside whiting were allowed to enter this fishery. We missed it by five days; we got sixteen days whacked off. Midwater Trawlers Cooperative (MTC) has been contacted by eighteen non member vessels that also fish shoreside whiting, asking us what's happened to their season, and what can be done to prevent 2007 from being another disaster.

Midwater Trawlers Cooperative members and non members that fish shoreside whiting will be at the September Council meeting to ask the Council to set aside the time, and to act swiftly to implement sideboards to protect the fishermen that have invested time and money in the shoreside whiting fishery. The spillover coming out of the huge Bering Sea rationalized pollock fishery has now cost most of us 30% of our income, with non member vessels reporting 50% loses in annual revenue. The spillover is continuing, the shoreside whiting fishermen that have not participated in the traditional groundfish fishery for years are now changing over to bottom fish to make up for lost income.

We have already been told that without immediate Council action the 2007, Shoreside whiting season will be a thirty day derby disaster. We now have the support of all the shoreside non-AFA whiting fishermen that depend of this fishery. We also have full support of all the American Fisheries Act fishermen that have always participated in the Shoreside whiting fishery who have depended on this fishery. We also have the support of West Coast Seafood Processors Association who recognizes the need to prevent a repeat of 2006.

We understand that the main hurdle the Council has is allocating the time needed to implement Amendment 15 before the June shoreside fishery begins. Amendment 15 should be given all the time needed; you have fishing families that are being severely impacted by an ugly problem that should have been dealt with in 2000.

It's now time to follow the law; it's actually six years and a lot of pain late. I saw how fast the Pacific Council went to the aid of the Catcher Processors when it was rumored of LE permits being bought to put on another CP. Using conservation as a key word, a letter was sent to change legislation to protect

Page 2 February 6, 2006

the CP fishery. Spiny dogfish, another example of how fast the Pacific Council can react to a conservation necessity, this one was also over at-sea processing. The Pacific Council has a string of control dates published in the Federal Register going back to 1998 to determine if management measures were needed to further limit harvest capacity. 1999 Federal Register, AFA sideboards, put fishermen on notice that action was pending. 2000 federal register, told AFA vessel owners that speculation in the whiting fishery, may not gain them entrance into the fishery, and permits may be revoked. 2003 Federal Register announcing the trawl IQ, also putting fishermen on notice. It's now time to put the control date printed in the 2000 Federal Register to use.

It's very easy to see all the adverse affects that AFA Legislation told the Pacific Council to protect their fisheries from. The most obvious affect is what happened this year, large loss of income, spillover into other fisheries, and conservation, which is being used by the Council and catcher processors to achieve a closed class in the at-sea CP whiting fishery. Council time shouldn't be a question, not when you can see how the continued allowance of these vessels to enter the shoreside fishery will affect all West Coast fisheries. We are asking the Pacific Fisheries Management Council to make Amendment 15 their highest priority, the losses that will occur from ignoring the shoreside whiting fishery will spillover into all other fisheries.

Thank you,

Sincerely,

Dol your

David Jincks Midwater Trawlers Cooperative

F/V Pegasus Captain R. Michael Storey Captain Bryan C. North 89610 Sea Breeze Drive Warrenton, Oregon 97146 PECETVI 406-21-2008 PEMC

August 18, 2006

Mr. Donald K. Hansen, Chairman Pacific Fishery Management Council 7700 NE Ambassador Place, Suite 101 Portland, Oregon 97220-1348

Dear Chairman Hansen:

The Pacific Fisheries Management Council needs to stop the influx of Alaska AFA Pollock vessels into the coastal whiting industry. For the past decade, nearly half or our income and our crews is derived from the whiting fishery. This year the season was shortened by close to <u>three</u> weeks with an increase in by-catch. Derby fishing with a huge increase in production is detrimental to by-catch issues, economic stability and control of the fishery. These are all areas that the council has been trying to execute for some time.

Not only does the shortening of the whiting season affect those who participated but changes the dynamics of the harvesting of all traditional ground fish and how those seasons are executed. Example: The influx of the whiting boats into traditional fisheries at an early date adds additional pressure on stocks that are already at their harvest levels.

The council needs to act fast to protect all ground fish as well as adding stability to the whiting industry.

Sincerely,

Aletric R. Michael Stree

Captain R. Michael Storey F/V Pegasus Cuptan Bryen C. Porth

Captain Bryan C. North F/V Pegasus

Cc: Dr. Donald McIsaac, Executive Director PFMC Mr. Curt Melcher, Assistant Division Administrator ODF&W Mr. Phil Anderson WDF&W Ms. Marija Vojkovich CDF&W August 16th, 2006 Pacific Fishery Management Council 7700 NE Ambassador Place, suite 101 Portland, OR 97220 Dear Council members: Agenda Item C.5 RECEIVED FMP Amendment 15 AUG 2 1 2006 PFNIC

My name is Wade Hearne my father is shore side whiting fishermen and owner operator of the F/V Last Straw that holds a west coast ground fish trawl permit. This vessel was mainly used for ground fish in the early 90s but after restrictions were implicated we have become increasingly more reliant on the mid-water fishery of pacific whiting. Today I would now estimate that our participation in the shore side-whiting season brings 40% of the gross income earned by the vessel, my family, and the crew of the vessel. I also have been crewing on the vessel during the whiting season to pay for my college education at Oregon Sate University and rely totally on this season for all of my income.

After reading the Mid-water Trawlers Cooperative letter to Chairman Hansen I understand that after the American Fisheries Act (AFA) in the north pacific, eliminating an Olympic season requires those vessels affected to prevent (AFA) vessels from impacting other fisheries; however I personally witnessed (AFA) vessels trawling for shore -side whiting. As explained by David Jinks and the Midwater Trawlers in the to the Pacific Fishery Management Council letter I now understand that (AFA) vessels impacting the shoreside whiting is against the law, and that it is the Pacific Fishery Management Council (PFMC) to prevent such vessels from doing so. I have also come to understand that (PFMC) had once had it on its agenda that to prevent such vessels, but dropped it from the agenda because of large workload.

I would like to ask the (PFMC) to please make this a priority on the agenda because whiting has become such a large part of many of the trawlers on the Oregon Coast not just my families. I know that my family, our business, our crew, and my education rely on the shore side-whiting fishery.

Sincerely Wade Hearne

algenda Hem C.5 RECEIVED FMP amendment 15 AUG 2 1 2006 8-17-06 Dear Chairman Hansen I am Dutting you in requards to our families lively hood. My husband and his Ashing ressel "RAVEN" is gradually loosing it's market share of the "Whiting" catch due to large AFA fishing ressels, with no prior inshore history, fishing on our Oregon coast. Thus decreasing our fishing quota which will cause our local families to suffer. Thou I am not well versed on all of the details, there are people like my husband and his orew who are. We need your help mr. Hansen - Could you please bring this important issue to the fore front before it gets out of hand and becomes vreversable! Please Support amendment 15.

Thank you for your time & e/fort! foutur Init

August 17, 2006

RECEIVEL AUG 2 I 2006 PFNIC

Mr. Donald K. Hansen, Chairman Pacific Fishery Management Council 7700 NE Ambassador Place, Suite 101 Portland, Oregon 97220-1348

Dear Chairman Hansen:

We are crewmen on the F/V Pegasus. This vessel has been a participant in the shore side whiting industry for the past decade. It has provided our families with a good source of income.

We urge you in the strongest voice possible to curb the erosion of the season by the introduction into the fishery of the large AFA vessels (from Alaska) with no history in shore side whiting.

The Pacific Fisheries Management Council is mandated to protect fishery participants from adverse impacts caused by AFA fishing cooperatives. Our season and income has been shortened by three weeks is more than a significant impact to vessels with <u>years</u> of history in the whiting industry. To allow the influx of these large Alaska boats in the face of a 40 million dollar buy-back program that cost our crew shares by 5% of our income seems to us that we are heading in the wrong direction.

We ask you only to do what is required by law; implementing the regulations by the American Fisheries Act that will protect historical participants; restricting these new large AFA vessels to their historical participation!

Thank you for your time and consideration of this critical issue. Help us now!

ARTURAS' FUSKENS' Sincerely:

Crew Men F/V Pegasus

Cc: Dr. Donald McIsaac, Executive Director PFMC Mr. Curt Melcher, Assistant Division Administrator ODF&W Mr. Phil Anderson WDF&W Ms. Marija Vojkovich CDF&W August 17, 2006

Mr. Donald K. Hansen, Chairman Pacific Fishery Management Council 7700 NE Ambassador Place, Suite 101 Portland, Oregon 97220-1348

Dear Chairman Hansen:

We are crewmen on the F/V Pegasus. This vessel has been a participant in the shore side whiting industry for the past decade. It has provided our families with a good source of income.

AUG 2 1 2006 PFN/C

We urge you in the strongest voice possible to curb the erosion of the season by the introduction into the fishery of the large AFA vessels (from Alaska) with no history in shore side whiting.

The Pacific Fisheries Management Council is mandated to protect fishery participants from adverse impacts caused by AFA fishing cooperatives. Our season and income has been shortened by three weeks is more than a significant impact to vessels with <u>years</u> of history in the whiting industry. To allow the influx of these large Alaska boats in the face of a 40 million dollar buy-back program that cost our crew shares by 5% of our income seems to us that we are heading in the wrong direction.

We ask you only to do what is required by law; implementing the regulations by the American Fisheries Act that will protect historical participants; restricting these new large AFA vessels to their historical participation!

Thank you for your time and consideration of this critical issue. Help us now!

APTURAS' FLOSKENS Sincerely;

Crew Men F/V Pegasus

Cc: Dr. Donald McIsaac, Executive Director PFMC Mr. Curt Melcher, Assistant Division Administrator ODF&W Mr. Phil Anderson WDF&W Ms. Marija Vojkovich CDF&W

BRETT HEARNE

407 SE 4TH STREET NEWPORT, OR 97365 541-265-7821 Laststraw@newportnet.com

AUG 2 2 2006 PFNIC

August 17, 2006

Mr.Donald K Hansen, Chairman Pacific Fishery Management Council 77 00 NE Ambassador Place, Suite 101 Portland, Oregon 97220-1348

Dear Chairman Hansen:

I am writing to you concerning the impact the of large AFA vessels recently introduced into the pacific whiting fisheries. We own and operate the F/V Last Straw. We have been fishing for pacific whiting since 1998. This fishery constitutes nearly 40% four yearly income .The pacific whiting is very crucial to our lively hood . With the introduction of the large AFA vessels into the whiting fishery our season has been shortened causing us to lose income and threatening our business survival. These vessels have no historical participation in this fishery. Every one of these vessels due to their large size has a significant impact on the whiting fishery.

I have personally fished for whiting since 1980, our boat has history with whiting at least back to 1979, and shore side whiting since 1998.

The Whiting fishery has not been protected by sideboards as required by the American Fisheries Act when the Pacific Council moves ahead quickly and provides the Inshore Whiting fishery with the protection established in the American Fisheries Act the destabilizing of this fishery can be avoided.

We ask that you immediately implement regulations as required by the American Fisheries Act that will protect the historical participants. Restrict these new large AFA vessels the their historical participation as required by law.

.Sincerely.

For FIV Last Straw

BRETT HEARNE

407 SE 4TH STREET NEWPORT, OR 97365 541-265-7821 Laststraw@newportnet.com

AUG 2 1 2006 DFMC

August 17, 2006 Mr.Donald K Hansen, Chairman Pacific Fishery Management Council 77 00 NE Ambassador Place, Suite 101 Portland, Oregon 97220-1348

Dear Chairman Hansen:

I am writing to you concerning the impact the of large AFA vessels recently introduced into the pacific whiting fisheries . We own and operate the F/V Last Straw . We have been fishing for pacific whiting since 1998 . This fishery constitutes nearly 40% of our yearly income .The pacific whiting is very crucial to our lively hood . With the introduction of the large AFA vessels into the whiting fishery our season has been shortened causing us to lose income and threatening our business survival. These vessels have no historical participation in this fishery . Every one of these vessels due to their large size has a significant impact on the whiting fishery.

I have personally fished for whiting since 1980, our boat has history with whiting at least back to 1979, and shore side whiting since 1998. We are a family business that has worked to establish a history in this fishery. large vessels with out established shore-side fishing history negatively impact our market. When the Olympic Pollock fishery was rationalized the American Fisheries Act established the AFA vessels would not be allowed to impact another fishery.

The Whiting fishery has not been protected by sideboards as required by the American Fisheries Act When the Pacific Council moves ahead quickly and provides the Inshore Whiting fishery with the protection established in the American Fisheries Act the destabilizing of this fishery can be avoided.

We ask that you immediately implement regulations as required by the American Fisheries Act that will protect the shore-side whiting boats with history in the fishery. Restrict these new large AFA vessels their participation as required by law. Please act quickly to protect our fishery. Thank you

Brett Hearne

agendatien C.5 FMP Ameniment 15

RECEIVED AUG 2 2006 PFMC

Dear Mr. Hanson, My name is Merritt, and I am 14 years 010. My dad is a commercial fisherman off of the coast of Newport, Cregon. His primary Summer catch is Pacific Whiting. He tells us that we are loosing our supply of fish ove to larger AFA" boats from Alaska fishing our area and hurting us land our future by taking a large share of our fish. Though it would be nice to have him fish less at times, it would not be good if he Could not fish at all due to these large AFA boats, whith have no prior inshare history. They are taking away our Hamilies' futures.

Thank you very much for reading my letter, and I hope you can help. Please support amendment 15!

Sincerely, Mewitt Smith O'Weill

Agenda Item C.5 FMP Amendment 15

BRETT HEARNE

407 SE 4TH STREET NEWPORT, OR 97365 541-265-7821 Laststraw@newportnet.com

RECEIVEL AUG 2 I 2006 PFNIC

August 17, 2006 Dr. Donald McIsaac, Executive Director Pacific Fisheries Management Council 7700 NE Ambassador Place ,Suite 101 Portland, Oregon 97220-1384

Dear Executive Director:

I am writing to you concerning the impact the of large AFA vessels recently introduced into the pacific whiting fisheries . We own and operate the F/V Last Straw . We have been fishing for pacific whiting since 1998 . This fishery constitutes nearly 40% of our yearly income .The pacific whiting is very crucial to our lively hood . With the introduction of the large AFA vessels into the whiting fishery our season has been shortened causing us to lose income and threatening our business survival. These vessels have no historical participation in this fishery . Every one of these vessels due to their large size has a significant impact on the whiting fishery.

I have personally fished for whiting since 1980, our boat has history with whiting at least back to 1979, and shore side whiting since 1998. We are a family business that has worked to establish a history in this fishery. large vessels with out established shore-side fishing history negatively impact our market. When the Olympic Pollock fishery was rationalized the American Fisheries Act established the AFA vessels would not be allowed to impact another fishery.

The Whiting fishery has not been protected by sideboards as required by the American Fisheries Act When the Pacific Council moves ahead quickly and provides the Inshore Whiting fishery with the protection established in the American Fisheries Act the destabilizing of this fishery can be avoided.

We ask that you immediately implement regulations as required by the American Fisheries Act that will protect the shore-side whiting boats with history in the fishery. Restrict these new large AFA vessels their participation as required by law. Please act quickly to protect our fishery. Thank you

Brett Hearne

August 14, 2006





Donald Hansen, Chair Pacific Fishery Management Council 7700 Ambassador Place, Suite 100 Portland, OR 97220

Re: AFA and Amendment 15

Dear Don:

The Fishermen's Marketing Association represents commercial groundfish and shrimp trawl fishermen in Washington, Oregon, and California.

I am writing to express our conditional support for the Council in moving forward with an amendment to the Groundfish Fishery Management Plan to limit fishing opportunities by those vessels which were granted access privileges in the Pollock fishery in the North Pacific by the passage of the American Fisheries Act. This is an action that Congress directed the Council to undertake; however, if the Council could not develop such an amendment then the Secretary was instructed to develop such an amendment.

The Council began this process in the late 1990's with Amendment 15, but the effort was delayed indefinitely when the amendment began to become overly complex and other important issues, such as rebuilding plans for overfished species, were given greater priority. Additionally, at the time it did not appear that a substantial effort shift was eminent; however, improving markets for whiting and anticipated reductions in North Pacific Pollock, have resulted in several AFA boats entering into the whiting fishery this year.

As stated above, our support for this effort is conditional. We believe that a fully implemented IFQ program for the groundfish trawl fishery should have work load priority. In fact, if the IFQ program was in place today, this issue of AFA boats entering into the groundfish fishery for whiting would be academic. The solution for these types of issues of access to the resource is the implementation of the IFQ program.

Thank you for the opportunity to provide these comments and I would be glad to provide additional comments or information if you or staff has questions.

Sincerely,

Peter Leipzig Executive Director

cc: FMA Board of Directors Dave Jincks, MTC Brent Paine, UCB August 21, 2006

Mr. Donald K. Hansen, Chairman Pacific Fisheries Management Council 7700 NE Ambassador Place Suite 101 Portland, Oregon 97220-1384

RECEIVED AUG 2 2 2006 PFMC

Dear Chairman Hansen,

I am writing this letter in regards to large AFA vessels entering the shore side whiting fishery. My name is David Richcreek and I have been a commercial fisherman since graduating high school in 1980. I have spent several years of fishing the west coast and many in Alaska. I have been on the F/V Raven since 1988, first as a crewman, then working my way to the wheelhouse as a captain and now part owner. We fish Alaska Bering Sea Pollock and cod, then summer months we fish whiting off the Oregon & Washington coast.

This year my whiting season was shorten by 25%, as large AFA boats for the first time decided to start fishing whiting. These boats sell or have other company boats harvest their Pollock while they "double-dip" in the whiting fishery. These boats have no history in a shore side fishery, but see an opportunity to make their company more money at the expense of smaller west coast boats. Some of the boats participating in the fishery this year have sold all their Pollock rights for millions of dollars and now are looking for something for their boats to do.

This year Bering Sea Pollock season was slow fishing and high fuel price. Next year there will be several large AFA boats looking at the whiting fishery, hence our season will be 50% shorter, 75% shorter, who knows?

If all goes well I plan to be at the Foster City meeting in September. I hope you can protect our fishery as required by law.

Sincerely,

Dave Richcreek

Wednesday, August 16,2006

Mr. Donald K. Hansen, Chairman Pacific Fisheries Management Council 7700 NE Ambassador Place Suite 101 Portland Oregon 97220-1384

RECEIVED AUG 2 2 2006 PFMIC

Dear Chairman Hansen:

My name is Michael B Retherford, I'm a crewman on the F/V EXCALIBUR, home port Newport, Oregon. This vessel has participated in the whiting fishery for the last 9 years, and it's a large portion of our income. My concern as a crewman and a family man, with all the increased production coming in from new large AFA vessels, can I still count on this income? The more AFA vessels, with no historical participation allowed into this fishery means, shorter seasons : which means less income.

My hope is that you will protect us by implementing the regulations of the American Fisheries Act. In turn this will protect our interest and income in the future of the fishery.

Sincerely,

W2AB Phint

Wednesday, August 16,2006

Mr. Donald K. Hansen, Chairman Pacific Fisheries Management Council 7700 NE Ambassador Place Suite 101 Portland Oregon 97220-1384

RECEIVED AUG 2 2 2006 PFMC

Dear Chairman Hansen:

My name is Chris Loper, I'm a crewman on the F/V EXCALIBUR, home port Newport, Oregon. This vessel has participated in the whiting fishery for the last 9 years, and it's a large portion of our income. My concern as a crewman and a family man, with all the increased production coming in from new large AFA vessels, can I still count on this income? The more AFA vessels, with no historical participation allowed into this fishery means, shorter seasons : which means less income.

My hope is that you will protect us by implementing the regulations of the American Fisheries Act. In turn this will protect our interest and income in the future of the fishery.

Sincerely, Chin Lane

Wednesday, August 16,2006

Mr. Donald K. Hansen, Chairman Pacific Fisheries Management Council 7700 NE Ambassador Place Suite 101 Portland Oregon 97220-1384

RECEIVED AUG 2 2 2006 PFMC

Dear Chairman Hansen:

My name is Luke Welch, I'm a crewman on the F/V EXCALIBUR, home port Newport, Oregon. This vessel has participated in the whiting fishery for the last 9 years, and it's a large portion of our income. My concern as a crewman and a family man, with all the increased production coming in from new large AFA vessels, can I still count on this income? The more AFA vessels, with no historical participation allowed into this fishery means, shorter seasons : which means less income.

My hope is that you will protect us by implementing the regulations of the American Fisheries Act. In turn this will protect our interest and income in the future of the fishery.

Sincerely, Jok Weld

Wednesday, August 16,2006

Mr. Donald K. Hansen, Chairman Pacific Fisheries Management Council 7700 NE Ambassador Place Suite 101 Portland Oregon 97220-1384

RECEIVED AUG 2 2 2006 PFNIC

Dear Chairman Hansen:

My name is Chris Retherford, I'm a crewman on the F/V EXCALIBUR, home port Newport, Oregon. This vessel has participated in the whiting fishery for the last 9 years, and it's a large portion of our income. My concern as a crewman and a family man, with all the increased production coming in from new large AFA vessels, can I still count on this income? The more AFA vessels, with no historical participation allowed into this fishery means, shorter seasons : which means less income.

My hope is that you will protect us by implementing the regulations of the American Fisheries Act. In turn this will protect our interest and income in the future of the fishery.

Sincerely,

Il no tell

Wednesday, August 16,2006

Mr. Donald K. Hansen, Chairman Pacific Fisheries Management Council 7700 NE Ambassador Place Suite 101 Portland Oregon 97220-1384

RECEIVED AUG 2 2 2006 PFMC

Dear Chairman Hansen:

My name is Mike Retherford. I'm owner and operator of F/V Excalibur out of Newport Oregon. I've participated in the whiting fishery for 9 years (seasons). As you probably know by now, there is much concern about recent participation in this fishery from large AFA vessels. I strongly urge PFMC to pick up where they left off on Amendment 15 and implement the regulations put forth in the American Fisheries Act. Thus doing so will not only protect historical participation in the whiting fishery, it will also protect for spillover into other west coast fisheries. As I recognize your work loads, please take in consideration my concerns of our future, and help protect it.

Thank you for your time and effort on this issue.

Sincerely

Mul SA

Mike Retherford

NEST COAST SEAFOON PROCESSORS ASSO

West Coast Seafood Processors Association 1618 SW 1st Avenue, Suite 318 Portland, OR 97201 503-227-5076

August 18, 2006

Mr. Donald Hansen, Chairman Pacific Fishery Management Council 7700 NE Ambassador Place Suite 101 Portland, OR 97220

RECEIVED AUG 2 3 2006 PFINC

Dear Don:

The following is provided as public comment under Agenda Item C.5.d, Pacific Groundfish Amendment 15.

The West Coast Seafood Processors Association (WCSPA) has supported establishment of appropriate regulations to protect the Pacific whiting and groundfish fisheries from overcapitalization caused by a Congressional grant of benefits under the American Fisheries Act. We believe that the Pacific Fishery Management Council should move forward with consideration of Amendment 15 to the Pacific Groundfish Fishery Management Plan, using as a base the proposal submitted by the Midwater Trawlers Cooperative at the June, 2006, Council meeting and the previously published control date of June 29, 2000.

This position has been supported by a majority of the WCSPA Board of Directors. We look forward to working with the Council on further development and approval of Amendment 15.

Sincerely,

Stather Mann

Heather Munro Mann Deputy Executive Director

541 336 0209

541-336-0209

Cooper Fishing, Inc. Patience Fisheries, Inc. P. O. Box 428 Newport, OR 97365

August 23, 2006

Mr. Donald K. Hansen, Chairman Pacific Fishery Management Council 7700 N. E Ambassador Place Suite 101 Portland, OR 97220-1384 RECEIVED AUG 2 3 2006 PFMC

RE: Amendment 15

Dear Chairman Hansen:

I am the owner of two trawlers that have fished in the shoreside whiting fishery since 1992. I would urge the council to take action on Amendment 15. Without action the onshore whiting seasons will just continue to get shorter and shorter. Proof is in the year 20006. It was 12 days shorter than 2005 with an OY equal in size. The parties hurt by the shortened season are the owners and crews of the boats that have pioneered this fishery at great time and expense.

I believe that congress gave PFMC through AFA a mandate to insure that AFA vessels that had not participated during the window period not be allowed to enter the PFMC fisheries and adversely impact boats already fishing in the PFMC. That's why I believe that sideboards should be adopted.

I urge the council to stay with the cut off date of Sept 16, 1999. AFA boats that enter the fishery after that date knew that they might be sideboarded out of that fishery at anytime. Some have decided to try it and they have shortened the season causing the traditional whiting fleet a loss in revenue of approximately 2.5 million in 2006 alone.

Sincerely Mark Cooper Mail Cooper

August 21, 2006

Dr. Donald McIsaac, Executive Director Pacific Fisheries Management Council 7700 NE Ambassador Place Suite 101 Portland, Oregon 97220-1384

RECEIVED Aug 2 3 2006 PFINIC

Dear Dr. McIsaac,

I am writing this letter in regards to large AFA vessels entering the shore side whiting fishery. My name is David Richcreek and I have been a commercial fisherman since graduating high school in 1980. I have spent several years of fishing the west coast and many in Alaska. I have been on the F/V Raven since 1988, first as a crewman, then working my way to the wheelhouse as a captain and now part owner. We fish Alaska Bering Sea Pollock and cod, then summer months we fish whiting off the Oregon & Washington coast.

This year my whiting season was shorten by 25%, as large AFA boats for the first time decided to start fishing whiting. These boats sell or have other company boats harvest their Pollock while they "double-dip" in the whiting fishery. These boats have no history in a shore side fishery, but see an opportunity to make their company more money at the expense of smaller west coast boats. Some of the boats participating in the fishery this year have sold all their Pollock rights for millions of dollars and now are looking for something for their boats to do.

This year Bering Sea Pollock season was slow fishing and high fuel price. Next year there will be several large AFA boats looking at the whiting fishery, hence our season will be 50% shorter, 75% shorter, who knows?

If all goes well I plan to be at the Foster City meeting in September. I hope you can protect our fishery as required by law.

Sincerely

Dave Richcreek

BAY ISLANDER, INC

Craig & Linda Cochran 7563 YAQUINA BAY RD NEWPORT. OR 97380 541-265-7463 541-265-4290fax

Pacific Fisheries Management Council 700 N. E. Ambassador Place Suite 101 Portland, OR 97220

RECEIVED AUG 2 3 2006 PFMC

August 23, 2006

Chairman Hansen and Council:

Since 1994, when Limited Entry was implemented, the Pacific Coast shore-side whiting fishery has been continually eroded by Management decisions.

1. The CP's swere allowed to enter the fishery, which they had not previously participated in by stacking permits. These CP's do not participate in the 5% Buyback Program. They do not pay state landing tax, and yet have the power to prevent the shore-side season through by-catch problems.

2. In 1999 The American Fisheries Act (AFA) was implemented in the Bering Sea. Not only did AFA close the Bering Sea to vessels which did not have History there, AFA through the formation of co-ops also enabled those vessels to branch out and impact other fisheries. The U. S. Congress recognized this posibility and gave the Regional Councils the responsibility of preventing this from happening. The NPFMC took this responsibility seriously and set sidboards for AFA vessels in the Gulf of Alaska restricting AFA vessels to their history in the GOA for AFA qualifying years.

The PFMC did talk about sideboards in 1999 and posted a notice in the Federal Register Vol-64 No 226 Wed. Nov. 24, 1999 under Proposed Rules. This document stated that Sept. 16, 1999 was a control date and that vessels eligible vor benefits under AFA may be subject to restrictions in the Pacific Coast

P.01

-2-

Groundfish Fisheries.

Nothing more was done! This year some AFA vessels which had no shoreside history shortened the shoreside whiting season by 16 days. In 2005 the season lasted until 8-18-05 while in 2006 it closed 2006. This cost my vessel 16 deliveries in 2006. This also cost 16 days of labor for the people who work in the fish plant.

I think it is about time that the PFMC stood up and took care of this business and eliminated the AFA boats withnno history prior to 2000.

Sincerely,

Craig M. Cochran

EXEMPTED FISHING PERMITS FOR 2007 FISHERIES

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. Because the EFP fisheries harvest or impact a portion of the overall available harvest, preliminary Council approval and harvest set asides for EFPs in 2007 (and 2008) were adopted along with 2007-2008 management measures at the June 2006 Council meeting. The preliminary 2007 EFP harvest set-asides were 6.9 mt of bocaccio, 0.4 mt of canary rockfish, 0.1 mt of cowcod, 0.4 mt of darkblotched rockfish, 3.6 mt of widow rockfish, and 0.1 mt of yelloweye rockfish.

Applications for EFPs proposed for 2007 were provided in the June briefing book to give Council members, Council advisory bodies, and the general public an opportunity to review these applications and prepare their recommendations for this meeting. Three EFP applications were reviewed in June and are considered for approval at this meeting (Agenda Items C.6.a, Attachments 1, 2, and 3). The three proposed EFPs are designed to test different hook and line gear configurations and strategies to selectively harvest abundant chilipepper rockfish off central California. The preliminary EFP set-asides decided in June were based on proposed bycatch caps in two of the three EFP applications provided in June; the third application was incomplete. All three EFP applications now propose bycatch caps for overfished species. The proposed bycatch caps in the third EFP application are 3,600 lbs (1.6 mt) of bocaccio, 240 lbs (0.1 mt) of canary rockfish, 6 cowcod (individual fish), 3,600 lbs (1.6 mt) of widow rockfish, and 6 yelloweye rockfish (individual fish). This represents the additional yield needed to be set aside to accommodate all three EFPs.

Under this agenda item, the Council will review and consider recommending approval of 2007 EFP applications for public review. This will allow the EFP sponsors and the public to understand the Council's intentions for 2007 EFPs prior to final Council action at the November meeting. There might also be a need to consider recommending a shoreside whiting EFP for the 2007 whiting fishery depending on advice from NMFS. Information provided under Agenda Item C.8 may also be helpful for deciding the need for a shoreside whiting EFP next year.

<u>Council Action</u>: Consider EFP applications for 2007 and consider recommending approval for public review.

Reference Materials:

- 1. Agenda Item C.6.a, Attachment 1: Chilipepper Rockfish EFP Application Sponsored by Berkeley.
- 2. Agenda Item C.6.a, Attachment 2: Chilipepper Rockfish EFP Application Sponsored by Churchman.
- 3. Agenda Item C.6.a, Attachment 3: Chilipepper Rockfish EFP Application Sponsored by Kraencke and Pemberton.

Agenda Order:

- a. Agenda Item Overview
- b. Reports and Comments of Advisory Bodies
- c. Public Comments
- d. Council Action: Approve for Public Review

PFMC 08/21/06 John DeVore

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 24, 2006 Applicant: Steven A. Berkeley Long Marine Lab, University of California, Santa Cruz, 100 Shaffer Road Santa Cruz, CA 95060

> Phone: 831-459-3530 Email: <u>stevenab@ucsc.edu</u>

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 (<u>http://www.st.nmfs.gov/pls/webpls/MF_ANNUAL_LANDINGS.RESULTS</u>) 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 speciesselective 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. 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 (0.65 mt) annual cap calculated as a maximum 3% by weight of expected chilipepper take Bocaccio: 7,200 lb (3.27 mt) annual cap calculated as a maximum 15% by weight of expected
- chilipepper take
- Canary: 20 lb bimonthly per vessel, 360 lb annual cap for all vessels

Cowcod: 1 fish annual cap

Yelloweye: 1 fish annual cap

Darkblotched: 50 lb bimonthly per vessel cap, 900 lb annual cap for all vessels

Under the terms of this EFP, each vessel will carry an observer and 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).

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 TO TEST A SUSTAINABLE HOOK AND LINE FISHERY FOR CHILLIE PEPPER ROCKFISH INSIDE THE NON TRAWL R.C.A. IN CENTRAL CALIFORNIA. (40/10-34/27).

Date of application 5/21/06

Applicant Name

Josh Churchman 1 Opal Road. Bolinas Ca. 94924 (415) 868 0982

John Mellor Ed Paasch Kurt Hochberg

MAY 2 3 2006 PFMC

Purposes and goals of the proposed experiment;

The goal of the exempted fishery is to develop a method for harvesting the abundant stocks of Chilipepper rockfish in the central California region, (40/10 to 38) and minimize the take of not target species. (canary, cow cod, golden-eye)

- Design a sustainable hook and line fishery for limited entry and open access vessels
- Restore historic method for a total retention fishery
- Bring back a community based fishery for rockfish

The specific goals of the experiment are;

- evaluate the effectiveness of vertically fished gear using a maximum of one hundred hooks
- measure by catch of non target species

Disposition of fish harvested under EFP

Species caught within normal trip limits may be retained and sold. All fish taken over species caps will be forfeited.

Justification explaining why an EFP is warranted;

Traditional "Fixed Gear" 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. Any EFP for this area should strive to be

a non-bottom contact fishery. The second flaw is the fact that too many hooks are deployed on any given set. If the set lands on a spot with the wrong kind of fish the impact is greater as the number of hooks increases.

The chillipepper rockfish is often found in mid-water. A vertical line will fish a suspended shoal of fish as well as a horizontal line and the vertical line does not need to contact the bottom to be effective

Statement of project significance

The three major ports in this area are Bodega Bay, San Francisco bay and Half moon bay. All three of these ports have had significant historic 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 so more boats catching fewer fish will make more money to support these three diminishing fishing communities.

If there is an open access fishery planned for the future in this area a vertical hook and line, hand operated equipment only alternative may be a consideration for the "go slow" approach.

Vessels to be covered by the EFP

FV Palo FG 27309 GF 0056 Josh Churchman	Bodega bay
FV Hazel A FG 44951 GF 0125 Ed Paasch	Bodega Bay
FV High Hopes FG 40156 L07874 John Mellor	San Francisco
FV Rogue FG 40158 Kurt Hochberg	San Francisco

Species and amounts to be harvested

The target species to be harvested is the Chillipepper rockfish (sebastes goodei)

Proposed vessel allocations... Two month limits

10,000 lbs Chilliepepper 1000 lbs Bocaccio 1000 lbs Minor shelf (widow/ yellowtail) 50 lbs cannary 25 lbs cow cod 25 lbs yellow eye

Two periods of two months each...Dec. thru March and August thru November Limits will be vessel specific and when a cap is reached that vessel will not fish until the beginning of the next two month period.

The Bocaccio rockfish (sebasties paucispinis) is often found with the chillipepper. The Bocaccio is much larger than the chilli and the pounds per fish difference is significant. The incidental take of Bocaccio is the only significant non target interaction anticipated in this EFP proposal.

All fishing will take place outside the 100 fathom line

All vessels will carry an observer and agree to pay any reasonable cost for the observer

All vessels will declair the time and place of landing to allow access to interested biologists

All vessels will have a VMS system

Contact person.... Josh Churchman 1 opal rd 5op Bolinas Ca. 94924 415 868 0982

Julh

Agenda Item C.6.a Attachment 3 September 2006

Proposal

The goal of this exempted fishing permit (EFP) is to demonstrate it is possible to harvest healthy stocks of Chilipepper Rockfish while avoiding other species deemed less healthy. This EFP would allow a limited number of vessels (6) take Chilipepper rockfish shoreward of the RCA boundary line using trolled hook and line gear known as "carpet runner" gear. At this time pursuing this underealized resource is economically unfeasible due to Chilipepper rockfish being considered part of the 200 pound bimonthly shelf rockfish limit. Allowing Chilipepper rockfish to be in a separate category and increasing the limit to 2000 pounds per month would make this a viable fishery. This would provide an alternative to replace lost fishing opportunities available to small vessels as a result of other closures. By allowing fishing with selective gear in the present RCA, the fishing would be done in the area where the targeted fish are found in the greatest numbers. There would be 100% retention of legal fish with only prohibited species being discarded. Trips would have 100% observer coverage to document and record the species caught.

Long Term Goal

The long term goal of this project is to provide access to Chilipepper rockfish stocks in the open access category fisherman. The monthly limits would be set by the biological abundance data. It is not known how many vessels would participate so the season may need adjustments to control the overall take.

Rationale:

- 1. The California Department of Fish and Game, in their regulations encourages experimental fishing methods (section 8606). This section allows new types of commercial fishing gear and methods in areas otherwise closed. Carpet runner gear allows for the use of existing salmon fishing machinery with limited expenditure for modifications.
- 2. The Chilipepper rockfish stock is healthy and harvest should be allowed if it is proven that non-target fish stocks can be avoided. A quote from a DFG document: dfg.ca.gov/MRD/MLPA/response/shelf "A few shelf rockfish species such as Chilipepper and Yellowtail appear to be comparatively healthy; their allowable take has been set at levels below the potential yield to protect the weaker species that tend to be caught with them, such as Bocaccio and Canary".
- 3. The fishing gear proposed can be set at a depth that is less likely to have contact non-target species such as Canary rockfish (further from the bottom). Cowcod and

Yelloweye rockfish are not commonly found in the proposed fishing area. During several salmon fishing trips within the RCA in 2005 the abundance of Chilipepper rockfish was noted. No Bocaccio rockfish were encountered with the trolled salmon gear during those trips.

- 4. Trolled gear, unlike trawl gear, has a relatively small catch capacity. The number of hooks used limits the catch in any one "set" so any contact with non-targeted species would be limited. The tows are much shorter in duration than trawl tows and the vessel can easily move to another fishing area if non-targeted species are encountered.
- 5. The fish caught by hook and line are handled much differently than trawl caught fish. Their superior appearance allows them to be more easily sold in the round for a higher price than trawl fish destined for the fillet market. The large ethnic communities in the San Francisco Bay area represent a consistently reliable market for this high quality round fish. A similar fish, Ocean Perch, are currently being imported from Canada to fill this market. Hook and line fishing seems to be a way of allowing a small harvest of a healthy resource for the most economic benefit to small vessel fishermen.
- 6. The limited availability of observers presents a challenge, however most vessels are already fishing in the groundfish fishery where observers are required. If the experimental fishing were done during the period the observer was already required to be aboard the vessel there would not be a net increase in observer coverage. The assumed higher catch rate fishing Chilipepper rockfish over nearshore fishing would allow the limit to be reached with fewer trips so it is possible the number of observer covered trips could actually be reduced.

Fishing Gear

The fishing gear would consist of the following elements:

A vertical 3/32 diameter stainless steel cable attached to a 50 pound lead ball. A horizontal main line of 400 pound test monofilament line with crimped stops and swivels placed approximately every 30 inches. Attached to the swivel are an approximately 12 inches of 80 pound test monofilament line and an artificial shrimp fly. The main line would contain a maximum of 200 hooks.

The main line is deployed and retrieved from a separate reel. The main line is overlayed with a piece of plastic carpet runner between wraps to prevent the hooks from tangling.

Fishing Technique

The vessel will motor through areas know to hold Chilipepper rockfish. Once a school of fish is located using depth sounder readings, a test line using a maximum of 6 hooks will be lowered to the indicated depth to determine the species of fish present. If other non-target species are found a new location will be sought. If Chilipepper rockfish are present the boat will be positioned to troll the gear through the school of fish at the depth noted

by depth sounder readings. The hooks will be kept at least 10 fathoms from the bottom by noting the amount of main line extended.

Bycatch Caps

	Per Vessel	Per Vessel	Annually
Species	2 mo. Period	Annually	All vessels
Widow/yellowtail	200	600	3600
Bocaccio	200	600	3600
Canary	20	40	240
Cowcod	1 fish	1 fish	6 fish
Yelloweye	1 fish	1 fish	6 fish
Target species			
Chilipepper	4000	16,000	96,000

Applicant Information:

Applicants:	Robert Kraencke 280 Douglane Ave. San Jose, Ca. 95117 Phone: 408-887-4567	Jerry Pemberton 426 Beach Street Half Moon Bay, Ca. 94019 Phone 650-619-0388
Vessel:	Lady LeBlanc F&G 49548	
Fishing Area:	Latitude 38N to 36:50 Depth 60 to 100 fathoms	

Time Period: April – November for a 2 year period

ENFORCEMENT CONSULTANTS REPORT ON EXEMPTED FISHING PERMITS FOR 2007 FISHERIES

The Enforcement Consultants (EC) have reviewed the materials as they relate to Exempted Fishing Permits (EFP).

In reviewing the EFP's, Mr. Churchman includes several elements that we feel are important.

- 100% observation
- Declaration of time and place of landing
- Vessel monitoring system

We did not find all of these elements in the other proposals and suggest that all three permits include these conditions.

Declarations should be made to California Department of Fish and Game and include date and at least 4 hours notice prior to delivery. They can be made to:

California Fish & Game Attn: Enforcement 20 lower Ragsdale Suite 100 Monterey Calif. 93940 Phone# 831-649-2870 Fax# 831-649-2894

PFMC 09/14/06

Chuck Wise President Divid Birrs Vice President Larry Misjunoro Secretary Madyse Battistella Treasure In Memoriam: Nathamel S. Birgham Harold C. Christensen

Please Respond to:

California Office
 P.O. Box 29370
 San Francisco, CA 94129-0370
 Tel: (415) 561-5080
 Fax: (415) 561-5464

PACIFIC COAST FEDERATION of FISHERMEN'S ASSOCIATIONS

http://www.pcffa.org

RECEIVED AUG 2 3 2006 PFMC

| Northwest Office P.O. Box 11170 Eugene, OR 97440-3370 Tel: (541) 689-2000 Fax: (541) 689-2500

By Fax, E-Mail, U.S. Postage

23 August 2006

Dr. Donald McIsaac, Executive Director Pacific Fishery Management Council 7700 NE Ambassador Place, Suite 101 Portland, OR 97220-1384

RE: Exempted Permit Application – Groundfish

Dear Dr. McIsaac:

The Pacific Coast Federation of Fishermen's Associations (PCFFA), representing working men and women in the West Coast commercial fishing fleet, supports the applications by a group of San Francisco Bay Area commercial fishermen for an exempted permit in the Groundfish Fishery.

The proposed experiment is intended to demonstrate the viability of a variation of hook-and-line gear for the take of specified species of rockfish. The intent is to develop a selective fishery that will allow for recovery of stocks of concern while targeting on abundant stocks of rock fish in the development of a low volume, high value fishery utilizing hook-and-line gear.

Many of the details of this proposal are in development, but we will be prepared to discuss it more fully with the Council at its September meeting. The importance for our organization and many of the locally-based fishermen is that this type of fishery has the potential for supporting many of the smaller boat fishing operations, maintaining fishing port infrastructure and providing consumers with a high quality, high value product.

If you, Council members of staff have any questions regarding PCFFA's endorsement of this exempted permit application, please notify us. Your attention to this matter is appreciated.

incerely.

elei Grader

W.F. "Zcke" Grader, Jr Executive Director

STEWARDS OF THE FISHERIES

Agenda Item C.6.c Public Comment September 2006

> W.F. "Zeke" Grader, h. Executive Director

- Glen H. Span Northwest Regional Director Match Franci

Bishery Enhancement Director
 Vision Bolini

Watershed Conservation Director

Duncan MacLean Sahnan Adeisor

TRAWL INDIVIDUAL QUOTAS: STAGE I ALTERNATIVES AND PROGRESS REPORT ON STAGE II

At this meeting, the Council will confirm the results and alternatives from the Stage I development of the Trawl Individual Quota (TIQ) Program analysis and review progress on Stage II. The Council will have convened Tuesday evening, September 12 to receive an information briefing on the potential initial allocation of quota shares to permit-owners and processors. No public comment will be taken during that session, but Council members will have an opportunity to ask questions. Information on that session is provided here as Agenda Item C.7.a, TIQ Information Session (1). Permit-owner and processor representatives making the Tuesday evening presentation were invited to provide statements on this issue in the briefing book (Agenda Item C.7.a, TIQ Information Session [2]).

Stage I Completion

At its June 2006 meeting, the Council conducted its initial review of results and alternatives and, relying in part on advice from the Trawl Individual Quota Committee (TIQC) and the Scientific and Statistical Committee, made a number of revisions to simplify the alternatives (Agenda Item C.7.a, Staff Report). Subsequent to the June Council meeting, comments were provided to Northern Economics Incorporated, the contractor developing stage I of the draft analysis. In early August, the contractor provided a final draft submission of its work product (Agenda Item C.7.a, Stage I Final Draft, Excerpts 1 and 2).

In June, the Groundfish Management Team (GMT) and Groundfish Advisory Subpanel (GAP) were fully subscribed with the biennial specifications process and unable to offer the Council their recommendations on this matter. At this meeting, the GAP and GMT will have had time to review materials related to this agenda item. Also, the TIQC will have met on Sunday, September 10, to review the Council's June action and develop additional details needed on some provisions, including co-op entities and the rollover of whiting individual fishing quota (IFQ) from one sector to another. The Council task related to the Stage I submission will primarily be to review and respond to these comments, as needed.

During its June deliberations, the Council requested a presentation on the question of the balance of the initial allocation of quota shares between processors and permit holders. Current options run from 0% to 50% for processors, with the remainder going to permit holders. On Tuesday evening of this Council meeting, there will be a Council session with industry representatives on each side of this issue making presentations followed by a formal question-and-answer period (Agenda Item C.7.a, TIQ Information Session). These presentations are informational and the Council is not necessarily expected to make a decision on the basis of the presentations at this meeting.

Approach to Reviewing Alternatives

The alternatives are described in Chapter 2 of Agenda Item, Stage I Final Draft, Excerpt 1. The overall structure of the alternatives can be viewed in text tables on pages 23 and 24 and the figures on pages 26 and 28. The alternatives are summarized in Table 2-1 (management regime alternatives, pages 30-36) and Table 2-2 (IFQ program alternatives, pages 37-43). The

component and element numbers in these summary tables correspond to the component and element numbers in the complete description of the alternatives provided in Tables 2-3 (management regime alternatives, pages 47-67) and Table 2-4 (IFQ program alternatives, pages 70-107). Keys for the highlighting in these tables are provided on pages 29 (Tables 2-1 and 2-2) and 46 (Tables 2-3 and 2-4). It is suggested that Council members first review the summary tables (Tables 2-1 and 2-2) before delving into the more detailed tables.

Stage II Progress

This two stage process for drafting of the analytical document was developed as a response to funding that was not sufficient to cover a complete analytical document. As of early August, funding to initiate the second stage of the analysis had not been secured. The result is that progress on the second stage and completion of Council deliberations will be delayed. In the interim, the Council staff has begun working to develop an analysis of components of the TIQ program. It is anticipated that the components analysis will directly contribute to continued progress on the draft analysis by enabling the Council to deliberate on certain design features of the TIQ program in a sequential manner.

Council Action:

- **1.** Determine whether additional adjustments are needed to the alternatives or plans for analysis.
- 2. Provide guidance on steps for Stage II, as necessary.

Reference Materials:

- 1. Agenda Item C.7.a, TIQ Information Session (1): Tuesday Evening Information Session: Questions for Presenters; and Standards, Goals, and Objectives.
- 2. Agenda Item C.7.a, TIQ Information Session (2): Harvester Position on the Initial Allocation of IFQs.
- 3. Agenda Item C.7.a, Staff Report: Actions from the June 2006 Council Meeting
- 4. Agenda Item C.7.a, Stage 1 Final Draft (Excerpt 1): Excerpt 1 from Stage 1 Document, IFQs and Permit Stacking Alternatives in the Limited Entry Trawl Fishery, Final Draft (Chapters 1, 2, 4 and Appendices A-C).
- 5. Agenda Item C.7.a, Stage 1 Final Draft (Excerpt 2): Excerpt 2 from Stage 1 Document, IFQs and Permit Stacking Alternatives in the Limited Entry Trawl Fishery, Final Draft (Chapters 3 and 5 through 11) (electronic copy on Council briefing book CD).
- 6. Agenda Item C.7.d, Public Comment.

Agenda Order:

- a. Agenda Item Overview
- b. Report of the Trawl Individual Quota Committee
- c. Reports and Comments of Advisory Bodies
- d. Public Comments
- e. **Council Action:** Confirm Stage I Results and Alternatives, and Provide Guidance on Stage II Analysis

PFMC 08/25/06 Jim Seger Dave Hanson

STAFF REPORT: ACTIONS FROM THE JUNE 2006 COUNCIL MEETING

At its June 2006 meeting the Council:

- adopted the Trawl Individual Quota Committee (TIQC) report but modified the TIQC's recommended definition of processing
- eliminated the low optimum yield (OY) management options
- directed that the permit stacking alternatives include
 - partial credit for stacked permits (partial limits for each stacked permit)
 - o a nonwhiting endorsement

The changes to the options, pursuant to these directions are reflected in the underlined (inserted) and struck through (deleted) text in Tables 2-1, 2-2, 2-3 and 2-4 of the Stage 1 analysis. The following is a list of the specific actions.

Adopted TIQC Report

The TIQC report recommended accepting the staff report with the following changes and additions:

1. Restructuring Individual Fishing Quota (IFQ) Program Alternatives

With respect to the three program alternatives, the TIQC recommended and the Council concurred with changing the section on initial allocation of quota shares to groups of initial participants to the following:

Program A	Program B	Program C	
Initial Allocation of Quota Shares, Section B.1.0			
<i>Eligible Groups:</i> 50% to current permit owners; 50% to processors.	<i>Eligible Group Suboption B-1:</i> 100% to current permit owners.	<i>Eligible Groups:</i> 75% to current permit owners, 25% to processors.	
	Eligible Group Suboption B-2: Nonwhiting-100% to current permit owners. Whiting-50% to current permit owners; 50% to processors.	(NOTE: For the nonwhiting shoreside fishery only, up to 20% of the <u>quota pounds</u> will be held back from the allocation (off the top) to support the community	
	Eligible Group Suboption B-3: 90% to current permit owners; 10% to processors.	stability holdback. Each year, the Council will have the flexibility to determine whether 20% or some lesser amount will be held back.	

2. Processor definition

The Council accepted a modification of the TIQC recommended processor definition. The modifications are highlighted in the following text with underscores for insertions and strikethroughs.

For purposes of allocation of QS/QP (quota share/quota pounds), two types of processors are defined for any program which includes an initial allocation of quota share to processors. These definitions will apply only for the initial allocation and not for other purposes (unless otherwise specified):

Processors:

At-sea processors are those vessels that operate as motherships in the at-sea whiting fishery or those vessels permitted to operate as catcher-processors in the catcher-processor whiting fishery.

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. a. The recipient of the groundfish listed on the fishticket is presumed to be the first processor unless evidence is presented to NMFS that some other entity was the processor as defined in this section.

"Shoreside Processing" is defined as either of the following:

Any activity that takes place shoreside; and that involves: cutting groundfish into smaller portions; OR freezing, cooking, smoking, drying groundfish; and OR

> packaging that groundfish for resale into 100 pound units or smaller for sale or distribution into a wholesale <u>or retail</u> market.

The purchase and redistribution into a wholesale <u>or retail</u> market of live groundfish from a harvesting vessel.

For the at-sea fishery, observer data and weekly processing reports will be used to document landings. Item d. may potentially result in conflicting claims to the history for a particular landing (e.g. claims by the first receiver and a processing company to the history for same fish ticket). This will create a need for adjudication. Further criteria will need to be developed for use in adjudication.

3. Definition of a Whiting Trip

Two options exist for the definition of a whiting trip. Based on its review of scattergrams showing the pounds of whiting and percent of whiting for trips in 2002, 2003, and 2004, the TIQC recommends that any trip composed of more than 50% whiting be considered a shoreside whiting trip. The rejected alternative would have defined a whiting trip as those trips composed of more the 50% whiting or trips with more than 10,000 pounds of whiting. The TIQC rejected the 10,000 pound option out of concern that different type of IFQ might be required for whiting and nonwhiting trips. If a vessel went out intending to make a whiting trip covered with IFQ for the whiting fishery and the trip was cut short, such that 10,000 pounds was not taken, then the vessel might not have the right type of IFQ to cover the catch.

The TIQC concurred with the staff report in the following areas.

Shoreside Whiting IFQ and Season Closures: If shoreside whiting closures are needed, they will be implemented by the imposition of whiting cumulative limits. Vessels catching whiting during a closure would have to comply with the cumulative limits and be required to cover their catch with quota pounds. If a shoreside nonwhiting sector is specified (Management Regime Alternative 2), there would be two types of shoreside whiting IFQ (quota shares/quota pounds): (1) whiting IFQ for the shoreside whiting fishery and whiting IFQ to cover incidental catch of whiting in the shoreside nonwhiting fishery. For the shoreside nonwhiting fishery, whiting cumulative limits would be in place year-round and quota pounds would be required to cover the incidental catch.

Cumulative Limits in the Whiting Fishery: If an alternative is adopted that includes permit stacking or separable transferable cumulative limits, these provisions will not apply with respect to whiting or nonwhiting species taken on whiting trips.

Combination Limited-Entry-Trawl Limited-Entry-Fixed-Gear Vessels: Two options for the IFQ alternatives were created. The option under Management Regime Alternative 2 would not provide these combination vessels an opportunity to use their trawl IFQ to increase their fixed gear catch above what would be allowed for fixed-gear-only vessels. The options under Alternatives 3 and 4 would allow vessels to take additional catch of any groundfish species (catch over and above that allowed for fixed-gear-only vessels) if such catch is covered with trawl IFQ and is taken in compliance with the trawl IFQ monitoring and enforcement rules (e.g., an observer is present). Similarly, two options are provided for permit stacking. One provides a vessel no opportunity to used stacked trawl permits to increase catch with limited entry fixed gear, the other would allow vessels to use limited entry fixed gear to fish against the limits allowed by their stacked trawl permits.

Limited Entry Trawl Vessels Using Open Access Gears Under Permit Stacking: Similar to what is provided for combination trawl/fixed-gear vessels, two options are provided for trawl vessels using open access gear under permit stacking. One provides a vessel no opportunity to use stacked trawl permits to increase catch with open access gear, the other would allow vessels to use open access gear to fish against the limits allowed by their stacked trawl permits.

Lengthening the Cumulative Limit Period: Alternative 2 specified that the cumulative limit periods might be lengthened but did not specify an option for the duration of the extension. The length of the period for the option was set to a 4-month period. During this four month period, transfers of partial cumulative limits would be allowed.

Threshold for Triggering Low OY Management: While the TIQC concurred with the staff suggestion to change the example provided ("25% of B_{msy}) into an option, the Council eliminated low OY management from the alternatives being analyzed.

Other Actions

Elimination of Low OY Management Options

Alternative 2 provided an option which would eliminate cumulative limit transferability for species at low OY levels. Under Alternative 2, transferable cumulative limits are being considered for nonIFQ species. Alternative 3 provided that low OY species would be managed with nontransferable cumulative limits instead of IFQs. The triggers for low OY management would be related to overfished thresholds and apply to stocks through part or all of their rebuilding. These options were eliminated from Alternatives 2 and 3 and are not contained in other alternatives.

Partial Credit For Stacked Permits

The Council directed the addition of an option for TIQC consideration that would provide less than a full cumulative limit for each permit stacked under the permit stacking alternative. Under permit stacking, it is expected that the utilization of cumulative limits will increase, requiring managers to reduce the size of the cumulative limits in order to keep harvest within constraints. If vessels get full credit for stacked permits, vessels not stacking permits would experience reduced limits. Partial credit would be intended to minimize the effect of permit stacking on vessels that do not stack their permits.

Nonwhiting Endorsement

For the permit stacking alternative, the Council directed that an option be added that would establish a landing requirement to prevent permits that had been only used in the whiting fishery from rotating into the nonwhiting fishery. This requirement might be based on Dover sole and sablefish or other species which members of the industry feel would appropriately represent the traditional nonwhiting trawl sector. The purpose would be to prevent latent capacity from spilling back into the nonwhiting fleet. The endorsement would act something like the sideboards used in the Alaska system.

Agenda Item C.7.a TIQ Information Session (1) September 2006

TRAWL INDIVIDUAL QUOTA INFORMATION SESSION (TUESDAY EVENING)

The Tuesday evening information session will be on the question of the relative proportion of quota shares that would go to permit owners and processors if an IFQ program is implemented. The following will be the order of business for the session.

Call to Order	Don Hansen
Issue Overview	Jim Seger
Opening Presentations	
	(order to be determined)
Advance Questions (see below)	Don McIsaac
Other Questions	Council Members
Closing Comments	Pete Leipzig and Jay Bornstein
	(order to be determined)

Opportunity will be provided for public comment or questions when this issue comes before the Council on Thursday, but not during the information session. The information session will be structured somewhat like a debate in order to ensure that an equitable opportunity is provided for both presenters to make their statements: presentations and responses to questions will be time limited; and opportunity will be provided to each presenter to comment on the initial response of the other.

The following two questions will be posed to the permit-owner and processor industry representatives.

- 1. How would the allocation of some of the quota shares to processors help or hurt the effectiveness of a TIQ program in terms of the program performance with respect to National Standards in the MSA, goals and objectives of the Council's groundfish FMP, and the goals and objectives currently listed for the trawl individual quota program? [Standards, goals and objectives are provided below for reference.]
- 2. How would the allocation of some of the quota shares to processors affect the balance of marketing power between fishermen and processors? Assume a hypothetical 3% accumulation cap on control of all nonwhiting groundfish quota shares (in aggregate). Note that under this hypothetical assumption, while the accumulation cap for all nonwhiting groundfish quota shares may be 3%, there may be higher caps for individual species, including whiting.

Presenters were invited to provide summaries of their positions for the briefing book (Agenda Item C.7.a, TIQ Information Session (2).

Title III -- National Fishery Management Program; Sec. 301. National Standards For Fishery Conservation and Management of the Magnuson-Stevens Fishery Conservation and Management Act

- (a) **IN GENERAL.-**-Any fishery management plan prepared, and any regulation promulgated to implement any such plan, pursuant to this title shall be consistent with the following national standards for fishery conservation and management:
- (1) 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.
- (2) Conservation and management measures shall be based upon the best scientific information available.
- (3) To the extent practicable, an individual stock of fish shall be managed as a unit throughout its range, and interrelated stocks of fish shall be managed as a unit or in close coordination.
- (4) Conservation and management measures shall not discriminate between residents of different States. If it becomes necessary to allocate or assign fishing privileges among various United States fishermen, such allocation shall be (A) fair and equitable to all such fishermen; (B) reasonably calculated to promote conservation; and (C) carried out in such manner that no particular individual, corporation, or other entity acquires an excessive share of such privileges.
- (5) Conservation and management measures shall, where practicable, consider efficiency in the utilization of fishery resources; except that no such measure shall have economic allocation as its sole purpose.
- (6) Conservation and management measures shall take into account and allow for variations among, and contingencies in, fisheries, fishery resources, and catches.
- (7) Conservation and management measures shall, where practicable, minimize costs and avoid unnecessary duplication.
- (8) Conservation and management measures shall, 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.
- (9) Conservation and management measures shall, to the extent practicable, (A) minimize bycatch and (B) to the extent bycatch cannot be avoided, minimize the mortality of such bycatch.
- (10) Conservation and management measures shall, to the extent practicable, promote the safety of human life at sea.

Goals and Objectives for Managing the Pacific Coast Groundfish Fishery

The Council is committed to developing long-range plans for managing the Washington, Oregon, and California groundfish fisheries that will promote a stable planning environment for the seafood industry, including marine recreation interests, and will maintain the health of the resource and environment. In developing allocation and harvesting systems, the Council will give consideration to maximizing economic benefits to the United States, consistent with resource stewardship responsibilities for the continuing welfare of the living marine resources. Thus, management must be flexible enough to meet changing social and economic needs of the fishery as well as to address fluctuations in the marine resources supporting the fishery. The following goals have been established in order of priority for managing the West Coast groundfish fisheries, to be considered in conjunction with the national standards of the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act).

Management Goals.

<u>Goal 1 - Conservation</u>. Prevent overfishing by managing for appropriate harvest levels and prevent any net loss of the habitat of living marine resources.

Goal 2 - Economics. Maximize the value of the groundfish resource as a whole.

<u>Goal 3 - Utilization</u>. Achieve the maximum biological yield of the overall groundfish fishery, promote year-round availability of quality seafood to the consumer, and promote recreational fishing opportunities.

<u>Objectives</u>. To accomplish these management goals, a number of objectives will be considered and followed as closely as practicable:

Conservation.

<u>Objective 1</u>. Maintain an information flow on the status of the fishery and the fishery resource which allows for informed management decisions as the fishery occurs.

<u>Objective 2</u>. Adopt harvest specifications and management measures consistent with resource stewardship responsibilities for each groundfish species or species group.

<u>Objective 3</u>. For species or species groups which are below the level necessary to produce maximum sustainable yield (MSY), consider rebuilding the stock to the MSY level and, if necessary, develop a plan to rebuild the stock.

<u>Objective 4</u>. Where conservation problems have been identified for nongroundfish species and the best scientific information shows that the groundfish fishery has a direct impact on the ability of that species to maintain its long-term reproductive health, the Council may consider establishing management measures to control the impacts of groundfish fishing on those species. Management measures may be imposed on the groundfish fishery to reduce fishing mortality of a nongroundfish species for documented conservation reasons. The action will be designed to minimize disruption of the groundfish fishery, in so far as consistent with the goal to minimize the bycatch of nongroundfish species, and will not preclude achievement of a quota, harvest guideline, or allocation of groundfish, if any, unless such action is required by other applicable law.

<u>Objective 5</u>. Describe and identify essential fish habitat (EFH), adverse impacts on EFH, and other actions to conserve and enhance EFH, and adopt management measures that minimize, to the extent practicable, adverse impacts from fishing on EFH.

Economics.

<u>Objective 6</u>. Attempt to achieve the greatest possible net economic benefit to the nation from the managed fisheries.

<u>Objective 7</u>. Identify those sectors of the groundfish fishery for which it is beneficial to promote year-round marketing opportunities and establish management policies that extend those sectors fishing and marketing opportunities as long as practicable during the fishing year.

<u>Objective 8</u>. Gear restrictions to minimize the necessity for other management measures will be used whenever practicable.

Utilization.

<u>Objective 9</u>. Develop management measures and policies that foster and encourage full utilization (harvesting and processing) of the Pacific coast groundfish resources by domestic fisheries.

<u>Objective 10</u>. Recognizing the multispecies nature of the fishery and establish a concept of managing by species and gear or by groups of interrelated species.

<u>Objective 11</u>. 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 other information necessary to determine the extent to which it is practicable to reduce bycatch and bycatch mortality.

<u>Objective 12</u>. Provide for foreign participation in the fishery, consistent with the other goals to take that portion of the optimum yield (OY) not utilized by domestic fisheries while minimizing conflict with domestic fisheries.

Social Factors.

<u>Objective 13</u>. When conservation actions are necessary to protect a stock or stock assemblage, attempt to develop management measures that will affect users equitably.

Objective 14. Minimize gear conflicts among resource users.

<u>Objective 15</u>. When considering alternative management measures to resolve an issue, choose the measure that best accomplishes the change with the least disruption of current domestic fishing practices, marketing procedures, and the environment.

Objective 16. Avoid unnecessary adverse impacts on small entities.

<u>Objective 17</u>. Consider the importance of groundfish resources to fishing communities, provide for the sustained participation of fishing communities, and minimize adverse economic impacts on fishing communities to the extent practicable.

Objective 18. Promote the safety of human life at sea.

Trawl Individual Quota Program Goals and Objectives

The following list of "goals, objectives, and constraints and guiding principles" outlines the purpose of the proposed action. This list is based on recommendations of the IEP, as modified by the TIQC and Council. The Council adopted this list in June 2005 while recommending to move forward with consideration of an Individual Fishing Quota (IFQ) program for the trawl fishery.

Goals

- 1. Increase regional and national net benefits including improvements in economic, social, environmental and fishery management objectives.
- 2. Achieve capacity rationalization through market forces and create an environment for decision making that can rapidly and efficiently adjust to changing conditions.

Objectives

- 1. Provide for a viable, profitable and efficient groundfish fishery.
- 2. Minimize negative ecological impact while taking the available harvest.
- 3. Reduce bycatch and discard mortality.

- 4. Promote individual accountability responsibility for catch (landed catch and discards).
- 5. Increase stability for business planning.
- 6. Increase operational flexibility.
- 7. Minimize adverse effects from an IFQ program on fishing communities to the extent practical.
- 8. Promote measurable economic and employment benefits through the seafood catching, processing, distribution elements, and support sectors of the industry.
- 9. Provide quality product for the consumer.
- 10. Increase safety in the fishery.

Constraints and Guiding Principles

- 1. Taking into account the biological structure of the stocks including such factors as populations and genetics.
- 2. Taking into account the need to ensure that the total OYs and Allowable Biological Catch (ABC) for the trawl and all other sectors are not exceeded.
- 3. Accounting for total groundfish mortality.
- 4. Avoiding provisions where the primary intent is a change in marketing power balance between harvesting and processing sectors.
- 5. Avoiding excessive quota concentration.
- 6. Providing efficient and effective monitoring and enforcement.
- 7. Designing a responsive review evaluation and modification mechanism.
- 8. Take into account the management and administrative costs of implementing and overseeing the IFQ program and complementary catch monitoring programs and the limited state and federal resources available.

HARVESTERS POSITION ON THE INITIAL ALLOCATION OF IFQ'S

August 23, 2006

Because an unregulated fishery will result in both overfishing and excess harvest capacity, there are compelling environmental and economic reasons for limiting fishing effort. Fundamentally, effort controls are simply fishery management tools designed to help in preventing overfishing, minimizing waste, and, one hopes, increasing the economic return from the fishery. Which tool is best depends on the desired goal. Some goals are biological, such as achieving maximum sustainable yield, and other goals are social and economic, such as achieving optimum yield. Sometimes a tool which helps achieve one goal may conflict with attaining an alternative goal. For example, trip limits have extended fishing and marketing opportunities for groundfish throughout the year, however, they have also increased discards. Even though trip limits have helped prevent overfishing and improved the market, they have increased waste.

The simplest effort controls include gear restrictions, seasons, and area closures. As fishing effort grows over time, these simple controls are frequently ineffective. When more complex controls are needed, fishery managers turn to dedicated access privileges. The U.S. Ocean Commission coined the term "dedicated access privileges" referring to programs such as License Limited Entry and individual fishermen's quota (IFQ) systems. This term is currently used in both the U. S. Senate and House of Representatives bills that would reauthorize the Magnuson-Stevens Act. As the name implies, both forms of dedicated access privilege directly control fishing effort by limiting who can participate in the fishery. Of course, just limiting who can participate (as in a license limited entry system) does not limit the extent of their participation, and in complex multi-species fisheries a license system is often insufficient in achieving the full range of management goals. One example occurs when the incidental take of non-target species (by-catch) results in excessive waste and may even prevent the full harvest of the intended catch. In these situations, the development and implementation of an IFQ program is the next logical step. IFQ programs facilitate enhanced accounting and improve fishery management and conservation by allowing fishermen to customize their business through a market-based, transparent system.

Groundfish trawl fishermen asked the Pacific Fishery Management Council to begin the process of implementing an IFQ system for trawl caught groundfish in the fall of 2003. Trawlers saw the development of an IFQ program as the next logical step in the Pacific Groundfish fishery. The fishery has transitioned from an open access fishery with simple gear controls and no quotas, to a fishery with quotas, then trip limits, next was limited entry, and finally a buy-back program. Each of these steps came at the request of fishermen to better manage the resource. As fishing effort has grown and management becomes more complex, these steps have become necessary to help achieve the full range of management goals. At every step, regulatory actions were focused on fishermen as harvesters. Today the request for IFQ's is again coming from fishermen as harvesters who see a need to more effectively manage the resource.

The benefits from a well designed IFQ system are well documented. IFQ's can:

- improve marketing of the catch
- allow more efficient harvesting of the quota.
- reduce political pressure to exceed quotas
- enhance stewardship of the resource
- reduce bycatch and discards.

Because of full accountability, fish that are now wasted as discards, can be landed and utilized. This will increase landed catch even though overall quotas remain constant.

Every change listed here provides real benefits to coastal communities and substantial benefits to the Nation as a whole. Every change moves us closer to achieving the full range of management goals for the groundfish fishery. Every change helps attain the optimal yield.

A handful of companies that buy fish from fishermen are requesting that, if quota shares are issued, up to one-half of all the harvesting shares be issued to them. It must be remembered that these companies are customers of fishermen. They are not asking for shares because they have invested in harvesting fish, they are asking for shares solely because they bought fish in the past. They are customers.

Fishermen, as businessmen, like having customers for their product. Every person in business would rather have more customers than fewer. When many customers are seeking their product, business is good. This is how the American economy works best. It is called capitalism and it is good.

Fishermen believe that when past customers are guaranteed the right to buy product in the future competition will be restrained and their business diminished.

So, why do fish processors want to have quota shares issued to them?

IFQ shares issued to current processors will force fishermen to sell their catch to the customers who have bought fish in the past. Because fishermen have no choice about where they sell, these companies will then be in a position to dictate the price of fish. Those processing companies that also own fishing vessels would likely make their processing shares available only to their company boats. This would greatly reduce the fishing opportunity for non company boats. By influencing the price of fish and controlling who catches their processing shares, existing processors will greatly impede the ability of any new customer from entering into the fish processing business.

In order to promote competition, an open and free market place for groundfish, and to prevent the accumulation of excessive share of the resource, the initial allocation of IFQ shares of trawl caught groundfish should not be issued to fish processors as a group.

PFMC 08/25/06

Agenda Item C.7.d Public Comment September 2006

Mr. Donald Hansen, Chair Pacific Fishery Management Council 7700 NE Ambassador Pl., Suite 200 Portland, Oregon 97220

August 18, 2006

RE: Whiting Mothership Sector Coop Proposal

Dear Mr. Hansen,

The catcher vessel/mothership sector of the west coast whiting fishery continue to support the PFMC process to rationalize the West Coast groundfish trawl fisheries. Toward that end, we have supported the bifurcation of whiting management from the management of traditional groundfish due to their major differences. We have carefully reviewed the PFMC document "Stage 1 Draft-IFQ and Permit Stacking Alternatives in the Limited Entry Trawl Fishery" (TIQ) and concluded that the options considered will strongly benefit by the inclusion of a cooperative management program option.

Over the past year, United Catcher Boats (UCB) together with a majority of representatives of the mothership processors in the whiting catcher vessel/mothership sector have developed a coop management proposal for this sector. Collectively, we ask that the PFMC consider including the enclosed document entitled "Proposed Whiting Coop Structure in the Catcher Vessel/Mothership Sector of the West Coast Whiting Fishery" into the TIQ alternatives for further development and analysis.

This proposal is endorsed by the UCB membership and five of the six whiting mothership processors, except as noted herein. Specifically, Golden Alaska does not support the requirements in elements #6 and #11 that catcher vessels must deliver their initial allocation or any subsequent allocations to the processor that they most recently delivered the majority of their catch. Their preferred alternative is that the catcher vessels are free to deliver to any processor. Golden Alaska will elaborate on these issues before the TIQC and the Council. American Seafoods, the sixth of the traditional mothership processors, will make their objections known to the TIQC and the Council during the public process.

In developing this program we considered a wide range of options and narrowed most of the options down to a recommended preferred alternative. Further options certainly may be added to the analysis and we expect that they will be included, debated and decided during the Council process. Accordingly, with strong support for our Co-op style of management as proposed, we have agreed that some debate of option details is to be expected. In our experience with fishery rationalization programs we believe that given the characteristics of the mothership whiting fishery, that a coop-style program is an optimal solution to the problems facing our fishery. Our proposal incorporates protections to both the harvesting and processing participants. One cornerstone of this proposal is that historic and current participants in the mothership fishery be included and that they be afforded the tools to address conservation issues while maximizing the value of the fishery.

As mentioned, the companies and vessel owners supporting this coop proposal represent the vast majority of the participants in the mothership whiting fishery. United Catcher Boats represents the interests of 15 vessels that actively participate in the fishery. As noted above, five of the 6 current whiting mothership processing vessels support this proposal.

Thank you for consideration Mr. Chairman. We ask that the Council include this proposal in the current IFQ analysis and ask that the TIQ Committee review this proposal at its September 10, 2006 meeting.

Sincerely,

Brent Paine

Executive Director United Catcher Boats

Joe Bersch Supreme Alaska Seafoods *M/V Excellence*

Doug Christensen F/T Arctic Storm F/T Arctic Fjord

Doug Forsyth

Premiere Pacific Seafoods S.S. Ocean Phoenix

Lou Fleming Golden Alaska Seafoods M/V Golden Alaska en thei

Proposed Whiting Co-op Structure in the Catcher Vessel/Mothership Sector of the West Coast Whiting Fishery

- Existing allocations to remain intact between inshore sector (42%), Catcher Vessel/Mothership (CV/MS) sector (24%) and factory trawler sector (34%).
- 2. The legal registered owner of a valid WCGF permit(s) with qualified whiting catch history equal to or exceeding 500 mt aggregate whiting delivery to MS markets 1998-2004 shall be eligible to receive an initial whiting allocation.
- Initial whiting allocations made to the legal registered owner of a valid WCGF permit(s) shall be based upon all catch histories accrued by or purchased by that owner during qualified catch history years.
- 4. Initial allocation of whiting will be based on a valid WCGF permits'
 - a. Catch history years 1998-2004, drop one, or
 - b. Catch history years 1994-2004, drop two.
- 5. Once an initial allocation of whiting has been made to a legal registered permit owner, that allocation with its associated WCGF permit may be transferred to the legal registered owner of any other valid WCGF CV trawl permit. Any vessel holding a valid WCGF CV trawl permit may harvest whiting for delivery in the MS sector. Whiting allocations are not permanently separable from a WCGP permit.
- 6. Owners of valid WCGF permits with whiting allocations may form coops or may elect to remain in open access. The first year of co-op formation, permit owners that join a co-op are required to deliver their whiting catches to the MS processor that they most recently delivered the majority of their whiting catch to in the last calendar year they participated. Alternatively, they may deliver their catches to another processor with the mutual agreement of the permit owner and the MS

to which they would otherwise be obligated to deliver their catch. Release by mutual agreement between processor and WCGF permit holder is on a year by year basis and does not exempt the permit holder from fishing one season in open access in order to effect a permanent move to a different mothership processor.

- 7. Co-op Formation
 - a. Formation of multiple co-op(s) is allowed.
 - Multiple co-ops are required to be formed based on the processor where CV permit holders delivered the majority of their most recent years' catch.
- Owners of valid WCGF permits with whiting allocation must register annually with NMFS as a co-op member or register annually as an open access member.
- 9. NMFS will allocate whiting annually to co-op(s) and to open access consistent with the aggregate catch history attributed to the permits' registered to participate in the co-op(s) and/or open access as appropriate.
- 10. CV co-ops will be governed by private contract. Co-op whiting allocations to CV owners follow the golden rule "allocation equals contribution to co-op but no more."
- 11. After the first year of co-op(s) formation, permit owners that are members of a co-op are required to deliver their catches of whiting to the MS processor that they most recently delivered the majority of their catches to or may deliver their catches to another processor 1) with mutual agreement established between the permit owner and the MS to which they would otherwise be required to deliver or 2) by withdrawing from the co-op and participating in open access for one season. Release by mutual agreement between processor and WCGF permit holder is on a year by year basis and does not exempt the

permit holder from fishing for at least one year in open access in order to effect a permanent move to a different MS processor.

- 12. If bycatch is allocated on a sector level, it should be done on a whiting tonnage pro-rata basis. Bycatch may be managed at a co-op level.
- 13. Owners of valid WCGF permits that are members of a co-op are permitted to transfer quota amongst other co-op members as long as such inter- or intra- co-op transfers are in accordance with 6 or 11. A co-op member may contract with any trawl vessel with a WCGF permit to harvest some or all of the allocation associated with the co-op member's permit.
- 14. No transfers of fish outside of sector by co-op members.
- 15a. Any rollover of whiting or bycatch between sectors to be determined and managed by NMFS, as is current practice.
- 15b. No rollovers of whiting between sectors permitted.
- 16. Ownership limits at the sector level (rather than TAC) to be developed by the Council.
- 17. The class of MS processors would be limited. MS processing permits would be issued to individuals or entities that operated as a processor in the MS sector and processed a minimum of 1,000 mt of whiting in any two of the years 1998-2004. (This should result in the six traditional MS processors receiving permits.) These permits are transferable.
- 18. In order to process whiting in the MS sector in a given year, a vessel must possess a valid MS processing permit. There will be no size limits placed on the permits, but a vessel that harvests whiting in any given year may not hold a MS processing permit in that same year. A MS processing permit may only be assigned to one vessel per year.

August 20, 2006

To: Pacific Fishery Management Council 7700 NE Ambassador Place, Suite 101 Portland, Oregon 97220-1384

Attn: Mr. Donald K. Hansen, Chairman Re: Trawl Individual Quotas: Stage I Alternatives and Progress Report on Stage II

Dear Mr. Hanson, members of the Council, and the TIQC,

I am writing this letter in regards to the Individual Trawl Quota program that is being worked on by the Council and the TIQ Committees. My concerns are about the LE Trawl Permits that are leased by a fisherman and not actually owned by the fisherman.

To date I have not heard any alternatives or discussion on how to handle the situation of leased LE Trawl Permits. This is of great concern to the fishers that lease their permits. They want to know what will happen to all of the tonnage that they have generated while leasing a permit. This is an area that needs attention and deliberation.

I would like to express a few of my own personal feelings and thoughts. The scenario of leasing a trawl permit usually goes something like this:

- 1. A permit owner owns a LE Trawl "A" permit that they cannot or for whatever reason decide that they do not wish to use.
- 2. A fisherman for whatever reason did not qualify for a permit, and cannot find one to buy or cannot afford to buy one and needs to lease one.
- 3. An agreement is made between the permit owner and the fisherman to lease the permit to the fisherman for X amount of dollars per year, per month, by a percentage of the catch, or by a combination of all.
- 4. The permit owner is paid by the fisherman and receives their money. The fisherman pays out and receives the right to catch fish and generate tonnage.

On one hand the permit owner owns the permit... they don't actively fish it but they own it. The fisherman that did not qualify for a LE Permit for whatever reason can not fish without one. On the other hand, by leasing a permit the fisherman is paying for his right to catch fish and generate the tonnage accrued. The fisherman has paid for that tonnage and the permit owner has received compensation for it.

The fisherman generates all of the tonnage associated with the permit. The fisherman and his fishing ability are what designate the amount of tonnage created. If the fisherman does not try very hard then there is not much tonnage generated. But if the fisherman is a highliner then there is a large amount of tonnage generated. Again, the right to generate this tonnage was paid for by the fisherman... and the permit owner was compensated for it. True, that the fisherman could not fish without leasing a permit, but the permit could also sit idle without being leased and no tonnage generated at all. So, the fisherman has paid for the tonnage and the permit owner has been compensated.

My opinion is that the tonnage generated while the permit was leased should remain with the fisherman. It does not seem fair at all if the permit owner is compensated monetarily by leasing the permit for the tonnage generated and then compensated again by being given the use of that tonnage on

the permit for resale purposes or anything else. The fisherman generated the tonnage not the permit owner. The permit owner was already compensated once for it.

The fisherman should be able to take his tonnage that he has worked so hard for AND paid for with him whether he continues to lease the same permit or needs to find a new one to lease or purchase. Fishermen with their own tonnage would atleast be able to have some quota to be able to continue their careers and fishing businesses. Also, the fishermen should have 100% of the tonnage too, not 50% to the fisherman and 50% to the permit owner. As I stated before, the permit owner was already compensated for that tonnage generated... they don't need to be compensated twice for it.

I strongly encourage the Council and the TIQC to assign the tonnage generated by a leased permit to remain with the fisherman and I urge you to support the fishermen that lease their permits in your decision making process. I know that all the alternatives involved with the TIQ are complex, and I very much appreciate everyone's hard work and efforts. This is an equally important issue and it needs to be addressed also.

Thank you for your time in reading my letter and I hope that you will support the fishermen that lease their permits and work so hard to generate the tonnage.

Sincerely,

Lee Ann Hightower F/V Sea Otter 2260 Hastings Ave. W. Port Townsend, WA 98368

Preston | Gates | Ellis LLP

RECEIVED AUS 2 3 2006 PFMC

August 23, 2006

Don Hansen, Chairman Pacific Fishery Management Council 7700 NE Ambassador Place, Suite 101 Portland, OR 97220-1384

Re: Stage 1 Draft EIS of the Environmental Impact Statement for IFQs and Permit Stacking Alternatives in the Limited Entry Trawl Fishery (May 2006)



I am writing on behalf of Environmental Defense to comment upon the May 2006 draft of the Environmental Impact Statement for IFQs and Permit Stacking Alternatives in the Limited Entry Trawl Fishery ("the Stage 1 draft EIS"). At the outset, please accept our appreciation for and support of the Council's continued efforts to implement critical reforms in the economically and environmentally valuable West Coast groundfish fisheries. We appreciate the opportunity to work with you on this EIS. As described below, we have serious reservations about the current scope of the alternative IFQ programs as framed in this Stage 1 draft, but we also believe that they can be readily rectified through proper revisions to the draft in response to comments. We stand ready to work with you on those revisions.

By way of background, Environmental Defense has worked for the development and implementation of a major IFQ program for the West Coast groundfish fishery in the belief that it will provide powerful long-term conservation incentives and economic efficiencies for the fishery and for those who depend upon it. We are therefore dedicated to working with a broad segment of harvesters, processors, community representatives, other environmental groups, and government officials to develop a catch shares system that will ensure the long-term viability of the whiting fishery and coastal communities. We believe that properly designed quotas can provide: (1) expanded conservation benefits to the fishery; (2) increased economic efficiencies to the harvesters, processors and distributors that comprise the industry; (3) increased economic stability of supply and quality to the ultimate consumers. We therefore enthusiastically encourage the Council to continue with this important effort.

If designed or implemented incorrectly, however, a fishing quota program could have certain adverse impacts on several of these overall program objectives, as the draft EIS notes in numerous places. These might either compromise the ability to achieve needed reductions in

A LAW FIRM A LIMITED LIABILITY PARTNERSHIP INCLUDING OTHER LIMITED LIABILITY ENTITIES

925 FOURTH AVENUE, SUITE 2900 SEATTLE, WA 96104-1158 TEL: (206) 623-7580 FAX: (206) 623-7022 www.prestongates.com Anchorage Beijing Coeur d'Alene Hong Kong Orange County Portland San Francisco Seattle Spokane Taipei Washington, DC

biological or economic waste and inefficiencies in the fishery, or result in a significant shift in the relative market power of harvesters and processors, thereby accelerating consolidations and undercutting desired community stability.

It appears that the effort to design an effective IFQ program is being overshadowed by the ongoing dynamics between the harvesting and processing sectors, with each trying to frame the IFQ alternatives to their maximum relative benefit vis-a-vis the other sector. In particular, we have genuine reservations about the wisdom of a harvest quota system that allocates significant portions (up to 50%) of that harvest quota to processors. We know of no other quota system where harvesting quota has been allocated on the basis of processing history, as is proposed in this EIS. We caution the Council that any such decision would be an important precedent for other U.S. fisheries. Therefore, the EIS must contain a clear articulation of the underlying rationale for these alternatives, a robust analysis of all their reasonably foreseeable effects, and an explanation of how these alternatives may (or may not) achieve the purpose and need of the proposed action. This Stage 1 draft EIS does not measure up in this respect and needs to be bolstered substantially. We believe, as explained below, that the proposed three IFQ programs are too narrowly framed and inappropriately limit the range of alternatives that the Council should consider to meet the purposes and need of the IFQ program itself. As currently framed, the draft EIS contains scant analysis of how initial allocation based on processing history meets the goals of the programs, and fails to fully explore alternative methods to address potential processor concerns.

A. <u>The Purpose and Need Statement is Well Framed.</u>

The heart of the NEPA analytical process is the articulation of the purpose and need of the proposed action, and a clear and well-defined statement of the overall objective of the effort. In this case, we believe that the Council has done a good job at articulating clearly and properly in section 1.1 the overall purpose and need of this proposal. We commend you for it, and note only that evaluating the ability of the alternatives to achieve these numerous discrete goals and objectives in a quantifiable and defensible manner presents a considerable analytical challenge.

B. The Framing of the Alternative Management Regimes Makes Sense.

Environmental Defense recognizes the complexity of the shaping of alternative designs for an effective IFQ program for the West Coast groundfish fishery. It further believes that the Council in this draft EIS has developed an effective way to capture some of this complexity by the use of a range of alternative species that would be the subject of an IFQ program, inclusion of a permit stacking alternative, and the parallel use of alternative IFQ program designs for each of those fisheries. While this introduces some tedious analytical complexity, it also reflects a solid and responsible mechanism for shaping what is, in fact, a wide range of alternative designs for the program. We further believe that the five basic alternatives for which species to manage with IFQs or, alternatively, permit stacking is the proper range of alternative management

regimes, and we recommend that the Council continue with these five basic management regimes as it continues with its draft EIS.

C. <u>The "IFQ Program Design" Alternatives are Too Narrow.</u>

The draft EIS proposes three IFQ program designs (referred to as programs A through C), and then applies those three "programs" selectively to the five alternative management regimes resulting in seven total options. The three alternative IFQ "programs" however, are nearly identical in terms of most design elements. One (program C) would provide for a quota-pounds based annual community stability holdback. The remainder of the elements for each programs show little variability, except for the initial allocation of quota and accumulation limits. When these programs are applied to the management regime alternatives, four of the five IFQ-related options would allocate significant quota shares to processors. However, the draft EIS fails to explain adequately the basic rationale for providing these processor allocations in the first place, or how these allocations will satisfy the fundamental purpose and need of the proposal itself. Our fundamental criticism of this draft EIS is therefore that the three IFQ programs are too narrowly framed and need to be reshaped to better achieve the purposes of the proposal.

As the draft EIS notes, both harvesters and processors have raised concerns during the course of these deliberations about the impact of transitioning to an IFQ program on the relative market power of each sector vis-à-vis the other. Environmental Defense recognizes and respects these concerns, and is of the fundamental view that the design of an IFQ program should be shaped in a manner that seeks to minimize any deliberate shift in the relative market powers of either sector that might occur as a result of the transition to an IFQ program. We note further approvingly that the Council itself in its basic goals and objectives embraces a similar objective.

From a processor perspective, these concerns evolved around several claims that a harvester IFQ program might: (1) shift bargaining power toward harvesters;¹ (2) decrease processor access to the product; (3) eliminate processors' marketing role; (4) lead to stranded capital; and (5) would not reward processors for their investment in the fishery. Environmental Defense believes that while there may be a swirl of speculation about these potential shifts in the relative market power of harvesters and processors, there has been little discussion about how the prevailing trend towards processor consolidations and a parallel increase in the relative bargaining power of the processing sector has already shifted relative bargaining powers towards processors from historical norms. Environmental Defense encourages the Council to take a hard look at all of these issues, and evaluate the likelihood and degree of such impacts resulting from an IFQ program itself.

The range of the proposed initial allocations thus inappropriately tilts towards an initial allocation of a portion of the quota shares to the processing sector without having established the

¹ The Draft EIS recognizes this argument at section 4.2.2.2.

need or underlying rationale for such an allocation in the first place. At present, the draft EIS would evaluate only one permit owner-only alternative out of the five total quota share alternatives. The draft EIS suggests, however, that the Council may "mix and match" the components of the various alternatives at the time of its final action, as long as the impacts of the result may be reasonably inferred from the existing analysis.² In its current form, the draft EIS does not include permit owner-only initial allocation quota share options for either Alternative 2 (IFQs for whiting and Trawl Target Species) or Alternative 4 (IFQs for all groundfish species). Only Alternative 3, which proposes IFQs for all groundfish species except Other Species, recommends a initial allocation to permit owners-only under its Program B.³ Because it could prove difficult to extrapolate impacts of initially allocating only to permit holders from such a limited sample size, and to ensure that the Council does not preclude selection of a permit owner-only program by default in the absence of sufficient analysis, the draft EIS should analyze initial allocation to permit owner-only program for each alternative.

These three IFQ program designs, in turn, fail to examine other approaches to an initial allocation that might serve to address more directly the potential negative consequences of a transition to a harvester-based IFQ program. These might include the potential for a localized instance of stranded capital from a harvester-only IFQ program or a localized anomaly in processor access to product due to an excessive initial concentration of quota among a small number of major harvesters. Environmental Defense therefore secondly recommends that the Council reshape these allocation programs to address the potential for these localized anomalies through other mechanisms than initial allocation. For example, just as vessel buyback programs help alleviate stranded capital held by harvesters, the proposed alternatives could include a processing capacity buyback to ameliorate processors' documented stranded capital during an extended fishing season requiring less overall processing capacity. Additionally, the Council could address the product access issue by modifying its Community Stability Holdback option to include the condition that harvesters must work with processors and demonstrate that they have a plan for harvesting and processing the quota in a manner that meets certain community objectives before obtaining holdback shares. If assuring current patterns of processor's access to product is important to both processor and community stability, then this could be explicitly identified as an important objective to be met through the community stability holdback program. A modified community stability program could hold promise as an alternative to initial allocation to processors as a means of addressing issues of concerns.

Furthermore, the draft EIS should accurately identify the percentage of permits currently held by either harvesters or processors. At least some of the companies currently processing groundfish own permits that would be allocated quota under a program that initially allocated only to permit holders. The Council needs to identify the percentage of quota that would be held by the processing sector even without any additional initial allocation based on processing

² Draft EIS, at 4 (Section 2.1).

³ Id. at 22-23.

history and, within the limits of confidentiality, how that quota would be distributed among the processing sector participants. If the concern is that some processors' access would be differentially impacted, then an initial allocation scheme that provides even more quota to those processors who would already receive quota initially under a permit history initial allocation scheme might not be the appropriate response to the concern.

Careful selection of the accumulation limits for any quota holder may also be a mechanism to minimize adverse impacts of the IFQ program. The program alternatives vary significantly with regard to accumulation limits and may need more specificity to be effectively analyzed. We recommend that the Council examine the range of accumulation limits for analysis closely to assure that an appropriate range of limits are analyzed.

D. Examine if Processor Shares May Undermine the proposed IFQ program goals.

Stage 1 of the draft EIS admittedly does not analyze whether the proposed alternatives are consistent with the IFQ program goals, objectives, constraints and guiding principles.⁴ However, recent experience with the Bering Sea/Aleutian Islands Crab Rationalization Program suggests that designing the IFQ program with a significant initial allocation of shares to the processing sector could compromise the ability of the IFQ program to achieve its stated goals and objectives. The majority of the negative impacts under the two-pie system in the crab fishery appear to be resulting from the required pre-season pairing of harvester quota with processor quota. Anecdotal evidence suggests that this tying of interests created an anticompetitive structure that permitted processors to impose conditions upon harvesters that compromised the conservation, stability, operational flexibility, and safety goals for that program.

For example, during the 2005-06 season, many processors changed the pricing structure for crab, paying for the first time significantly less for crabs that had any barnacles on them or that were somewhat darker in color. As a result, estimates of at-sea high grading suggest that harvesters discarded more than 20% of harvestable crab, an eight-fold increase over the previous season.

In addition, the crab rationalization program replaced the race for fish with a race to the processor. Harvesters engaged in an intense pre-season race to match up with processors, leading some to sign agreements that provided little or no protection under the binding arbitration provisions just to avoid being the "last man standing" with few options for matching quota. Moreover, provisions in some of these agreements established a cut-off date for crab deliveries, compelling an accelerated crab harvest to meet these deadlines and avoid stranding harvesters' quota shares, which compromised traditional safety enhancements offered by quota programs.

⁴ Draft EIS, at 265 (Section 6.1 contains a placeholder for this analysis).

The Bering Sea/Aleutian Islands Crab Fishery differs from the IFQ programs framed in this draft EIS as it was a "two-pie" system of parallel harvesting and processing quota programs while all of the alternatives under this EIS deal only with allocation of harvesting quota. However, a significant allocation of harvest quota shares to processors could have some parallel effects. If the Council were to allocate upwards to 50% of the harvesting quota to processors, no fishermen would have enough quota to continue to fish without acquiring significant additional quota; the primary source being quota held by processors. The draft EIS should therefore examine whether the effects of a significant allocation of quota shares to the processing sector, as is currently proposed, might generate some of the same adverse consequences as appear to be occurring in the crab fishery under its "two pie" system.

E. <u>Conclusion</u>.

Environmental Defense wishes to express its strong support for the work of the Council on the groundfish IFQ program and believes that this Stage 1 draft EIS constitutes an excellent foundation for proceeding. We furthermore urge you to continue with this process in the belief that it holds the promise of substantial reforms to the fishery that can result in a healthier fishery, a more profitable fishery for both the harvesting and processing sectors, and a more biologically sustainable and economically efficient fishery.

Environmental Defense recognizes the complexity of this effort, and believes that the draft EIS provides a thoughtful and reasonable approach to that complexity. We are concerned that the range of the IFQ program design proposals are both too narrow and too heavily tilted towards initial allocation of significant portions of the harvesting quota to processors, that the draft has not provided an adequate justification for this, and that it should examine other program design strategies outside of initially allocating processors harvesting quota that address the underlying concerns.

We look forward to the opportunity to continue to work with the Council, the industry and the National Marine Fisheries Service through the completion of this important work. If we can be of any assistance to you in this effort, or if we can otherwise answer any questions that may arise from these comments, please do not hesitate to contact me directly, or have the Council staff do so. I can be reached at 206.623.7580, or wills@prestongates.com.

Very truly yours,

PRESTON GATES & ELLIS LLP



William W. Stelle

K:\51828\00001\KA2L\KA2LL205V

FMP AMENDMENT 10 (SHORE-BASED WHITING MONITORING)

A permanent monitoring program for the shore-based Pacific whiting fleet needs to be developed and implemented. This program would meet the requirements to monitor incidental catches of salmon in the whiting fishery, as stipulated in the 1992 Biological Opinion that analyzed effects of the Pacific Coast groundfish fishery on Endangered Species Act (ESA)-listed salmon stocks. Such a program would also allow for accurate tracking of depleted groundfish species mortality.

The issue of salmon retention in the groundfish trawl fisheries was first brought before the Council in 1996 in the form of Amendment 10 to the Pacific Coast Groundfish Fishery Management Plan (FMP) and Amendment 12 to the Pacific Coast Salmon FMP. Based on an Environmental Assessment drafted to analyze these amendments, the Council recommended the temporary use of the exempted fishery permit (EFP) process until a permanent monitoring program could be developed and implemented in the shore-based Pacific whiting fishery. Since that time, the EFP process has been employed each year to monitor this sector. However, EFPs are intended to provide for limited testing of a fishing strategy, gear type, or monitoring program that may eventually be implemented on a larger fleet-wide scale and are not a permanent solution to this monitoring issue. Results of the shore-based Pacific whiting EFPs indicate that it is feasible to retain and appropriately monitor the incidental take of salmon and groundfish other than Pacific whiting in the shore-based Pacific whiting fishery.

The Council has considered this monitoring issue at a number of meetings since 1996. At the September 2003 meeting, the National Marine Fisheries Service (NMFS) presented a preliminary draft Environmental Assessment that included a range of alternative monitoring systems for the shore-based Pacific whiting fishery. The Council recommended postponing adoption of a preliminary range of alternatives until more public input could be collected. Following a public scoping meeting convened in Newport, Oregon, the Council again considered the alternatives and adopted a preliminary range at the June 2004 meeting. However, a number of issues concerning how the monitoring program would operate to meet analytical requirements under the Magnuson-Stevens Fishery Conservation and Management Act and the ESA were still unresolved at that time, and the Council again postponed taking final action.

From 2004 to the present, NMFS and the states have operated the fishery under an EFP using an electronic monitoring system to verify maximized retention at sea. Amendment 18 adopted electronic monitoring as a potential fishery monitoring tool, in Section 6.4.1.1 of the FMP:

Electronic monitoring is an automated alternative to some human data collection systems. Electronic monitoring equipment may provide accurate, timely, and verifiable information on some elements of fishing operations at a lower cost than that provided by an at-sea observer. Electronic monitoring is an integrated assortment of electronic components combined with a software operating system. An electronic monitoring system typically includes one or more video cameras, a CPU with removable hard drive, and software that can integrate data from other components of a vessel's electronic equipment. The system autonomously logs video and vessel sensor data during the fishing trip without human intervention. When the vessel has completed its fishing operations and returned to port, the video and other data are transferred to a separate computer system for analysis. Video records are typically reviewed by human samplers on shore, but electronic techniques are being developed to automate some of this activity.

At its June 2006 meeting, under Agenda Item B.6., "Workload Priorities," the Council asked that the three State agencies and NMFS meet over the summer to discuss next steps in a monitoring and management program for the shore-based whiting fishery. The Council also asked that the agencies discuss the analysis that would be needed to implement sector bycatch caps for overfished species and/or salmon taken in the three non-tribal whiting sectors.

State and Federal agency technical staff met with each other via conference call on Monday, July 31, 2006. Technical staff then reported to and met with State and Federal agency policy staff on Wednesday, August 2, 2006. A joint agency report summarizing those meetings is provided as an attachment for this agenda item.

Council Task:

1. Provide comment on joint agency report and recommendations for further issue development.

Reference Materials:

- 1. Agenda Item C.8.b, Summary of Joint Agency Meeting: Report on Joint State-Federal Discussion on Whiting Fishery Monitoring and Management, Particularly for the Shore-Based Whiting Fishery.
- 2. Agenda Item C.8.b, Example EFP: Example of a 2006 Pacific Groundfish Exempted Fishing Permit for Monitoring Incidental Catch in the Shore-Based Pacific Whiting Fishery.

Agenda Order:

- a. Agendum Overview
- b. Joint Agency Meeting Review
- c. Reports and Comments of Advisory Bodies
- d. Public Comment
- e. Council Action: Assess Current Status and Recommend Future Action.

PFMC 8/28/06

 $Z: \label{eq:linear} Z: \label{eq:linear} Ex_C8_SitSum_shorebased whiting monitoring.doc \\$

Laura Bozzi Agency Staff PACIFIC COAST GROUNDFISH FISHERY EXEMPTED FISHING PERMIT (EFP) AUTHORITY: Title 50, Code of Federal Regulations Sections 600.745 and 660.406, and Subpart G of part 660

MONITORING INCIDENTAL CATCH IN THE SHORE-BASED PACIFIC WHITING FISHERY

F/V Vessel name

PERMIT # 06-HAK-XX Pacific Coast Groundfish Limited Entry Permit # xx

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 **XXXXXX**, 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 <u>et seq</u>. (Magnuson-Stevens Act), and implementing groundfish regulations at 50 CFR Part 660, Subpart G 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, Subpart G 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, 2006, whichever is earlier. It also may be terminated or modified earlier by regulatory action pursuant to 50 CFR Part 660, Subpart G, or revocation, suspension, or modification pursuant to 15 CFR Part 904, or successor regulations, or by the terms and conditions of this permit.

Signature D. Robert Lohn, Regional Administrator Northwest Region National Marine Fisheries Service Date Signed

Signature **XX**, EFP holder.

Date Signed

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

MONITORING INCIDENTAL CATCH IN THE SHORE-BASED PACIFIC WHITING FISHERY

TERMS AND CONDITIONS

A. <u>PURPOSE</u>.

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) in the shore-based whiting fishery, thereby, helping 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 2006 optimum yields (OYs) for groundfish species other than whiting. Early OY attainment for groundfish species other than whiting could result in NMFS having to close the coastwide fishery and/or having to terminate the EFPs. 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. <u>SCOPE</u>.

1. This permit applies to all fishing activities by the permitted vessel targeting on Pacific whiting during the effective dates of the permit. <u>In addition to all applicable terms</u> and conditions in this document, the EFP holder is responsible for instructing all

<u>vessel operators and crew members</u> <u>concerning the terms and conditions of this</u> <u>permit.</u>

- 2. This permit 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, Subpart G, including restrictions specified by or pursuant to 50 CFR 660.323, 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 at 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 at 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 10,000 pounds or more of Pacific whiting.
- 4. If a vessel lands less than 10,000 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 current trip limits, 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. Consistent with §660.373(b)(3), trip limits in Table 3 of 50 CFR Subpart G 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.
- 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. When the vessel is targeting Pacific whiting and fishing under this permit as well as participating in the Pacific Coast groundfish fishery and not fishing under this permit

during a single cumulative limit period, groundfish caught will count against a vessel's cumulative trip limits for those species.

E. <u>EFFECTIVE DATES</u>.

- 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 2006 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 permit is terminated on the date requested and no further notification from the Regional Administrator or State is required. 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 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 achievement of the allocation, commercial harvest guideline, or species' harvest guideline, in which case termination occurs concurrent with the closure, as announced in the <u>Federal Register</u>, 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 <u>Federal Register</u>, in which case further written notification of the vessel owner is not required.
 - f. When the closure of the shore-based sector of the Pacific whiting fishery is announced in the Federal Register.
- 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.

- 1. <u>Maximized Retention</u>. All catch, with the exception of unavoidable discards (see paragraph 2.b. below), must be brought onboard the vessel and retained until offloading.
- <u>Discard</u>. 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.
 - a. 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 shall be recorded and labeled "discard" in the logbook required by the State of landing.
 - b. 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.
 - c. Avoidable Discard: Avoidable discard, or discard that results from such events as malfunctioning net sensors and/or catching more fish that 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. <u>Disposition of salmon</u>. 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. <u>Fishing shoreward of latitude and longitude coordinates approximating the100-fathom</u> <u>contour</u>
 - 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. - $40^{\circ}30'$ N. lat.).

b. Coastwide: If NMFS projects the catch of Chinook salmon in the Pacific whiting fishery to exceed the 11,000 fish, a Salmon Conservation Zone, wherein all fishing for whiting would be prohibited, will be established until the EFP is terminated. NMFS will officially announce the effective date of the Salmon Conservation Zone by email (westcoastgroundfish@noaa.gov,) facsimile and/or email to the state representatives identified in section I.1.of this permit, and/or a Notice to Mariners. Written notice will also be provided to all EFP holders. The Salmon Conservation Zone is defined as: All waters shoreward of a boundary line approximating the 100- fm (183- m) depth contour. Latitude and longitude coordinates defining the boundary line approximating the 100-fm (183-m) depth contour are provided at § 660.393(a).

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. <u>At-sea observations</u>. 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.S. 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. <u>Federal observer coverage</u> 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. <u>Electronic Monitoring (EM) Equipment</u> A vessel fishing under this EFP will be required to carry electronic monitoring equipment to monitor for at-sea discarding of catch, unless the requirement is specifically waived by NMFS.

- 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 next EFP fishing trip. If an EM system is not installed before the next EFP fishing trip, the permit is invalid. However, on a trip-by-trip basis NMFS may choose to waive the requirement for installation if the equipment cannot be installed within 12 hours of the scheduled time.
- 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 permit.

- 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 permit and the permit.
- d. Vessel operator must regularly check status lights located on the EM system control box 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. For 2005, the NMFS specified EM provider is Archipelago Marine Research Ltd. Contacts: Project manager - Howard McElderry (1.800.663.7152); Field services – XXX
- 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.

I. NOTIFICATION REQUIREMENTS.

1. If requested, the EFP holder must provide departure and arrival notification to the State or observer program coordinator 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: Mike Fukushima, California Dept. of Fish and Game, 707- 441-5797. Oregon: Steve Parker, Oregon Dept. of Fish and Wildlife, 541-867-0300 Washington: Brian Culver, Wash. Dept. of Fish and Wildlife, 360-249-4628

2. For landings in California, the vessel operator must notify CDFG at least 12 hours before departing port to commence fishing under this permit.

J. <u>REPORTING REQUIREMENTS</u>. 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 a future permit.

- 1. <u>Trawl Logs</u>. 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 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.

- 2. <u>Other Reports</u>. This permit does not relieve any person from any other state or federal reporting requirements.
- 3. <u>Public Release of Information</u>. The fishing activities carried out under this permit, which are otherwise prohibited, are for the purpose of collecting 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. <u>LANDINGS</u>.

- 1. All landings must be at processing plants that are listed in the Designated Processor List (DPL) in Appendix A to this EFP. Vessel owners with vessels that participate in both the April 1 shore-based whiting fishery opening (south of 42° N. lat.) and the June 15 fishery opening (coastwide, including north of 42° N. lat.) must ensure that they get an updated DPL prior to June 15, 2006 in order to participate in that coastwide fishery opening.
 - a. The DPL in Appendix A may be revised, after consultation between NMFS and the State observation program coordinator. The observation program coordinators for each state are as follows:

In California: Mike Fukushima, California Dept. of Fish and Game, 707-441-5797. In Oregon: Steve Parker, Oregon Dept. of Fish and Wildlife, 541-867-0300 In Washington: Brian Culver, Washington Dept. of Fish and Wildlife, 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). Once offloading has commenced at a designated processing plant, all fish onboard the vessel must be offloaded at that plant.

L. <u>SANCTIONS</u>.

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, Subpart G, any other applicable provision of 50 CFR Parts 600 and 660 Subpart G, 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)).

M. <u>WAIVER</u>.

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.

APPENDIX A

EXEMPTED FISHING PERMIT MONITORING INCIDENTAL CATCH IN THE PACIFIC WHITING FISHERY

Vessel Name: xx

EFP#: 06-HAK-xx

1. Designated processor(s):

xx[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:

		Authorizing Official			
Item Changed	Date Approved	Name	Agency		

REPORT ON JOINT STATE-FEDERAL DISCUSSION ON WHITING FISHERY MONITORING AND MANAGEMENT, PARTICULARLY FOR THE SHORE-BASED WHITING FISHERY

At its June 2006 meeting, under agenda item B.6., "Workload Priorities," the Council asked that the three State agencies meet with the National Marine Fisheries Service (NMFS) over the summer to discuss next steps in a monitoring and management program for the shore-based whiting fishery. The Council also asked that the agencies discuss the analysis that would be needed to implement sector bycatch caps for overfished species and/or salmon taken in the three non-tribal sectors of the whiting fishery.

Technical staff from the State and Federal agencies met with each other via conference call on Monday, July 31, 2006. Technical staff then reported to and met with State and Federal agency policy staff on Wednesday, August 2, 2006. The agencies provide this report summarizing those meetings to provide background so that the Council may receive comments from its advisory bodies and the public to in support of Council guidance for moving forward on whiting fishery management.

SHORE-BASED WHITING SECTOR MONITORING AND MANAGEMENT

Need for and purpose of moving from exempted fishing permit (EFP) management to permanent regulations for the shorebased whiting fishery

The shore-based sector of the whiting fishery needs to have a catch accounting system in place to: accurately track Chinook salmon takes as required in the ESA section 7 Biological Opinion for Chinook salmon catch in the Pacific whiting fishery; provide catch data on species incidentally taken in the whiting fishery to meet the standardized reporting methodology defined by the Magnuson-Stevens Act; provide the opportunity to collect biological data on catch that would not otherwise be available if catch were sorted at sea; and create the regulatory structure necessary to efficiently manage the whiting fishery (for both the agencies and fishery participants) without an EFP.

Purpose of the moving forward with a new management regime for this fishery:

- Establish a program that benefits shore-based whiting sector participants by allowing the fishery to be prosecuted efficiently;
- Establish a program that benefits the whiting industry and buyers by allowing the whiting quality to be maintained throughout the harvesting and delivery process;
- Establish the framework for a program that minimizes discarding of catch to the extent practicable;
- Establish a standardized reporting methodology for the collection of accurate data from the shore-based whiting fishery;
- Establish a monitoring mechanism that is adequate to maintain the integrity of the maximized retention program.

TECHNICAL STAFF MEETING SUMMARY FOR SHORE-BASED WHITING MONITORING AND MANAGEMENT ISSUES

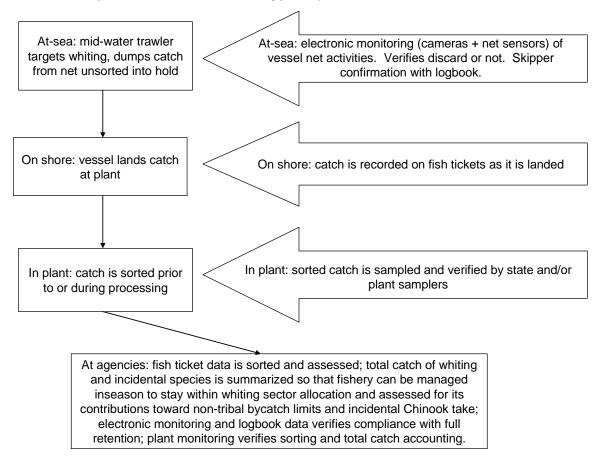
State and Federal agency staff met via conference call on July 31, 2006, to discuss procedures for and challenges with monitoring and assessing catch from the shore-based whiting sector after it is brought to shore. Call participants assumed that the fishery would continue to be managed as a maximized retention fishery – that is, as much catch as possible would be brought to shore, and would be landed unsorted. Maximized retention at sea would continue to be verified by approved monitoring mechanisms on the vessels.

Purpose of a monitoring program is the collection of data that is adequate to:

- Measure fleet-wide total catch by species (groundfish and protected species) over the length of the season.
- Measure total catch of target and bycatch species for tracking cumulative catch on a weekly basis throughout the season.
- Track catch and disposition of salmon

Possible Future Purpose of a monitoring program: Assess data and monitoring needs to support sector bycatch limits

Current data flow in shore-based whiting fishery:



Reporting needs for this fishery: The data reporting needs (timing and species-specific accounting) are greater in this fishery than in the non-whiting groundfish fishery because the management strategy for this fishery is more flexible than that used under the non-whiting groundfish fishery.

- Management under a bycatch limit regime allows fishery participants greater access to target species OY. Therefore, the monitoring needs associated with such a regime are more demanding if fishery is to be managed to stay under target quota and bycatch species limits.
- Management under a maximized retention regime allows fishery participants to land unsorted catch in a high-volume fishery without having tracked that catch prior to offloading. Therefore, the fishery has the potential to be a greater risk to Chinook salmon and overfished groundfish species, because it is permitted to operate within the Rockfish Conservation Area.

An on-shore sampling program needs performance standard recommendations from Council and its advisory bodies. What level of sampling/verification of reporting accuracy is expected if inseason fishery management staff is to ensure that the collective non-tribal whiting fisheries do not exceed overfished species bycatch limits, such as the 2006 fleetwide limit of 4.7 mt of canary? What level of sampling/reporting accuracy would be expected if inseason fishery management staff is to ensure that one of the sectors within the collective non-tribal whiting fisheries does not exceed overfished species for the sector – for example, less than 2 mt of canary?

Fish ticket system and the shore-based whiting fishery:

- Ensuring accurate and swift fish ticket reporting requires intensive port biologist work with and in the fish plants; PacFIN-style fish ticket data receiving not swift enough to manage this fishery
- ODFW runs a parallel database (to PacFIN) to track total catch from fish ticket data manually collected and submitted by three states at a speed that supports inseason quota monitoring
- Fish tickets subject to a more swift checking and verification system than in non-whiting fishery states track issues and errors with plants at time of fish ticket receipt
- During primary season, fish ticket data collected on a weekly basis
- Sorting at the point of landing is required for fish ticket accuracy. California requires processing at the site of landing and defines processing as including cutting the fish, but may need to provide for whole fish markets. California and Washington have found that bycatch that went missing during sorting is later "found" during processing, and have had mixed results in getting catch information from processors when catch is processed offsite.
- Ideas to address current incentives for plants to under-report bycatch, or to delay fish ticket submission:
 - Certified weighmaster program, as in California herring fishery, where each plant would be required to have a trained and certified weighmaster on duty throughout every whiting landing, and that weighmaster would be responsible for verifying the accuracy of landings weights/numbers/species reported by plants.
 - Whiting processor permits that would come with obligations for participating in the fishery timely and accurate fish ticket reporting, weighmaster program

participation, certain level of catch sampling (if done by processor,) recording to species (rather than market category) on a fish ticket, etc. If processors did not meet the stated performance measures in a given year, the permit would be subject to revocation.

- Hold back a portion of the sector allocation and assess compliance mid-season. Plants that have complied get access to that held-back portion; plants that have not complied, do not.
- Implement electronic fish ticketing for shore-based whiting fishery as a pilot program for West Coast electronic ticketing with priority for implementation at largest facilities first

Plant sampling in the shore-based whiting fishery:

- In California and Washington, in-plant samplers are state employees; in Oregon, in-plant samplers are plant employees, with some monitoring by state personnel
- Sampling rates vary by plant in two ways:
 - The number of deliveries sampled out of total deliveries received at a plant varies between plants
 - Of the deliveries sampled, the percentage of the weight sampled in each delivery also varies between plants and between deliveries
- Different plants see different incentives to either sample themselves or to facilitate state sampling some see incentives to prove that they're clean, others see incentives to hide incidental catch
- Inconsistent training of state/plant samplers and across states
- Regulations dealing with plant sampling need to ensure that plant samplers have access to the catch, as well as time and space (sorting table) to sample the catch

POLICY STAFF MEETING ISSUES FOR COUNCIL CONSIDERATION ON SHORE-BASED WHITING MONITORING AND MANAGEMENT

- EFP has still not been managed as the fishery would be if regulations were in place; need to review draft regulation in Council process so that 2007 EFP can be managed under structure as similar to anticipated regulations as possible.
- Electronic monitoring funding, both for camera placements and maintenance and for data evaluation, has come from NMFS temporary funds for bycatch-minimization experiments. Funding for permanent regulatory program uncertain.
- Some in-plant monitoring and inseason catch data assessment has come from State temporary funds. Funding for ongoing program management uncertain.
- Logbooks need to be evaluated for their applicability to this fishery. May need to design logbook specific to shore-based whiting fishery, rather than trying to use the multi-species bottom trawl logbook. Would logbook and resulting data be State or Federal? Paper or electronic?
- Current and long-term adequacy of port biologist coverage in all three states is a concern for management of all fisheries, including the shore-based whiting fishery. Port biologist program has been level-funded for several years, while program costs have increased, ultimately resulting in fewer port biologists in fewer ports. Should Council request that

Pacific States Marine Fisheries Commission evaluate the adequacy of port biologist coverage to address fishery management needs?

• If this fishery were transitioned to regulations, aligning State regulations with each other would be challenging because of the different in-state processes and requirements. Optimally, most regulatory requirements would be Federal, so that states could adopt through in-place concurring processes. May need to consider how to get issues currently addressed in state-processor agreements addressed in Federal regulations.

POLICY & TECHNICAL STAFF MEETING ISSUES FOR COUNCIL CONSIDERATION ON SECTOR-SPECIFIC BYCATCH LIMITS FOR ALL NON-TRIBAL WHITING SECTORS (CATCHER/PROCESSOR; MOTHERSHIP; SHORE-BASED)

Sampling Summary for Three Whiting Sectors

- Catcher/processor sector: industry pays for two third-party (non-government, nonindustry) observers on each vessel; approximately 50% of all catch, by weight, is sampled.
- Mothership sector: industry pays for two third-party observers, who sample all of the catch that is processed; data gap on whether catcherboats delivering to motherships are maximizing their catch retention, so need monitoring mechanism for catcherboat operation. On an annual basis, about half of the catcherboats that deliver to the shore-based plants also deliver to motherships during that sector's fishery.
- Shore-based sector: industry-employed samplers combined with state samplers; sampling rates vary between plants and, within each plant, between deliveries.

Issues to Consider in Developing Sector-Specific Bycatch Limit Program

- Sampling protocols under sector-specific limits would have to be designed to achieve greater precision and accuracy, since we would have to find/count/estimate smaller quantities of bycatch species.
- Bycatch estimates for particular species tend to be less precise when those species are a small proportion of total catch (low bycatch rates within a high-volume fishery) as with salmon or overfished species taken in the whiting fishery. Need to provide Council and SSC with analysis of desired precision of estimates of total catch, overfished species catch, and salmon catch to better understand how to structure monitoring for sector-specific bycatch limits.
- The cost of data collection rises with increased monitoring. Need to know what the tradeoffs are between costs of increased monitoring and precision needs for fleetwide and sector limits
- If you set sector-specific bycatch limits, would you base those limits on:
 - A proportion of the bycatch species equal to the proportional allocation of whiting, so that if a sector gets 40% of whiting, it gets 40% of canary? This could end up distributing bycatch species quantities to sectors that may or may not need those quantities.
 - OR, a historical look at bycatch species taken in each sector? This could end up "punishing" the sector with the best bycatch record by giving them the lowest bycatch limits. Different sectors have different historical sampling rates, and different associated sampling accuracy.

- OR, some other method?
- Alaska Pollock CDQ fishery has bycatch limits sampling rates there might provide an example of how to address sampling rates for sector-specific limits in whiting fishery.
- Whiting fishery has varied in the past in terms of which bycatch species are problematic in any one year, and in terms of which sector has problematic bycatch rates in any one year. Sector-specific bycatch rates would eliminate the flexibility of moving available bycatch between sectors

2007 EXEMPTED FISHING PERMIT

The EFP program for 2007 should be designed so that its requirements are as close as possible to the regulations that would need to be in place to manage this fishery under long-term Federal regulations, rather than through an annually-issued EFP. The EFP program for the shore-based whiting fishery includes the EFP itself, which is a permit issued by NMFS to participating vessels, state agreements with participating vessels, state agreements with fish processors, and state and federal fishery monitoring. In other words, NMFS requirements affect vessel activities at sea and until the point of landing, and state requirements affect vessel activities from the point of landing and affect processor activities. Depending on guidance from the Council, the 2007 EFP itself may need to include technical protocols for electronic monitoring equipment, logbook requirements specific to this fishery, and a constraint on yellowtail rockfish bycatch, as it applies to vessels (converting the "penalty box" restrictions.) The states and NMFS will also need to work with industry to evaluate funding for these programs and to evaluate on shore processes so that fish tickets are delivered on a more regular and frequent basis, and on a consistent basis from plant to plant.

July 31, 2006 agency technical call participants:

California Department of Fish & Game: Susan Ashcraft, Mike Fukushima

Oregon Department of Fish & Wildlife: Steve Parker, Mark Saelens (Patty Burke, Gway Kirchner, and Maggie Sommer attended as policy staff, but did not participate)

Washington Department of fish & Wildlife: Brian Culver

National Marine Fisheries Service: Gretchen Arentzen, Elizabeth Clarke, Jonathan Cusick, Yvonne deReynier (facilitating,) Becky Renko

August 2, 2006 agency policy-technical call participants:

California Department of Fish & Game: Susan Ashcraft, Marija Vojkovich

Oregon Department of Fish & Wildlife: Patty Burke, Gway Kirchner, Curt Melcher, Mark Saelens, Maggie Sommer

Washington Department of fish & Wildlife: Phil Anderson, Brian Culver

National Marine Fisheries Service: Gretchen Arentzen, Elizabeth Clarke, Jonathan Cusick, Yvonne deReynier, Frank Lockhart (facilitating,) Becky Renko

Agenda Item C.1.a Supplemental Attachment 3 September 2006 UNITED STATES DEPARTMENT OF COMMERCE



National Oceanic Atmospheric Administration National Marine Fisheries Service Sustainable Fisheries Division 7600 Sand Point Way N. E., Building. 1, Bin C15700 Seattle, WA 98115-0070

DATE: September 6, 2006

TO: DISTRIBUTION

FROM: F/NWR2 -Becky Renko

SUBJECT: PRELIMINARY Report #12 -- 2006 Pacific Whiting Fishery

This report consolidates preliminary state, federal, and tribal data for the 2006 Pacific whiting fishery. Due to concerns about the incidental catch of overfished species, bycatch limits are in place for canary (4.7 mt), widow (200 mt) and darkblotched rockfish (25 mt) taken in the non-tribal sectors of the fishery. If either bycatch limit is reached, the primary whiting seasons for the non-tribal fisheries will end regardless of the amount of whiting allocation remaining.

	Allocation		Whiting			5	Percent of
	Percentages	Metric Tons	Catch* (mt)	Overfished Species and Chinook salmon catch	Thru [date]	Status	alloca- tion taken
California (south of 42 N lat.)	(5% shore alloc'n; included in WOC shore allocation)	4,873	5,474		5/25	started 4/1, closed 1800 5/25	107.5%
Oregon		NA	61,382	~			
Washington		NA	30,465				
WOC shore- based	42% commercial OY	97,469	97,320	Canary - 1.63 mt Widow - 48.95 mt Darkblotched -2.27 mt Chinook # 816	6/15	started 6/15 closed 1800 8/2	99.8%
Mothership (n. of 42 N. lat.)	24% commercial OY	55,696	50,519	Canary - 0.75 mt Widow - 70.87 mt Darkblotched - 4.24 mt Chinook # 1,002	9/5	started 5/15	90.7%
Catcher/ processor (n. of 42 N. lat.)	34% commercial OY	78,903	63,607	Canary08 mt Widow - 66.65 mt Darkblotched - 6.72 mt Chinook - # 112	9/5	started 5/15	80.6%
Total nontribal	commercial OY	232,069	211,446	Canary - 2.46 mt Widow - 186.47 mt Darkblotched - 13.23 mt Chinook - # 1,930		 	91.1%
Tribal (Makah)		35,000	9,245	Canary - 0.15 mt Widow - 2.42 mt Darkblotched -0.00 mt Chinook - # 2,230	9/5		26.4%
Total directed fishing		267,069	220,691	Canary - 2.61 mt Widow - 188.89 mt Darkblotched - 13.23 mt Chinook - # 4,160			82.6%

* Catch includes: discards from at-sea processors; weigh-backs from shore-based vessels; and catch landed under trip limits prior to the season. The values for at-sea processing sectors are based on NMFS observer data. Data for shore-based vessels were provided by the States. Data for the at-sea processing portion of the Makah fishery are based on preliminary NMFS observers data and shore-based catch was provided by tribal samplers. All weights are in metric ton (2,204.6 pounds).

Agenda Item C.1.a Supplemental NWFSC PowerPoint Presentation September 2006

Northwest Fisheries Science Center Report

September 2006

Pre-recruit Survey Workshop -Co-organized by SW & NW Centers -This Wednesday-Friday in Santa Cruz -Examining comparability of 2 existing surveys and methods for including data from them in stock assessments Economic Data Collection -Remarkable 77% response rate to costearnings survey from the Oregon trawl fleet -Survey begins in Washington this week

Canary Catch in 2006 Trawl Survey -Roughly 6.5 mt through 1st leg of 2nd survey pass -Reports of another .7 mt this weekend that have not been QA/QC'd yet August Workshop on Data & Modeling Issues held in Seattle -Brought together over 40 scientists and data managers from throughout the west coast

Discard in the 2002 and 2003 Groundfish Trawl Fisheries: A Comparison of MRAG and NW Fishery Science Center Analyses

(Agenda Item C.1.a, Attachment 2) Prepared by: James Hastie, Jonathan Cusick, Nancy Gove, Janell Majewski of the NWFSC

Background

Results of MRAG analysis presented at June Council meeting under public comment

 NWFSC undertook a comparison of methods and results this summer
 MRAG Lead author Jennie Harrington provided a description of methods and an example of calculations.

Coastwide Discard Estimates

	2002			2003		
	MRAG NWFSC			MRAG	NWFSC	
Whiting	4,695	1,841		5,118	1,255	
Arrowtooth flounder	2,347	4,128		2,611	587	
Petrale sole	592	185		692	105	
Dover sole	1,469	1,210		1,620	1,102	
Longspine thornyhead	365	380		407	321	
Shortspine thornyhead	229	355		259	432	
Unspecified thornyheads	271			312		
Sablefish	4,831	1,814		5,471	1,615	
mortality		907			808	

	20	2002			2003		
	MRAG	MRAG NWFSC		MRAG	NWFSC		
	Coast-	Coast-		Coast-	Coast-		
	wide	wide		wide	wide		
Bocaccio ¹	104	27		92	2		
Chilipepper ¹	189	141		97	2		
Canary	221	36		254	14		
Cowcod ¹	3	3		2	0		
Widow	3	39		3	5		
Yellowtail	508	396		490	4		
Yelloweye	1	1		1	0		
Darkblotched	120	94		132	39		
POP	37	36		39	14		
Splitnose ¹	188	21		210	7		
Lingcod	619	269		706	139		
mortality		135			70		

Overall Discard Conclusions

	2002			20	003
	MRAG	NWFSC		MRAG	NWFSC
Sum of gross discard for the included spp.	16,791	10,975		18,515	5,644
Sum of discard mortality		9,933			4,767

Major Methodological Differences

MRAG used discard data from 2002 to estimate 2003 discard

 No ability to capture effects of RCAs

 Different data stratifications were used

 MRAG approach had limited ability to pick up depth-based differences in discard rates

Major Methodological Differences

- Different approaches used to expand observed discard to the fleet
- MRAG uses 'target fishery' categories from Observer Program Initial Report in a manner inconsistent with how the categories were used in the report.
 - –44% of MRAG's sablefish discard estimate was attributed to the Non-Groundfish target fishery (where only 1.6 mt of discard observed)

Major Methodological Differences

- MRAG applied non-EFP discard data rates to EFP trips
- EFPs required full Sebastes retention
 MRAG did not differentiate between
 - discard and discard mortality
 - Based on peer-reviewed studies, the Council family assumes survival of sablefish and lingcod averages 50%



Agenda Item C.1.b Supplemental WDFW Report September 2006

STATE OF WASHINGTON DEPARTMENT OF FISH AND WILDLIFE

48 Devonshire Road • Montesano, Washington 98563-9618 • (360) 249-4628 FAX (360) 664-0689 September 7, 2006

Mr. Donald Hansen, Chair Pacific Fishery Management Council 7700 Northeast Ambassador Place, Suite 101 Portland, Oregon 97220-1384

Dear Mr. Mansen:

The Washington Department of Fish and Wildlife (WDFW) sent a letter to the Northwest Fisheries Science Center, dated July 26, 2006, regarding WDFW's involvement in preparing assessments for the 2007 cycle, and received a response from the Science Center, dated August 14, 2006 (copies attached). Specifically, with regard to black rockfish, WDFW does not support updating the northern assessment (North of Cape Falcon) in 2007 for the reasons described below.

Over the last 25 years, WDFW has spent significant assets conducting research and collecting fisheries information on black rockfish because this resource is a key component to Washington's recreational fisheries and ensuring that Washington State realizes a return on this investment is a responsibility that WDFW does not take lightly. WDFW implemented a new black rockfish tagging program beginning in 1998; since then, we have spent approximately \$90K per year on tagging efforts. WDFW staff have tagged over 25,000 black rockfish since 1998, in addition to the approximately 60,000 tagged releases from previous years. Given the amount of Washington State resources that have been spent on this effort, the importance of black rockfish to Washington's sport fisheries, and the level of intimacy that WDFW staff have with this program, we believe it is imperative that WDFW remain the lead agency for the northern assessment.

The resulting data from WDFW's tagging effort needs to be compiled, documented, and analyzed, which will take a significant amount of WDFW staff time. Our marine fish science resources are limited and already overly subscribed contributing to the current stock assessment cycle. We are prepared to produce a technical report and publication that summarizes the updated tagging data in time for the 2009 assessment cycle, but these data will simply not be ready in time to contribute to this assessment cycle.

The Science Center mentioned the NOAA guideline of reassessing stocks once every five years; however, this is not necessarily a requirement and, in their April 2006 report, the Scientific and Statistical Committee supported pursuing new assessments as a priority. WDFW agrees with this approach and, therefore, is focusing staff time on a new spiny dogfish assessment for 2007.

For the reasons stated above, WDFW does not support a northern black rockfish assessment in 2007 and would be prepared to lead a northern assessment in 2009. The Council may wish to consider whether to proceed with a southern black rockfish assessment this cycle, or wait until the next cycle, so the two areas could be assessed concurrently. If you have any questions, please feel free to contact me.

Sincerely,

Philip Anderson

Philip Anderson Assistant Director Intergovernmental Resource Management



UNITED STATES DEPARTMENT OF COMMERCE National Oceanic and Atmospheric Administration NATIONAL MARINE FISHERIES SERVICE

Fishery Analysis and Monitoring Division Northwest Fisheries Science Center 2725 Montlake Blvd E. Seattle, WA 98112 206 860-3381

August 14, 2006

Mr. Phillip Anderson Assistant Director Intergovernmental Resource Management State of Washington Department of Fish and Wildlife 48 Devonshire Road Montesano, Washington 98563-9618

Dear Mr. Anderson:

Thank you for the update on your planning for the spiny dogfish assessment. I really appreciate your efforts. With regard to the yelloweye rockfish assessment, the Terms of Reference for assessment review is a Council document developed by the Scientific and Statistical Committee (SSC). Although we coordinate the process of developing the list of assessments, the Council, with advice from the SSC, is responsible for finalizing the terms of reference and making the determination whether assessments comport with the terms of reference. Consequently, we would recommend that you discuss the scope of the yelloweye assessment with the full SSC. As you state in your letter additional data would require a "loose" interpretation of the terms of reference and the full SSC must make that determination. Resolving this matter as quickly as possible would assist us in coordinating the development of the final STAR panel schedule.

The classification of the black rockfish assessment as "coastwide" in planning documents reflected our assumptions about the full geographic range of the species and therefore the assessment. Since the northern area has not been assessed since 1999, one of the reasons for including black rockfish in the list of 2007 assessments was the realization that the stock's status off Washington should be updated. This comports with



guidance we have received from within NOAA Fisheries that assessments need to be routinely updated and that a more than 5-year gap between assessments should avoided. We hope that you can provide data and assistance to the lead author so that assessments can be completed for all areas of interest to the council. I believe the methods used are a scientific question best decided by the scientists involved in consultation with the full SSC. However, my preference would be that whatever the eventual stock structure that is used to model this species it would be useful to unify what have been two completely separate assessments within a single assessment exercise.

Sincerely,

M. Elizabeth Clarke, Ph.D. Division Director

cc: Stacey Miller Jim Hastie Don Hansen, Chair, PFMC Dr. Don McIsaac, Executive Director Dr. Rick Methot Morris Barker Brian Culver Michele Culver Tom Jagielo Theresa Tsou Farron Wallace



STATE OF WASHINGTON DEPARTMENT OF FISH AND WILDLIFE

48 Devonshire Road • Montesano, Washington 98563-9618 • (360) 249-4628 FAX (360) 664-0689

July 26, 2006

)

)

Dr. Elizabeth Clarke National Marine Fisheries Service Northwest Fisheries Science Center 2725 Montlake Boulevard East Seattle, Washington 98112

Dear Dr. Clarke:

The purpose of this letter is to communicate the Washington Department of Fish and Wildlife's (WDFW) intent to participate in the next stock assessment cycle as the lead author for the spiny dogfish assessment, and to share some of our thoughts relative to the planned black rockfish assessment and future yelloweye rockfish assessments.

With regard to spiny dogfish, WDFW staff have been working with representatives from the University of Washington and Canada Department of Fisheries and Oceans to share and review dogfish biological and fishery data. We are committed to being the lead authors on this assessment, and plan to develop an assessment that takes into account the transboundary nature of the stock.

As for black rockfish, there appears to be some confusion as to whether the planned assessment is intended to be a coastwide assessment (which would produce a coastwide acceptable biological catch and optimum yield), or whether Washington would remain a separate area in the model, or whether only the southern area (i.e., Oregon and California) would be assessed. It is also unclear what role is anticipated for WDFW in drafting the assessment. With regard to the coastwide application, a genetic study conducted in 1995-97 reinforced findings from a major tagging study that there are two separate black rockfish stocks, north and south of Cape Falcon, Oregon. As a reminder, the Council's Groundfish Management Team, estimated the amount of the stock located between Cape Falcon and the Oregon/Washington border and, for ease of management, transferred that amount from the northern assessment area to the south. Based on the results of this genetic study, WDFW strongly believes that Washington should remain a separate assessment area.

In addition, the present northern black rockfish assessment model incorporates a unique, direct approach to using the available tagging data, which cannot be implemented as such in the current stock synthesis 2 (SS2) model. Given this, and the fact that our limited assessment resources will be fully subscribed with the spiny dogfish assessment in 2007, we would advocate that a full northern black rockfish assessment be completed in 2009. Given the health of the resource indicated by the last assessment, and subsequent harvest substantially below optimum yield levels, there is likely no biological urgency to reassess northern black rockfish next year.

Dr. Elizabeth Clarke July 26, 2006 Page 2

With regard to yelloweye rockfish, we reviewed the list of species and types of assessments for the next three cycles, which was presented to the Council in April, and noted that yelloweye were scheduled as "updates" for 2007, 2009, and 2011. We understand that, under the Terms of Reference, new data sources cannot be considered with an update; however, we would like to request a somewhat loose interpretation of this requirement to ensure that additional data (from an existing data source in the current assessment) are considered. Specifically, we would like the stock assessment team to consider adding Washington recreational catch-per-unit-of-effort (CPUE) data from halibut trips. (Note: Washington recreational CPUE data are currently used, but only for bottomfish trip types, whereas Oregon recreational CPUE data from both bottomfish and halibut trips are included.)

Finally, we are planning additional research activities for yelloweye in 2007 and 2008, and would like to have the opportunity to consider those data in a full assessment in 2009.

Thank you, in advance, for taking these comments into consideration. If you have any questions, please feel free to contact me at (360) 902-2720.

Sincerely,

Philip Anderson Assistant Director Intergovernmental Resource Management

cc: Don Hansen, Chair, PFMC Dr. Don McIsaac, Executive Director, PFMC Dr. Rick Methot, NWFSC Morris Barker Brian Culver Michele Culver Tom Jagielo Theresa Tsou Farron Wallace

Agenda Item C.2.a Supplemental Attachment 2 September 2006

DRAFT

The Pacific Fishery Management Council's Groundfish Bycatch Mitigation Program Work Plan June 2006

1. Introduction

Amendment 18 to the groundfish fishery management plan (FMP), implementing the preferred alternative in the Bycatch Mitigation Program Final Environmental Impact Statement, adds language to the FMP to:

- Require the use of current bycatch minimization measures.
- Provide the current standardized bycatch reporting methodology in the FMP.
- Incorporate the Groundfish Strategic Plan goal of reducing overcapacity in all commercial fisheries. (FMP Objective #2: "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 appropriate for a sustainable harvest and low discard rates, and which results in a fishery that is diverse, stable, and profitable. This reduced capacity should lead to more effective management for many other fishery problems.")
- Support the future use of individual fishing quota (IFQ) programs as bycatch reduction tools for appropriate commercial fishery sectors.
- Authorize the use of sector-specific and vessel-specific total catch limit programs to reduce bycatch in appropriate sectors of the fishery.
- Authorize the use of full/maximized retention requirements for selected fisheries, where practicable.

The Groundfish FMP is a framework plan; it provides the Council with a range of management measures they may consider for implementation through federal rulemaking. Implementing new management measures most commonly occurs as part of the biennial harvest specifications regulatory process. The Council may also develop regulatory amendments to change or amend federal regulations.

The Council reviewed this work plan at its November 2004, March 2005, September 2005, and November 2005 meetings. At its November 2005 meeting, the Council debated the practicability of implementing the various bycatch mitigation measures made available for use in the groundfish fishery through Amendment 18. The Council determined that, while sector- and vessel-specific bycatch limits could be useful bycatch mitigation measures in some cases, fishery management agencies do not, at this time, have the resources, money, or infrastructure to manage major portions of the groundfish fishery with sector- or vessel-specific bycatch limits. Therefore, the Council expressed a desire to focus its current efforts on management tools that could be developed and implemented within a 2- to 3-year time frame, in order to evaluate and improve bycatch accounting, reduce bycatch through programs that are practicable for near-term implementation, and build a management infrastructure to support implementation of more complex bycatch reduction measures. As initial steps, the Council suggested that this work plan first focus on:

• Requiring permits in the open access sector of the groundfish fishery to better monitor overall participation in the groundfish fishery;

• Analyzing how total catch data is delivered to the Council process, in order to improve the speed of data-delivery.

Section 2 of this work plan reviews the range of measures the Council has already implemented. Section 3 discusses additional bycatch mitigation measures under Council development.

2. Bycatch Mitigation Measures and Programs Currently in Place

Ongoing management measures and programs implemented by the Council and NMFS that mitigate bycatch include:

- At-sea observer programs in both shore-delivery and sea-delivery groundfish fisheries, including groundfish limited entry trawl, limited entry fixed gear, and open access vessels.
- Large-scale closed areas to reduce protected salmon bycatch: Klamath and Columbia River Conservation Zones.
- Large-scale closed areas to reduce overfished species bycatch: Rockfish Conservation Areas, Cowcod Conservation Areas, Yelloweye Rockfish Conservation Areas.
- Large-scale closed areas to protect groundfish essential fish habitat: 51 new closed areas implemented off West Coast in June 2006.
- Vessel Monitoring System (VMS) requirements for the limited entry fleet to ensure compliance with closed area restrictions.
- Landings limits set for harvest of healthy stocks so that they constrain the incidental catch of overfished species that co-occur with those stocks.
- Season restrictions to reduce directed and incidental catch of overfished species.
- Trawl mesh size, chafing gear, and codend regulations to reduce juvenile fish bycatch.
- Trawl footrope size regulations to reduce access to rocky habitat and rockfish bycatch.
- Selective flatfish trawl regulations to reduce bycatch of rockfish in flatfish fisheries.
- Escape panel requirements for groundfish pots to prevent lost pots from ghost fishing.
- FMP Amendment 14 to reduce capacity in the limited entry fixed gear fleet.
- Trawl buyback to reduce capacity in limited entry trawl fleet.
- Geographically-based harvest guidelines where appropriate, especially in recreational fisheries.
- Total catch limits for canary, darkblotched, and widow rockfish in the non-tribal Pacific whiting sector.

Bycatch mitigation measures and programs developed by the Council and planned for implementation by January 1, 2007:

<u>Amendment 18 implementing regulations</u>: Require that groundfish fishery management measures take into account the co-occurrence ratios of overfished species with more abundant target stocks; require vessels that participate in the open access groundfish fisheries to carry observers if directed by NMFS; update the boundary definitions of the Klamath and Columbia River Salmon Conservation Zones and Eureka nearshore area to use latitude and longitude coordinates in a style similar to that of the Groundfish Conservation Areas; and authorize the use of depth-based closed areas as a routine management measure. The purposes for the routine use of depth-based closed areas are: protect and

rebuild overfished stocks, prevent the overfishing of any groundfish species, minimize the incidental harvest of any protected or prohibited non-groundfish species, control effort to extend the fishing season, minimize the disruption of traditional commercial fishing and marketing patterns, spread the available recreational catch over a large number of anglers, discourage target fishing while allow small incidental catches to be landed, and allow small fisheries to operate outside the normal season.

- <u>VMS regulations</u>: Expand VMS program to require that all commercial vessels that take and retain, or possess groundfish in the EEZ, or land groundfish taken in the EEZ, and all trawl vessels that operate in the EEZ, to carry and use VMS units.
- <u>2007-2008 Groundfish Harvest Specifications and Management Measures</u>: In addition to those measures already listed above as currently in place, this rulemaking would add three new Yelloweye Rockfish Conservation Areas to constrain yelloweye bycatch, and add an Ocean Salmon Conservation Zone for inseason use to constrain salmon bycatch in the whiting primary season.

3. Bycatch Accounting and Mitigation Measures Under Development

3.1. Total Catch Data Collection, Analysis, and Delivery

In June 2006, per the Council's request, NMFS's Northwest Fisheries Science Center presented a report, *Summary of West Coast Groundfish Observer Program Data Collection and Quality Control Process* (Agenda Item F.1.b., NWFSC Report, June 2006). That report described the data collection and quality control process as occurring in four phases: 1) observer data collection, entry, and initial quality control; 2) identifying and attaching corresponding fish ticket data with observer data; 3) data processing and analysis; 4) validating and delivering discard data, and developing models based on this data, for use in management.

To estimate total catch rates in the groundfish fishery, observer data must be expanded from the observed trips in a particular sector to all of the trips taken in that sector. These expansions require that the observer program link observer data with fish ticket and logbook data. In its report, NMFS suggested that the delivery to the Council process of analyzed observer data could be speeded up if fish ticket upload time to the PacFIN data system were shortened; logbook data upload time, particularly for identifying fishing depths, were shortened; fish tickets were more consistent between states; and fish tickets and logbooks were altered to add an identifier for when the trip was associated with an exempted fishing permit.

3.2. Inter-Sector Allocation

The Council has previously established formal allocations between different fishery sectors for several species or species groups: 1) all groundfish species between the limited entry and open access commercial fisheries based on relative catch histories of the two fleets; 2) whiting between the shore-based, mothership, and catcher/processor sectors of the groundfish limited entry trawl fleet; and 3) sablefish between the limited entry fixed gear and trawl sectors, sablefish between the endorsed and non-endorsed portions of the limited entry fixed gear fleet, and sablefish between the three Amendment 14 tier groups. Several of the bycatch mitigation tools provided by Amendment 18 would first require that the Council develop additional groundfish allocations between fishery sectors. Implementing sector- or vessel-specific bycatch cap programs would first require that available groundfish harvest be allocated between sectors and/or vessels. Implementing an individual quota program for any one sector of the groundfish fleet would require groundfish allocations between that sector and the remaining sectors in the fleet. To that end, the Council has released a Notice of Intent to prepare an Inter-Sector Allocation Environmental Impact Statement (EIS). The public comment period on this Notice of Intent ended on June 16, 2006.

Scoping for the EIS is continuing and the Groundfish Allocation Committee is scheduled to meet in October 2006 to continue development of a range of alternatives. The Council is next scheduled to discuss the development of this EIS at its November 2006 meeting. Any inter-sector allocation would likely require an FMP amendment in addition to the EIS. The FMP requires that FMP amendments be considered over at least three Council meetings.

3.3. Open Access Sector License Limitation

When it considered this bycatch work plan in November 2005, the Council recommended expanding the current limited access system to cover a larger segment of vessels targeting groundfish. The Council noted that fishery managers cannot currently identify all of the vessels participating in the groundfish fishery. Better identification of the fishery participants would allow fishery managers to better monitor and account for bycatch in the sector, and to better target particular management measures to reduce bycatch in the sector. A license limitation program to reduce effort in the fishery would reduce the number of vessels targeting groundfish and having opportunities to discard incidentally-caught fish.

Currently, a federal limited entry permit is not required for all vessels that land groundfish. A trawlendorsed permit is required to land groundfish with that gear type (as defined in the FMP and Federal regulations), although certain trawl fisheries catching groundfish incidentally, such as the pink shrimp trawl fishery, may land limited amounts of groundfish consistent with specified limits and under defined gear exemptions. Vessels targeting groundfish without a Federal permit may use fixed gear (longline and pot), but are subject to much lower landing limits (such as the daily trip limit for sablefish) than those vessels with a fixed gear endorsed groundfish limited entry permit. Other legal groundfish commercial gear types, such as vertical hook-and-line, may also land groundfish under the same set of open access landing limits, which are established in biennial specifications. In most cases these open access fisheries are subject to state limited entry programs, as is the case for nearshore groundfish fisheries in Oregon and California. (Washington prohibits commercial groundfish fisheries in state waters.) Like the nongroundfish trawl fisheries, there are other fisheries, such as salmon troll, that may land small amounts of groundfish without those species being their principal target. At their September 2006 meeting, the Council is scheduled to begin the process of developing a permit system for the open access fishery participants. Any such program would require amending the groundfish FMP, a process that requires at least three Council meetings (per the FMP) to complete.

3.4. Trawl Individual Quota Program

The Council has been considering the development of a dedicated access privileges program, principally focusing on individual fishing quotas (IFQs) for the groundfish limited entry trawl sector. As discussed above, implementing such a program would require allocating harvest of a wide range of target and non-target species between the limited entry trawl sector and all other groundfish sectors in aggregate (by means of the Inter-Sector Allocation EIS.) The Council has appointed an Ad-hoc Trawl Individual Quota Committee to develop alternatives, which will be analyzed in a separate Trawl Individual Quota Program EIS. Like open access permitting, a trawl IFQ program would require an FMP amendment. The Council has already discussed this issue at several past meetings. At its September 2006 meeting, the Council intends to finalize its initial alternatives for analysis and to provide guidance to its analysts on next steps for developing the EIS. The draft timeline for this action estimates that, depending on the complexity of the program proposed, a trawl IFQ program could be implemented beginning January 1, 2011.

3.5. Maximized Retention Program for the Shore-based Whiting Sector

Federal groundfish regulations require that groundfish catch be sorted by species or species group prior to the first weighing after offloading. They also prohibit retention of groundfish in excess of trip limits, and

retention of prohibited species. The shore-based Pacific whiting trawl sector has been operating under an exempted fishing permit (EFP) that allows participating vessels to land their catch without sorting it, and to retain until offloading prohibited species and groundfish in excess of trip limits, in order to allow the unsorted catch to go directly into the hold to better preserve the condition of the whiting flesh. Since 2004, NMFS and the states have operated the EFP with at-sea electronic monitoring, and with a requirement that participating vessels maximize their retention of all catch (eliminate discards as much as possible). Pursuant to the FMP's Amendment 10, the Council may exempt a fishery with an approved monitoring program from the prohibitions from landing unsorted catch and from retaining incidentallycaught salmon as part of that unsorted catch. Amendment 18 made electronic monitoring available as a monitoring tool for use outside of experimental efforts. Implementing such a program for the shore-based whiting sector will require: 1) development of requirements for electronic monitoring system components; 2) development of maximized retention regulations; 3) evaluation of the shore-based total catch monitoring program for the whiting fishery; and 4) development of permanent infrastructures to support inseason monitoring of the shore-based whiting fishery's catch and to support collection and analysis of electronic monitoring system data. An EA is currently under development to support the transition from the EFP to a permanent regulatory framework for the exemptions and required monitoring program. Although Amendment 10 initially envisioned a program for the monitoring of incidental salmon catch, current Council efforts have expanded the intent of the program to ensure better accounting of all bycatch species and to reduce fishery discards. At the Council's September meeting, NMFS and state agencies will report to the Council on issues for Council consideration and needed next steps to move this program to Federal regulation. This program may or may not need an additional FMP amendment. Depending on the complexity of the program developed, the fishery is expected to transition to Federal regulations in time for the 2008 primary whiting season.

3.6. Sector- and Vessel-Specific Bycatch Limits

Per Council recommendations, NMFS has implemented bycatch limits for canary, darkblotched, and widow rockfish taken incidentally in the whiting fishery. At its June 2006 meeting, the Council asked that additional discussions be held at its autumn 2006 meetings on the feasibility of implementing sector-specific overfished species bycatch limits for the three different sectors within the non-tribal whiting fishery. As discussed above, whiting has been allocated between the fishery sectors that target whiting. For overfished species bycatch limits to be implemented for the whiting sectors, those species would have to be allocated between the sectors and an adequate monitoring system would need to be developed and implemented. The Council could recommend that such an allocation be considered as part of the Inter-Sector Allocation EIS, or through some separate action. The trawl IQ program, discussed above, would be a vessel-specific total catch limit program for the trawl sector. Like the trawl IQ program, additional sector- and/or vessel-specific bycatch limit programs could be implemented, if found to be practicable, following the development of inter-sector groundfish allocations for those sectors and development of an adequate monitoring program. A Council evaluation of the total catch monitoring program for any sector managed with bycatch limits.

3.7. Other Bycatch Mitigation Measures the Council May Consider

Under Amendment 18, Council could also consider the following bycatch mitigation measures for development:

• Integrating EFH- and bycatch-related groundfish closed areas so that where EFH-related closed areas reduce bycatch, that reduction is accounted for in bycatch rate modeling.

- Expanding VMS coverage requirements to commercial passenger fishing vessels that are subject to groundfish closed area restrictions.
- Hot-spot management to either prevent fishing in an area of overfished species abundance, or to allow fishing in an area of target species abundance.

Print date: 9/6/2006 4:18:00 PM Path: G:\!PFMC\MEETING\2006\September\Groundfish\Ex C2a Supp Att 2 -Bycatch_Work_Plan_rev606-emc.doc

GROUNDFISH ADVISORY SUBPANEL REPORT ON GROUNDFISH BYCATCH WORK PLAN

The Groundfish Advisory Subpanel (GAP) supports efforts to increase and improve monitoring, data collection, and analysis; especially mechanisms that move us toward real-time data such as electronic fish tickets. The GAP encourages the Council to urge National Marine Fisheries Service, Pacific States Marine Fisheries Commission, and state agencies to prioritize development of these improved monitoring and reporting programs. Such programs will facilitate development of sector-specific bycatch limits and the trawl individual quota (IQ) program.

Specific to the other items identified in Agenda Item C.2.a, Supplemental Attachment 2; the GAP believes that inter-sector allocation is the highest priority. The GAP urges the Council to begin making significant progress on this issue, which will be necessary to implement the trawl IQ program.

PFMC 09/11/06

THE GROUNDFISH MANAGEMENT TEAM (GMT) REPORT ON CONSIDERATION OF INSEASON ADJUSTMENTS

The GMT reviewed several inseason management issues and have the following recommendations for consideration by the Council.

COMMERCIAL

Limited Entry Bottom Trawl Fishery Trip Limit Adjustments

Catch of petrale sole and sablefish in the limited entry bottom trawl fisheries is tracking behind projections. The GMT considered increasing trip limits in Period 6 (November-December) to 70,000 lb per 2 months for petrale sole and to 20,000 lb per 2 months for sablefish to provide some increase in fishing opportunity while staying within the OYs for these species. The GMT reviewed whether increased catches of these species could be accommodated without increasing impacts on overfished species beyond amounts available in the bycatch scorecard. The estimated mortality of overfished and target species in the limited entry bottom trawl fishery is shown in the following table.

	-	North	South	Total
Rebuilding	Canary	5.0	2.3	5 7.3
Species	POP	57.0	0.0	57.0
	Darkblotch	119.5	43.0	162.5
	Widow	0.6	0.1	0.6
	Bocaccio	0.0	57.5	5 57.5
	Yelloweye	0.0	0.1	0.1
	Cowcod	0.0	2.5	5 2.5
Target	Sablefish	2089.2	716.2	2805.4
Species	Longspine	273.8	543.3	8 817.0
	Shortspine	597.1	299.5	896.5
	Dover	5427.5	1983.5	5 7411.0
	Arrowtooth	4137.3	35.7	4173.0
	Petrale	2169.9	419.3	2589.2
	Other Flat	593.8	611.0	1204.8
	Slope Rock	173.3	219.6	392.9

Estimated Mortality in the LE Bottom Trawl Sector

These estimated impacts on overfished species are within amounts available in the bycatch scorecard.

Therefore, the GMT recommends that the limited entry trawl fishery trip limits for Period 6 (November-December) be adjusted as follows:

- 1) north of 40°10' N. latitude, increase petrale sole trip limits from 60,000 lb per 2 months to 70,000 lb per 2 months for large and small footrope trawl gear;
- 2) south of 40°10' N. latitude, increase petrale sole trip limits from 60,000 lb per 2 months to 70,000 lb per 2 months;
- 3) north of 40°10' N. latitude, increase sablefish trip limits from 14,000 lb per 2 months to 20,000 lb per 2 months for large and small footrope trawl gear;
- 4) south of 40°10' N. latitude, increase sablefish trip limits from 17,000 lb per 2 months to 20,000 lb per 2 months.

Update on Darkblotched Rockfish Catch in the Whiting Fishery

In the non-tribal sectors of the whiting fishery, overfished species bycatch limits are currently in place for canary rockfish (4.7 mt), widow rockfish (200 mt), and, after the June 2006 Council meeting, darkblotched rockfish (25 mt). The 25 mt darkblotched rockfish bycatch limit for the non-tribal whiting sectors is intended to reduce the likelihood of the darkblotched rockfish OY from being exceeded, and reduce the risk of the whiting fishery affecting the continuance of other groundfish fisheries that encounter darkblotched rockfish.

Data available in NMFS Whiting Report #12 through September 6, 2006, indicates that 13.23 mt of darkblotched rockfish has been taken by the non-tribal whiting sectors. Catch rates of darkblotched rockfish have decreased since mid June (the June 19 whiting report indicated that 11.07 mt of darkblotched rockfish had been taken through June 18). At this time the fishery is projected to stay within the specified bycatch limit.

Update on Darkblotched Rockfish Catch in the Limited Entry Bottom Trawl Fishery

At the Council's June 2006 meeting, the Council recommended inseason actions to slow the catch of darkblotched rockfish in the bottom trawl fishery. Inseason action was taken for the limited entry trawl fishery north of 38° N. latitude changing trip limits and the seaward boundary of the trawl RCA with the intent to slow catch of darkblotched rockfish enough to have a period 6 petrale sole fishery. Data available through August indicates that 122 mt of darkblotched rockfish has been taken by the limited entry bottom trawl fishery and a total of 155.2 mt could be taken if the current catch rates continue throughout the season and before proposed adjustments are adopted.

Update on the Lingcod Harvest Guideline

At the June 2006 meeting, the Council recommended allowing the lingcod harvest guideline to be exceeded in 2006 to prevent the commercial fishery from being unnecessarily constrained. PacFIN estimates the commercial catch of lingcod through August to be 273 mt, 58.3 mt over the 2006 commercial harvest guideline for lingcod of 214.7 mt. However, the anticipated total catch through the end of the year is still not expected to exceed either the lingcod OYs (1,801 mt north of 42° N. latitude and 612 mt south of 42° N. lat) or the ABC (2,716 mt). Therefore, the GMT recommends no further action at this time and will continue to monitor lingcod catch.

Widow Rockfish Bycatch Limit in the Whiting Fishery

The GAP requested that the GMT consider an increase in the widow bycatch limit for the nontribal whiting fishery to buffer against a disaster tow that might shut down the fishery before the whiting quota is achieved. In the non-tribal sectors of the whiting fishery, the bycatch limit for widow rockfish is 200 mt. Bycatch of widow rockfish in the whiting fishery was estimated in NMFS Whiting Report #12 to be at 186.47 mt through September 6, 2006. The GMT estimates widow rockfish catch in all commercial groundfish fisheries to be 200 mt through August.

Also, the tribal midwater trawl fishery is likely to take less widow rockfish than the 40 mt projected in the bycatch scorecard. While current estimates of tribal midwater trawl widow catch is approximately 5 mt, the Makah tribe plans to have a fall midwater fishery that will take additional widow rockfish.

The GMT considered whether to increase the bycatch limits for widow rockfish in the non-tribal whiting fishery above the 200 mt specified in regulation. The whiting fishery is nearing the end of its seasons for the various sectors. The shorebased fishery has already closed. The mothership fishery has approximately 5,000 mt (~9% of allocation) remaining, and the catcher/processor fishery has approximately 15,000 mt (~20% of allocation) remaining. Catch of widow rockfish in the whiting fishery is expected to remain low through the remainder of the season. However, there is the potential for a large tow of widow rockfish. There have been past unexpectedly high tows upwards of 20 mt. Therefore, while catch of widow rockfish is expected to remain low, the Council might consider increasing the widow bycatch limit enough to cover an unexpectedly high tow of approximately 20 mt. Increasing the bycatch limit from 200 mt to 215-220 mt should provide enough widow rockfish to allow the whiting fisheries to catch their whiting allocations without the threat of a single large widow tow shutting whiting fisheries down early while remaining within the widow OY. The GMT notes that the Council recommended increasing the widow bycatch limit in September 2005 from 200 mt to 212 mt.

Open Access DTL Sablefish Limits North of 36° N. latitude

On May 1, 2006, per the Council's recommendation, NMFS reduced the open access (OA) sablefish daily trip limit, or DTL, fishery cumulative trip limit north of 36° N. latitude from 5,000 lb per 2 months to 3,000 lb per 2 months. The Council recommended this reduction in anticipation of a large influx of fishing effort into the sablefish DTL fishery as a result of salmon fishery closures. Reducing the cumulative limit was intended to provide for a longer season, which was thought to most benefit fishers who have historically participated in the year-round fishery.

To date, the catch of OA sablefish is higher in 2006 than catch projected from historical data. This supports the assumptions that restrictions in the salmon fishery may have resulted in increased effort in the OA DTL fishery. PacFIN estimates the OA sablefish DTL catch through August to be 524 mt, out of a 613 mt harvest guideline north of 36° N. latitude. Given that this sector has caught an average of 70-80 mt of sablefish per month since March, the OA DTL fishery is expected to catch their sablefish allocation in early October.

The GMT considered lowering limits in this fishery to extend the season, but those limits would not be in place until October 1 at the earliest. Since the allocation is likely to be reached around that time, lowering limits is not an option for keeping this fishery within its allocation. The GMT also considered whether other fisheries were projected to take their sablefish allocations and if allowing the OA DTL fishery to exceed their allocation might be an option. However, the GMT raised several concerns with this option.

- 1. While the limited entry trawl fishery is not projected to harvest their sablefish allocation, even with the proposed increase in sablefish trawl trip limits, the OA DTL fishery would have a higher mortality on canary rockfish compared to estimated limited entry trawl mortality. The mortality estimates in the bycatch scorecard for canary rockfish do not have any residual amount available. Therefore, the OA directed groundfish estimate of 3.0 mt, which includes estimates for the OA DTL fisheries, does not have room to increase unless another sector of the fishery can be reduced.
- 2. Another option would be to reduce trip limits in the limited entry (LE) fixed gear sablefish DTL fishery. However, the GMT is concerned that this is not fair given that some limited entry fixed gear participants have not yet completed their primary sablefish season and, therefore, have not yet had an opportunity to participate in the LE sablefish DTL fishery. This option brings up fairness issues by lowering trip limits in the LE DTL fishery because the OA DTL fishery is suffering from the effects of increased effort in their fishery.

Therefore, the GMT recommends that beginning October 1, the OA DTL fishery trip limits be adjusted north of 36° N. latitude from "300 lb per day, or 1 landing per week of up to 1,000 lb, not to exceed 3,000 lb per 2 months" to "closed."

Limited Entry Fixed Gear & Open Access DTL Sablefish Limits South of 36° N. latitude

The GMT considered a recommendation from the GAP to increase the LE & OA sablefish DTL fisheries south of 36° N. latitude from 350 lb per day to 500 lb per day beginning October 1, leaving the weekly limit the same. Leaving the weekly limit the same is intended to discourage increased effort from shifting from north of 36° N. latitude if that area is closed beginning October 1. This action is being considered because the LE & OA sablefish DTL fisheries south of 36° N. latitude are tracking behind schedule. PacFIN QSM data through the end of August estimates 52 mt out of a 271 mt total catch OY. There is not a limited entry or open access sablefish allocation in this area. This action would not increase estimated impacts on overfished species as reported in the bycatch scorecard, including canary rockfish. Values currently in the bycatch scorecard assume that this sector will achieve their allocation.

Therefore, the GMT recommends that beginning October 1, the LE & OA sablefish DTL fishery trip limits be adjusted south of 36° N. latitude from "350 lb per day, or 1 landing per week of up to 1,050 lb" to "500 lb per day, or 1 landing per week of up to 1,050 lb."

Update on California Commercial Nearshore Fisheries

CDFG has taken two inseason actions for commercial nearshore fisheries for species with state trip limits that are more restrictive than federal trip limits. First, CDFG closed their commercial greenling fishery effective August 1. Second, CDFG recently lowered their 2-month Sep-Oct cabezon trip limit from 900 lbs to 200 lbs in the hope that the fishery can continue to the end of the year.

RECREATIONAL

There are no inseason recreational proposals for Washington or California. Washington reports that their recreational fisheries are tracking behind expected catches at this point in time. Recreational take of groundfish in California through June is currently tracking close to or below expected levels. A comparison to annual projections for species of concern (using actual take plus model projections for remaining months) remains below harvest targets.

Oregon Recreational Fishery

Vermilion rockfish are managed within a state harvest limit, as part of the "other nearshore rockfish" aggregate (also including brown, china, copper, grass, quillback, and tiger rockfishes). In June, the catch rate of the "other nearshore rockfish" aggregate was tracking higher than expected and projections showed that without action the harvest limit would be prematurely attained. Vermilion rockfish represented approximately half of the landings in the "other nearshore rockfish to prevent reaching the harvest limit. Beginning on June 24, 2006 retention of vermilion rockfish was prohibited in the recreational ocean and estuary boat fisheries.

The GMT recommends conforming federal recreational regulations to state regulations by prohibiting the retention of vermillion rockfish by boat anglers.

RESEARCH

Canary Rockfish in the Research Catch

Catch of canary rockfish by research vessels is higher than projected in the bycatch scorecard for 2006. Previously, the bycatch scorecard had projected 3 mt of canary rockfish would be taken in research catch. Based on preliminary information from research vessels to date, 7.5 mt is a better estimate of current research catch. This will reduce the amount of "residual" canary rockfish in the bycatch scorecard to a negative number, -1.2 mt. Research surveys are continuing from Eureka to San Diego, so there is still a possibility of increased catch of canary rockfish. However, more than 90% of the canary rockfish take in the historical triennial trawl survey occurs north of Eureka.

However, other ongoing fisheries are tracking behind their projected take of canary rockfish. The non-tribal whiting fisheries have taken 2.5 mt out of their 4.7 mt canary rockfish bycatch limit. The tribal whiting fishery has taken 0.3 mt through August out of a projected 1.6 mt canary mortality and the tribal midwater trawl fishery is also tracking behind in the bycatch scorecard. In addition, recreational fisheries are tracking behind their estimated canary take at this time. Thus, there is the potential for canary rockfish total mortality to come in below the bycatch scorecard projections for the year. Projected total mortality of canary rockfish for the year in the bycatch scorecard is 48.3 mt, approximately 1.2 mt over the OY of 47.1.

The GMT discussed options to address this projected potential overage of the canary OY.

- 1. Reduce the canary rockfish bycatch limit for the non-tribal whiting fishery by at least 1.2 mt.
- 2. Reduce trip limits or adjust RCAs in other sectors of the fishery.

Yelloweye Rockfish in Research Catch

The Oregon LOA research has caught more yelloweye rockfish than projected. The Oregon research to date has caught the 5 yelloweye rockfish (in numbers of fish), the same number it projected for the entire research project. The research does not expect to take any additional yelloweye rockfish, however, they would like the Council's blessing in continuing their research with the acknowledgement that there is the potential to catch a few additional yelloweye rockfish. The estimated impact of this research adds a couple of pounds to research catch. Therefore, it is within the bycatch scorecard estimated mortality of 2.0 mt of yelloweye rockfish from research catch.

SCORECARD UPDATE

There are two versions of the bycatch scorecard attached to this statement. The first version shows updates to the scorecard since the June Council meeting. These include: 1) estimated impacts to canary rockfish from the research catch; 2) estimated total mortality of canary rockfish and cowcod for the limited entry trawl non-whiting fleet; and 3) estimated mortality from the CA early season whiting EFP south of $40^{\circ}10^{\circ}$ N. latitude. The CA EFP total mortality estimates for canary, darkblotched, and widow rockfish (0.1 mt, 0.2 mt, and 0.4 mt, respectively) were already included in the non-tribal whiting bycatch limits and have therefore been reduced to zero under the EFP row in the bycatch scorecard.

The second version of the scorecard projects mortality to bocaccio, darkblotched rockfish, and POP from the proposed trawl trip limits increases. Bycatch scorecard adjustments to the bycatch limit for widow rockfish in the non-tribal whiting sectors, if applicable, have not been made at this time.

GMT RECOMMENDATIONS

- Increase limited entry trawl fishery trip limits for petrale sole and sablefish coastwide in Period 6 (November-December).
- Consider raising the non-tribal whiting widow bycatch limit.
- Close the OA sablefish DTL fishery north of 36° N. latitude beginning October 1.
- Increase the LE & OA sablefish DTL fishery south of 36° N. latitude beginning October 1 (weekly limits would remain status quo).
- Conform federal recreational regulations to state regulations by prohibiting the retention of vermillion rockfish by boat anglers.
- Consider action to reduce projected take of canary rockfish.

Fishery	Bocaccio a/	Canary	Cowcod	Dkbl	POP	Widow	Yellowey
Limited Entry Trawl- Non-whiting	57.3	7.3	2.5	155.2	56.8	0.6	0.1
Limited Entry Trawl- Whiting	01.0	1.0	2.0	10012	00.0	0.0	0.1
At-sea whiting motherships					1.0	· · · · ·	0.0
At-sea whiting cat-proc		4.7		25.0	2.9	200.0	0.0
Shoreside whiting				20.0	1.8	200.0	0.0
Tribal whiting		1.6		0.0	0.6	6.1	0.0
Fribal		1.0		0.0	0.0	0.1	0.0
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	0.0
Fixed gear		0.3		0.0	0.0	0.0	2.3
imited Entry Fixed Gear	13.4	1.2	0.1	1.3	0.4	0.5	2.9
Open Access: Directed Groundfish	10.6	3.0	0.1	0.2	0.1	0.1	3.0
Open Access: Incidental Groundfish		0.0	0.1	0.4	0.1	0.1	
CA Halibut	0.1	0.1		0.0	0.0		
CA Gillnet b/	0.5	0.1		0.0	0.0	0.0	
CA Sheephead b/	0.0			0.0	0.0	0.0	0.0
CPS- wetfish b/	0.3			0.0	0.0		
CPS- squid c/	0.0						
Dungeness crab b/	0.0		0.0	0.0	0.0		
HMS b/		0.0	0.0	0.0			
Pacific Halibut b/	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	1.6	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 d/							
WA							
OR		8.5				1.4	6.7
CA	98.0	9.3	0.4			8.0	3.7
Research: Includes NMFS trawl shelf	slope surve	ys, the IP	IC halibut s	urvey, and	expected	impacts fr	om SRPs
and LOAs.							
	2.0	7.5	0.1	3.8	3.6	0.9	2.0
ion-EFP Total	182.6	48.3	3.2	185.6	70.9	258.0	21.1
FPs e/							
CA early season whiting S. of 40°10'	0.3	0.0	0.0	0.0	0.0	0.0	0.0
EFP Subtotal	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	182.6	48.3	3.2	185.6	70.9	258.0	21.1
2006 OY	309	47.1	4.2	200	447	289	27
Difference	126.4	-1.2	1.0	14.5	376.1	31.1	5.9
Percent of OY	59.1%	102.5%	76.2%	92.8%	15.9%	89.3%	78.0%
Key		= either noi	t applicable;	trace amour	nt (<0.01 mt)	; or not repo	nted In
a/South of 40°10'N. lat. b/Mortality estimates are not hard number							

Estimated Total Mortality Impacts Updated with 2006 OY levels - Prior to September Trawl Adjustments

c/ Bycatch amounts by species unavailable, but bocaccio occurred in 0.1% of all port samples and other rockfish in another 0 of all port samples (and squid fisheries usually land their whole catch). In 2001, out of 84,000 mt total landings 1 mt was gr

d/ Values for yelloweye in California represent specified harvest guidelines.

e/ Values are proposed EFP bycatch caps, not estimates of total mortality. The EFP is terminated inseason if the cap is projected to be attained early.

Limited Entry Trawl- Non-whiting 5 Limited Entry Trawl- Whiting 4 At-sea whiting motherships 4 At-sea whiting cat-proc 5 Shoreside whiting 7 Tribal whiting 7 Midwater Trawl 6 Bottom Trawl 7 Troll 7 Fixed gear 1 Dpen Access: Directed Groundfish 1 Open Access: Incidental Groundfish 1 CA Halibut 1 CA Sheephead b/ 1 CPS- wetfish b/ 1 CPS- squid c/ 1	13.4 0.5 0.1	Canary 7.3 4.7 1.6 0.8 0.5 0.3 1.2 3.0 0.1	Cowcod 2.5	Dkbi 162.5 25.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.2	POP 57.0 2.9 1.8 0.6 0.0 3.7 0.0 0.0 0.0 0.0 0.4 0.1	Widow 0.6 200.0 6.1 40.0 0.0 0.0 0.5	Yelloweye 0.1 0.0 0.0 0.0 0.0 0.0 0.0 0.0
Limited Entry Trawl- Whiting At-sea whiting motherships At-sea whiting cat-proc Shoreside whiting Tribal whiting Iribal Midwater Trawl Bottom Trawl Troll Fixed gear Limited Entry Fixed Gear Open Access: Directed Groundfish Open Access: Incidental Groundfish CA Halibut CA Sheephead b/ CPS- wetfish b/ CPS- squid c/ Dungeness crab b/	13.4 10.6 0.1 0.5	4.7 1.6 1.8 0.8 0.5 0.3 1.2 3.0	0.1	25.0 0.0 0.0 0.0 0.0 0.0 1.3	1.0 2.9 1.8 0.6 0.0 3.7 0.0 0.0 0.0 0.4	200.0 6.1 40.0 0.0 0.0 0.5	0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 2.3
At-sea whiting motherships Image: Constraint of the sea whiting cat-proc Shoreside whiting Image: Constraint of the sea whiting Tribal whiting Image: Constraint of the sea whiting Tribal Whiting Image: Constraint of the sea whiting Tribal Whiting Image: Constraint of the sea whiting Midwater Trawl Image: Constraint of the sea whiting Bottom Trawl Image: Constraint of the sea white of the sea wh	0.6 0.1 0.5	1.6 1.8 0.8 0.5 0.3 1.2 3.0		0.0 0.0 0.0 0.0 0.0 1.3	2.9 1.8 0.6 0.0 3.7 0.0 0.0 0.0 0.4	6.1 40.0 0.0 0.0 0.5	0.0 0.0 0.0 0.0 0.0 0.0 2.3
At-sea whiting cat-proc Shoreside whiting Tribal whiting Inibal Midwater Trawl Bottom Trawl Troll Fixed gear Limited Entry Fixed Gear Deen Access: Directed Groundfish CA Halibut CA Gillnet b/ CA Sheephead b/ CPS- wetfish b/ CPS- squid c/ Dungeness crab b/	0.6 0.1 0.5	1.6 1.8 0.8 0.5 0.3 1.2 3.0		0.0 0.0 0.0 0.0 0.0 1.3	2.9 1.8 0.6 0.0 3.7 0.0 0.0 0.0 0.4	6.1 40.0 0.0 0.0 0.5	0.0 0.0 0.0 0.0 0.0 0.0 2.3
Shoreside whiting Tribal whiting Tribal whiting Midwater Trawl Bottom Trawl Bottom Trawl Fixed gear Limited Entry Fixed Gear Dipen Access: Directed Groundfish CA Halibut CA Gillnet b/ CA Sheephead b/ CPS- wetfish b/ CPS- squid c/ Dungeness crab b/	0.6 0.1 0.5	1.6 1.8 0.8 0.5 0.3 1.2 3.0		0.0 0.0 0.0 0.0 0.0 1.3	1.8 0.6 0.0 3.7 0.0 0.0 0.0 0.4	6.1 40.0 0.0 0.0 0.5	0.0 0.0 0.0 0.0 0.0 2.3
Tribal whiting Tribal Midwater Trawl Bottom Trawl Fixed gear Limited Entry Fixed Gear Limited Entry Fixed Gear Open Access: Directed Groundfish CA Halibut CA Gillnet b/ CA Sheephead b/ CPS- wetfish b/ CPS- squid c/ Dungeness crab b/	0.6 0.1 0.5	1.8 0.8 0.5 0.3 1.2 3.0		0.0 0.0 0.0 0.0 1.3	0.6 0.0 3.7 0.0 0.0 0.4	40.0 0.0 0.0 0.0 0.5	0.0 0.0 0.0 0.0 2.3
Tribal Midwater Trawl Bottom Trawl Image: Stress of the stres	0.6 0.1 0.5	1.8 0.8 0.5 0.3 1.2 3.0		0.0 0.0 0.0 0.0 1.3	0.0 3.7 0.0 0.0 0.4	40.0 0.0 0.0 0.0 0.5	0.0 0.0 0.0 2.3
Midwater Trawl Image: Second	0.6 0.1 0.5	0.8 0.5 0.3 1.2 3.0		0.0 0.0 0.0 1.3	3.7 0.0 0.0 0.4	0.0 0.0 0.5	0.0 0.0 2.3
Bottom Trawl Image: Second S	10.6 0.1 0.5	0.8 0.5 0.3 1.2 3.0		0.0 0.0 0.0 1.3	3.7 0.0 0.0 0.4	0.0 0.0 0.5	0.0 0.0 2.3
Troll Fixed gear Limited Entry Fixed Gear 1 Dpen Access: Directed Groundfish 1 Open Access: Incidental Groundfish 1 CA Halibut 1 CA Gillnet b/ 1 CA Sheephead b/ 1 CPS- wetfish b/ 1 CPS- squid c/ 1 Dungeness crab b/ 1	10.6 0.1 0.5	0.5 0.3 1.2 3.0		0.0 0.0 1.3	0.0 0.0 0.4	0.0 0.5	0.0 2.3
Fixed gear 1 Limited Entry Fixed Gear 1 Open Access: Directed Groundfish 1 Open Access: Incidental Groundfish 1 CA Halibut 1 CA Gillnet b/ 1 CA Sheephead b/ 1 CPS- wetfish b/ 1 CPS- squid c/ 1 Dungeness crab b/ 1	10.6 0.1 0.5	0.3 1.2 3.0		0.0 1.3	0.0 0.4	0.5	2.3
Limited Entry Fixed Gear 1 Open Access: Directed Groundfish 1 Open Access: Incidental Groundfish 1 CA Halibut 1 CA Gillnet b/ 1 CA Sheephead b/ 1 CPS- wetfish b/ 1 CPS- squid c/ 1 Dungeness crab b/ 1	10.6 0.1 0.5	1.2 3.0		1.3	0.4	0.5	
Open Access: Directed Groundfish 1 Open Access: Incidental Groundfish 1 CA Halibut 1 CA Gilnet b/ 1 CA Sheephead b/ 1 CPS- wetfish b/ 1 CPS- squid c/ 1 Dungeness crab b/ 1	10.6 0.1 0.5	3.0					
CA Halibut CA Gillnet b/ CA Sheephead b/ CPS- wetfish b/ CPS- squid c/ Dungeness crab b/ CPS crab b/ C	0.1 0.5		0.1	0.2	0.1	0.1	3.0
CA Halibut CA Gilnet b/ CA Sheephead b/ CPS- wetfish b/ CPS- squid c/ Dungeness crab b/ CPS - start b/ CPS - squid c/ CPS - sq	0.5	0.1				0.1	- 3.0
CA Gilnet b/ CA Sheephead b/ CPS- wetfish b/ CPS- squid c/ Dungeness crab b/ CPS- squid c/ CPS- squi	0.5	0.1		0.0	0.0		
CA Sheephead b/ CPS- wetfish b/ CPS- squid c/ Dungeness crab b/ CPS- squid c/ CPS- squ						0.0	
CPS- wetfish b/ CPS- squid c/ Dungeness crab b/ CPS- squid c/ CPS- squid				0.0	0.0		0.0
CPS- squid c/ Dungeness crab b/				0.0	0.0	0.0	0.0
Dungeness crab b/	0.3						
-							
HMS b/	0.0		0.0	0.0	0.0		
B 10 11 0 11 1		0.0	0.0	0.0			
	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	0.1	0.1	0.0	0.0	0.0	0.1	0.1
	0.1	0.0	0.0	0.0	0.0	0.0	0.0
	0.2	1.6	0.0	0.0	0.0	0.3	0.2
	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Spot Prawn (trap)							
Recreational Groundfish d/							
WA		8.5					6.7
OR						1.4	
	98.0	9.3	0.4	<u> </u>		8.0	3.7
Research: Includes NMFS trawl shelf-slop	e surve	ys, the IPH	C halibut su	rvey, and e	expected in	npacts fror	n SRPs an
LOAs.	2.0	7.5	0.1	3.8	3.6	0.9	2.0
	82.8	48.3	3.2	192.9	71.1	258.0	21.0
EFPs e/	02.0	40.0	0.2	102.0	11.1	200.0	21.1
	0.3	0.0	0.0	0.0	0.0	0.0	0.0
cA carry season whiting 3. or 40 10	0.0	0.0	0.0	0.0	0.0	0.0	0.0
EFP Subtotal	0.0	0.0	0.0	0.0	0.0	0.0	0.0
	82.8	48.3	3.2	192.9	71.1	258.0	21.1
	309	40.5	4.2	200	447	230.0	21.1
	26.2	-1.2	1.0	7.1	375.9	31.1	5.9
	20.2 9.2%	102.5%	76.2%	96.4%	15.9%	89.3%	78.0%
Key			not applicable				
a/South of 40°10'N. lat.		onnor					por court
o/Mortality estimates are not hard numbers; bas	ed on th	e GMT's hest	nrofessional	judament			

Estimated Total Mortality Impacts Updated with 2006 OY levels - Proposed September Trawl Adjustments

d/ Values for yelloweye in California represent specified harvest guidelines.

e/ Values are proposed EFP bycatch caps, not estimates of total mortality. The EFP is terminated inseason if the cap is projected to be attained early.

ENFORCEMENT CONSULTANTS REPORT ON OPEN FISHERY LIMITATION: PLANNING FOR A POSSIBLE FISHERY MANAGEMENT PLAN (FMP) AMENDMENT

The Enforcement Consultants (EC) support the concept of a Federal Open Access Permit. A permit will provide a number of administrative, regulatory, and enforcement objectives.

- Data base can be used to identify fishermen involved in open access fisheries. New vessel monitoring system requirements will start to develop a list but may not include all fishermen, or limit new entries.
- Enhanced communication with Federal and State agencies.
- Permit qualifications can be established to achieve management objectives.
- Permits can be sanctioned to appropriately penalize egregious violations.

If the Council chooses to develop a Federal Open Access Permit, the EC is interested in participating in that development.

PFMC 09/13/06

GROUNDFISH ADVISORY SUBPANEL REPORT ON OPEN ACCESS FISHERY LIMITATION: PLANNING FOR A POSSIBLE FISHERY MANAGEMENT PLAN AMENDMENT

The majority of the Groundfish Advisory Subpanel (GAP) favors the Council moving forward to limit capacity in the Open Access Fishery, but also advises the Council to focus on other more pressing issues first.

PFMC 09/13/06

THE GROUNDFISH MANAGEMENT TEAM (GMT) REPORT ON OPEN ACCESS (OA) LIMITATION: PLANNING FOR A POSSIBLE FMP AMENDMENT

The GMT discussed the Council timeline for implementing Open Access Limitation relative to current high priority issues and the pros and cons of proceeding along the prescribed timeline. The GMT prioritized OA limitation relative to the other workloads (e.g. TIQ, intersector allocation, and Amendments 10 and 15) and outlined the potential economic and resource conservation benefits (see table below), recognizing that all the items are important and should not be overlooked. The items are not independent processes, but rather integrated processes, thus it may be beneficial and efficient to proceed with some processes concurrently.

Rank	Potential Economics Benefits	Rank	Potential Conservation Benefits
1	Trawl IQ	1	Trawl IQ
2	Intersector Allocation	1	Open Access Limitation
3	Amendment 10	2	Amendment 10
4	Amendment 15	3	Amendment 15
5	Open Access Limitation	4	Intersector Allocation

The GMT recommends proceeding with the OA limitation process sooner rather than later. Fishery managers cannot currently identify all of the vessels participating in the OA groundfish fishery, which constrains the ability to effectively model catches in this fishery and project harvest limit attainment. However, with expansion of vessel monitoring system (VMS) to the OA fleet in early 2007, fishery managers will be able to identify OA participants. OA limitation would better control the number of participants and would facilitate a more reliable tracking of catch, particularly for rebuilding species.

The GMT supports OA limitation as a true limitation program, rather than a simple registration program, as the latter would add complexity to management and do little to achieve conservation goals.

The GMT also recognized a fast track approach could take away time from working on other equally or higher priority items, such as trawl IQ, under the suggested open access implementation timeline of January 1, 2009. Additionally, adding this timeline to the existing workload could compromise the quality of the program, particularly regarding the qualifying criteria. The GMT recommends incorporating the current state limited entry permits, including but not limited to those permitted under the Oregon and California's commercial nearshore fisheries.

PFMC 09/13/06

Federal Register / Vol. 62, No. 162 / Thursday, August 21, 1997 / Rules and Regulations 44421

THEFT RATES OF MODEL YEAR 1995 PASSENGER MOTOR VEHICLES STOLEN IN CALENDAR YEAR 1995-Continued

	Manufacturer	Make/modet (line)	Thefts 1995	Production (mfgr's) 1995	1995 (per 1,000 vehi- cles pro- duced) theft rate
205	ROLLS-ROYCE	SIL SPIRIT/SPUR/MULS	0	132	0.0000
206		TURBO R	0	19	0.0000
207		EUROVAN	0	1,814	0.0000
208		LIMOUSINE	0	6	0.0000

Issued on: August 18, 1997.

L. Robert Shelton, Associate Administrator for Safety Performance Standards. [FR Doc. 97–22263 Filed 8–20–97; 8:45 am] BILLING CODE 4910–59–P

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Chapter VI

[Docket No. 970728184-7184-01; I.D. 060997C]

Policy Guidelines for the Use of Emergency Rules

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

ACTION: Policy guidelines for the use of emergency rules.

SUMMARY: NMFS is issuing revised guidelines for the Regional Fishery Management Councils (Councils) in determining whether the use of an emergency rule is justified under the authority of the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act). The guidelines were also developed to provide the NMFS Regional Administrators guidance in the development and approval of regulations to address events or problems that require immediate action. These revisions make the guidelines consistent with the requirements of section 305(c) of the Magnuson-Stevens Act, as amended by the Sustainable Fisheries Act.

DATES: Effective August 21, 1997. FOR FURTHER INFORMATION CONTACT: Paula N. Evans, NMFS, 301/713-2341.

SUPPLEMENTARY INFORMATION:

Background

On February 5, 1992, NMFS issued policy guidelines for the use of emergency rules that were published in

the Federal Register on January 6, 1992 (57 FR 375). These guidelines were consistent with the requirements of section 305(c) of the Magnuson Fishery Conservation and Management Act. On October 11, 1996, President Clinton signed into law the Sustainable Fisheries Act (Public Law 104-297), which made numerous amendments to the Magnuson-Stevens Act. The amendments significantly changed the process under which fishery management plans (FMPs), FMP amendments, and most regulations are reviewed and implemented. Because of these changes, NMFS is revising the policy guidelines for the preparation and approval of emergency regulations. Another change to section 305(c), concerning interim measures to reduce overfishing, will be addressed in revisions to the national standards guidelines.

Rationale for Emergency Action

Section 305(c) of the Magnuson-Stevens Act provides for taking emergency action with regard to any fishery, but does not define the circumstances that would justify such emergency action. Section 305(c) provides that:

1. The Secretary of Commerce (Secretary) may promulgate emergency regulations to address an emergency if the Secretary finds that an emergency exists, without regard to whether a fishery management plan exists for that fishery;

2. The Secretary shall promulgate emergency regulations to address the emergency if the Council, by a unanimous vote of the voting members, requests the Secretary to take such action;

3. The Secretary may promulgate emergency regulations to address the emergency if the Council, by less than a unanimous vote of its voting members, requests the Secretary to take such action; and

4. The Secretary may promulgate emergency regulations that respond to a public health emergency or an oil spill. Such emergency regulations may remain in effect until the circumstances that created the emergency no longer exist, provided that the public has had an opportunity to comment on the regulation after it has been published, and in the case of a public health emergency, the Secretary of Health and Human Services concurs with the Secretary's action.

Policy

The NOAA Office of General Counsel has defined the phrase "unanimous vote," in paragraphs 2 and 3 above, to mean the unanimous vote of a quorum of the voting members of the Council only. An abstention has no effect on the unanimity of the quorum vote. The only legal prerequisite for use of the Secretary's emergency authority is that an emergency must exist. Congress intended that emergency authority be available to address conservation, biological, economic, social, and health emergencies. In addition, emergency regulations may make direct allocations among user groups, if strong justification and the administrative record demonstrate that, absent emergency regulations, substantial harm will occur to one or more segments of the fishing industry. Controversial actions with serious economic effects, except under extraordinary circumstances, should be done through normal notice-and-comment rulemaking.

The preparation or approval of management actions under the emergency provisions of section 305(c) of the Magnuson-Stevens Act should be limited to extremely urgent, special circumstances where substantial harm to or disruption of the resource, fishery, or community would be caused in the time it would take to follow standard rulemaking procedures. An emergency action may not be based on administrative inaction to solve a longrecognized problem. In order to approve an emergency rule, the Secretary must have an administrative record justifying emergency regulatory action and demonstrating its compliance with the national standards. In addition, the preamble to the emergency rule should indicate what measures could be taken

or what alternative measures will be considered to effect a permanent solution to the problem addressed by the emergency rule.

The process of implementing emergency regulations limits substantially the public participation in rulemaking that Congress intended under the Magnuson-Stevens Act and the Administrative Procedure Act. The Councils and the Secretary must, whenever possible, afford the full scope of public participation in rulemaking. In addition, an emergency rule may delay the review of non-emergency rules, because the emergency rule takes precedence. Clearly, an emergency action should not be a routine event.

Guidelines

NMFS provides the following guidelines for the Councils to use in determining whether an emergency exists:

Emergency Criteria

For the purpose of section 305(c) of the Magnuson-Stevens Act, the phrase "an emergency exists involving any fishery" is defined as a situation that:

(1) Results from recent, unforeseen events or recently discovered circumstances; and

(2) Presents serious conservation or management problems in the fishery; and

(3) 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.

Emergency Justification

If the time it would take to complete notice-and-comment rulemaking would result in substantial damage or loss to a living marine resource, habitat, fishery, industry participants or communities, or substantial adverse effect to the public health, emergency action might be justified under one or more of the following situations:

(1) Ecological—(A) to prevent overfishing as defined in an FMP, or as defined by the Secretary in the absence of an FMP, or (B) to prevent other serious damage to the fishery resource or habitat; or

(2) Economic—to prevent significant direct economic loss or to preserve a significant economic opportunity that otherwise might be foregone; or

(3) Social—to prevent significant community impacts or conflict between user groups; or (4) Public health—to prevent significant adverse effects to health of participants in a fishery or to the consumers of seafood products.

Dated: August 14, 1997.

Gary C. Matlock,

Acting Assistant Administrator for Fisheries, National Marine Fisheries Service. [FR Doc. 97–22094 Filed 8–20–97; 8:45 am] BILLING CODE 3510–22–F

DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Part 285

[Docket No. 970702161-7197-02; I.D. 041097C]

RIN 0648-AJ93

Atlantic Highly Migratory Species Fisheries; Import Restrictions

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

ACTION: Final rule.

SUMMARY: NMFS amends the regulations governing the Atlantic highly migratory species fisheries to prohibit importation of Atlantic bluefin tuna (ABT) and its products in any form harvested by vessels of Panama, Honduras, and Belize. The amendments are necessary to implement International Commission for the Conservation of Atlantic Tunas (ICCAT) recommendations designed to help achieve the conservation and management objectives for ABT fisheries.

DATES: Effective August 20, 1997. Restrictions on Honduras and Belize are applicable August 20, 1997; restrictions on Panama are applicable January 1, 1998.

ADDRESSES: Copies of the supporting documentation are available from Rebecca Lent, Chief, Highly Migratory Species Management Division, Office of Sustainable Fisheries (F/SF1), NMFS, 1315 East-West Highway, Silver Spring, MD 20910–3282.

FOR FURTHER INFORMATION CONTACT: Chris Rogers or Jill Stevenson, 301–713– 2347.

SUPPLEMENTARY INFORMATION: The Atlantic tuna fisheries are managed under the authority of the Atlantic Tunas Convention Act (ATCA). Section 971d(c)(1) of the ATCA authorizes the Secretary of Commerce (Secretary) to issue regulations as may be necessary to carry out the recommendations of the ICCAT. The authority to issue regulations has been delegated from the Secretary to the Assistant Administrator for Fisheries, NOAA (AA).

Background information about the need to implement trade restrictions and the related ICCAT recommendation was provided in the preamble to the proposed rule (62 FR 38246, July 17, 1997) and is not repeated here. These regulatory changes will further NMFS' management objectives for the Atlantic tuna fisheries.

Proposed Import Restrictions

In order to conserve and manage North Atlantic bluefin tuna, ICCAT adopted two recommendations at its 1996 meeting requiring its Contracting Parties to take the appropriate measures to prohibit the import of ABT and its products in any form from Belize, Honduras, and Panama. The first recommendation was that its Contracting Parties take appropriate steps to prohibit the import of ABT and its products in any form harvested by vessels of Belize and Honduras as soon as possible following the entry into force of the ICCAT recommendation. Accordingly, the prohibition with respect to these countries is effective August 20, 1997. The second recommendation was that the Contracting Parties take appropriate steps to prohibit such imports harvested by vessels of Panama effective January 1, 1998. This would allow Panama an opportunity to present documentary evidence to ICCAT, at its 1997 meeting or before, that Panama has brought its fishing practices for ABT into consistency with ICCAT conservation and management measures. Accordingly, the prohibition with respect to Panama will become effective January 1, 1998.

Under current regulations, all ABT shipments imported into the United States are required to be accompanied by a Bluefin Statistical Document (BSD). Under this final rule, United States Customs officials, using the BSD, will deny entry into the customs territory of the United States of shipments of ABT harvested by vessels of Panama, Honduras, and Belize and exported after the effective dates of the trade restrictions. Entry will not be denied for any shipment in transit prior to the effective date of trade restrictions.

Upon determination by ICCAT that Panama, Honduras, and/or Belize has brought its fishing practices into consistency with ICCAT conservation and management measures, NMFS will publish a final rule in the **Federal Register** that will remove import restrictions for the relevant party. In

Agenda Item C.5.b Supplemental ODFW Report September 2006

OREGON DEPARTMENT OF FISH AND WILDLIFE'S COMMENTS REGARDING AMENDMENT 15 PROTECTION FROM ADVERSE AMERICAN FISHERIES ACT (AFA) IMPACTS

The Oregon Department of Fish and Wildlife (ODFW) supports immediate completion of Amendment 15 to the West Coast Groundfish Fishery Management Plan, affording protection from AFA designated vessels that have not previously participated in the traditional shoreside Pacific whiting fishery. Delaying the protection required by AFA in this amendment will result in immediate adverse impacts to the shoreside Pacific whiting fishery, as well as other Pacific Coast groundfish fisheries. The Council stated their intent in the advanced notice of proposed rulemaking (FR Vol. 64, No. 226, Wednesday, November 24, 1999).

The American Fisheries Act (AFA) was enacted in 1998 to reduce the harvest capacity in the Alaska pollock fishery by retiring nine Bering Sea catcher/processors. It also defined conditions for creating fishery cooperatives in the pollock fleet. Vessels that participate in such cooperatives are likely to have increased flexibility in arranging their fishing schedules (vs. vessels that participate in a "derby" style fishery); this allows them to consider entering additional fisheries (including the Pacific Coast Groundfish Fishery) that occur during the traditional Alaska pollock season.

Under the requirements of the 1998 Act, (PL 105-277, Section 211 (c) (3) Fisheries other than North Pacific:

A) By not later than July 1, 2000, the Pacific Fishery Management Council established under section 302(a)(1)(F) of the Magnuson-Stevens Act (16 U.S.C. 1852 (a)(1)(F)) 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 cooperative 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 <u>Secretary may by regulation implement adequate</u> <u>measures including, but not limited to, restrictions on vessels which harvest pollock</u> <u>under a fishery cooperative which will prevent such vessels from harvesting Pacific</u> <u>groundfish, and restrictions on the number of processors eligible to process Pacific</u> <u>groundfish.</u>

In the years subsequent to enacting AFA, the Council developed alternatives to afford the groundfish fishery the protection required by AFA (1999 - 2001). This process was abandoned late in 2001. A brief history is relevant:

• Late 1999 - the Pacific Fishery Management Council adopted participation requirements and unanimously voted to initiate the development of recommendations to restrict AFA

qualified vessels from participating in the Pacific Coast groundfish fishery (FR Vol. 64, No. 226, Wed, Nov 24, 1999, Advanced Notice of Proposed Rulemaking).

- April 2000 the Council reviewed alternatives for providing protection to Pacific Coast groundfish fisheries and its participants from AFA qualified vessels and processors that failed to meet minimum participation requirements in the Pacific Coast groundfish fisheries. In addition, the Council considered whether to restrict, suspend, or void permits registered to AFA-qualified vessels if the vessels did not meet the participation requirements.
- September 2000 the PFMC, as authorized by the AFA, considered management measures to recommend to the Secretary of Commerce to protect the Pacific Coast groundfish fisheries from adverse impacts caused by the AFA (FR Vol. 65, No. 178, Wed, Sept 13, 2000, Advanced Notice of Proposed Rulemaking). The intended effect of this action was to discourage speculative entry or increased effort in the Pacific Coast groundfish fisheries by entities eligible for AFA.
- September 2001 The Council selected a preferred alternative that restricted participation by AFA vessels that did not meet qualifying requirements and restricting the use of limited entry permits held by those vessels. It was believed this would provide the greatest protection against harm resulting from increased effort shift by AFA vessels. Restricting both the vessel and the limited entry permit associated with that vessel reduced the likelihood that an AFA beneficiary would be able to participate in West Coast groundfish fishery to the detriment of the current fishery participants.

Subsequent to this, in March of 2002, the Council voted not to continue to work on the AFA sideboard process, but voted to support a risk assessment at the November 2002 meeting to assess the potential harm of continued no action or of allowing NMFS to address the restrictions at that time. This delay was due to a workload concern in dealing with an urgent need to address overfished species rebuilding impacts on the entire fleet.

An assessment was not conducted in November of 2002, but the Council did not have information that indicated a shift in effort into Pacific Coast fisheries from AFA vessels until the 2006 Pacific whiting season. At that time, three new AFA participant vessels with no previous record of landings in the shoreside fishery prior to AFA, participated in the shoreside fishery. A single AFA vessel, which did not have Pacific coast whiting fishery participation prior to AFA, but which had participated in this fisheries since 2001, also continued to participate in 2006.

During 2006, these four large AFA qualified vessels, without participation in the shoreside whiting fishery prior to AFA, fished in the shoreside whiting EFP fishery out of a total of 37 participating vessels. These new participants had a combined total whiting catch of 15,928 mt (17.3%) of the 91,995 mt taken in the northern (Oregon and Washington) fishery. The average catch per trip by these vessels ranged from 147-218 mt compared to the average for the traditional fleet of 76 mt. This effort alone contributed to the shoreside fishery closing 7-10 days earlier than the previous year, even though the fish landed were reportedly smaller than in the past year, which should have extended the season. As AFA qualified effort increases in this fishery, the season will likely erode from a currently multiple-week-long fishery to a few days: a derby style fishery. The current management process has no way to effectively structure this type of fishery or time to react to high catches of bycatch, and the fishery has the potential to collapse (as well as to impact other groundfish fisheries).

The AFA provides that the Council shall take action to protect the west coast groundfish fisheries from potential impacts. It did not require that these impacts be documented or even realized prior to the Council taking protective actions, but required that the Council take action to prevent likely or potential impacts. It is clearly a mandate that is preventative in nature. Therefore, ODFW contends that action to protect the west coast shoreside whiting fishery at this time is appropriate. Action is clearly justified and prudent due to the effort shift from AFA vessels during the 2006 season, and would exceed the requirements in the AFA for action by the Council or NMFS to take protective measures.

Some conditions which have driven this effort shift and conservation and fishery management concerns related to it include:

* Shortly after the AFA was enacted, the North Pacific Fishery Management Council lengthened the Bering Sea pollock B Season. If the Bering Sea Fishery was still a derby fishery, it is not likely that these vessels would travel to participate in the shoreside whiting season on the West Coast (which runs from June 15th). With the advent of the dedicated access pollock fishery and longer seasons, vessels have the time to harvest their quota when convenient and most profitable. This shift allows the large AFA vessels to come down to fish the Pacific whiting shoreside and mothership fisheries and have plenty of time to return to AK to harvest their quota of pollock in the B Season (i.e, no more derby fishery start for the B Season).

* A limited entry control date of November 6, 2003 was set by the Council for the limited entry groundfish trawl fishery ITQ program. Recently permit speculation and vessel participation has been driven by those who did not meet the control date/participation requirements.

* Price for shoreside Pacific whiting has increased significantly in 2006, attracting more vessels. In 2004 the price was .04/lb, in 2005 it was .055/lb and in 2006 .06/lb. For this high volume fishery, such price increases are a significant incentive for additional participants.

The current profile of the shoreside fishery has allowed for excellent harvest and bycatch tracking and peer pressure to enhance self-regulation of bycatch avoidance. Larger vessels not involved otherwise in west coast groundfish fisheries will have a greater likelihood of landing and less of an incentive to avoid great quantities of bycatch species when fishing in the shoreside fishery.

A primary concern of lack of action on AFA sideboards is one of conservation, particularly that of depleted rockfish species. As an example of recent federal action taken in 2005, a catcher/processor vessel speculated on participating in the open access dogfish fishery. Due to the fishing capacity of that vessel and the threat of large impacts to depleted species by that vessel, an emergency rule was enacted to cap the bycatch of the open access fishery. In a similar nature, large AFA vessels that have little experience in the shoreside whiting fishery have an even higher potential to adversely impact depleted species. New entrants with high volume vessels that are not as aware of the strategies/locations to avoid high bycatch areas add to the potential to accelerate attainment of or potentially significantly exceed the hard bycatch caps for the entire whiting fishery.

As the shoreside whiting fishery season erodes to that of a derby fishery, the incentive for bycatch reduction is likely removed. Vessels will be encouraged to prosecute the fishery as

quickly as possible, with little regard to the encountered bycatch. Once the whiting allocation is achieved, some vessels return to Alaska, and many vessels revert to the traditional west coast groundfish fishery, shifting the overall concentration of effort, and thus also increasing bycatch in the traditional groundfish fishery. Additionally, the incentive to avoid salmon bycatch in the whiting fishery diminishes as the race for fish increases. In 2005, an emergency rule was enacted to restrict the whiting fishery to waters seaward of 100-fathoms due to salmon interactions, recognizing that fishing in deeper depths potentially increases bycatch of depleted darkblotched rockfish.

In addition to potential impact to resources, impact to traditional fishery participants and the existing fishery is a concern. The fishing capacity of a large vessel far out-competes that of a smaller vessel. Additionally, there is the potential for small boat markets to be replaced by larger boats, as some processors prefer accepting one large delivery versus several smaller deliveries. One traditional shoreside fishery participant reported a 25% decline in deliveries, translating into a loss of \$100,000 ex-vessel value in 2006 due to the shortened season. Another shoreside vessel that participated in the fishery for 16 years, experienced a 30% loss of revenue in 2006 vs. comparable seasons. The 2006 shoreside Pacific whiting fishery had a value to coastal communities of approximately \$32,500,000.

The Council repeatedly did not address the AFA sideboard requirement after 2002, due to workload priorities and assertions that there was no significant effort shift demonstrated. Clearly that effort shift occurred in 2006 and the original obligation for the Council and/or NMFS to take action (see law cited above) to protect fisheries under PFMC jurisdiction from impacts caused by any fishery cooperatives in the directed pollock fishery is of an urgent nature at this time.

There is evidence of continued spillover by the AK dedicated access pollock fishery in to the west cost shoreside fishery. Protections required by the AFA continue to be absent and are of great urgency to implement.

ODFW recommendations:

- 1. Move forward as soon as possible with the Amendment 15 process for establishing AFA sideboards for implementation no later than the 2008 Pacific whiting season.
- 2. National Marine Fisheries Service enact a temporary or emergency rule, in place for the 2007 shoreside whiting fishery, to prohibit participation in the shoreside whiting fishery of AFA vessels that did not participate in that fishery prior to 2006.

GROUNDFISH ADVISORY SUBPANEL REPORT ON FMP AMENDMENT 15 (AMERICAN FISHERIES ACT PROVISIONS)

The Groundfish Advisory Subpanel (GAP) discussed the recommendation from several shoreside whiting vessels and processors to continue with the implementation of Amendment 15 to the Pacific Coast Groundfish Fishery Management Plan. There is consensus among GAP members that moving forward with Amendment 15 is both critical and a high priority.

GAP members heard testimony for and against moving forward with implementation of sidebars mandated by the American Fisheries Act to "protect fisheries under its jurisdiction and the participants in those fisheries from adverse impacts caused by this Act."

Participants in the shorside fishery testified to the shortened season, lost income, and the additional pressure on groundfish stocks as the impetus for reviving Amendment 15 through the Council process.

GAP members believe that additional pressure on non-whiting groundfish stocks can have adverse impacts on the conservation of species of concern. Specifically, as the whiting season becomes shorter, vessels who would traditionally be fishing whiting are now switching over to non-whiting groundfish earlier in the year. Fishing opportunities on healthy stocks are already severely restricted due to species of concern. Additional pressure on these fisheries exacerbates these problems and potentially jeopardizes meeting management objectives.

The GAP believes that the law is clear directing the Council to protect the whiting fishery - and that has not changed. While the GAP appreciates the large workload on the Council's agenda, we continue to believe that reviving Amendment 15 and moving forward is critical to protecting the traditional whiting fishery. As more and more participants enter the fishery unfettered (and they will), the season length will continue to decline creating an extremely unsafe derby style fishery.

Staff from Oregon Department of Fish and Wildlife joined our discussion and indicated that they would be able to invest staff time to help expedite this process.

The GAP would further recommend that the Council identify the clear direction and a timeline for completion and implementation of Amendment 15 for the 2008 season.

PFMC 09/13/06



600 S.E. BAY BOULEVARD NEWPORT, OREGON 97365 (541) 265-7758 FAX (541) 265-4235

August 24, 2006

Mr. Donald K. Hansen, Chairman Pacific Fishery Management Council 7700 N.E. Ambassador Place, Suite 101 Portland, OR 97220-1384 RECEIVED AUG 2 5 2006 PFMC

Dear Chairman Hansen:

It has been brought to the Port of Newport's attention by members of Newport's shoreside whiting fleet that action on PFMC Amendment 15 is urgently needed at this time to counteract large American Fisheries Act (AFA) catcher vessels without pre-AFA onshore whiting history from overcapitalizing in and destabilizing the fishery.

The recommended directive in 1999 was that the PFMC would insure that AFA vessels that had not participated in the inshore whiting fishery by the control date of September 16, 1999 would most likely be restricted. However, due to PFMC workload, the shore-based whiting fishery, as well as other West Coast groundfish fisheries, has not been protected. The direct result has been an abbreviated whiting season. This year, the season was 12 days shorter than 2005, adversely impacting the owners and crews of boats that pioneered and invested in this fishery.

The Port of Newport strongly urges the Council to stay with the control date recommended in 1999 and adopt the necessary sideboard regulations to provide the historic vessels participating in the shore-based whiting fishery the protection they are entitled to as established by the intent of the American Fisheries Act.

Sincerely

Rob Halverson President

C: David Jincks, MTC

Agenda Item C.5.e Supplemental Public Comment 3 September 2006

Mark I, Inc. 4225 23rd Avenue W. #103 Seattle, WA. 98199

RECEIVED SEP 0 7 2008 PFINIC

August 14, 2006

Mr. Donald K. Hansen, Chairman Pacific Fisheries Management Council 7700 NE Ambassador Place, Suite 200 Portland, Oregon 97220-1384

Dear Chairman Hansen,

I am the owner of the fishing vessel F/V Mark I, a 99-foot AFA-endorsed vessel, as well as a West Coast LE Groundfish permit. The F/V Mark I has participated in the Mothership Whiting fishery every year since the limited entry program was enacted in 1994. This year the F/V Mark I participated in the Inshore Whiting fishery delivering to Ocean Gold in Westport, WA. I'm writing in response to Midwater Trawlers Cooperative's (MTC) proposal to limit participation in West Coast trawl fisheries. I ask the PFMC to not move this proposal forward at this time for a couple reasons.

If implemented, the MTC proposal would limit my participation in the shoreside whiting fishery due to my vessel's AFA endorsement. My recent participation in the shoreside whiting fishery is not due to changing fishing strategy in my Alaska Pollock fishing: rather it was due to whiting market opportunity and availability. In March of this year, I received a call from the Ocean Gold plant in Westport, WA asking if we would consider delivering whiting to them during the 2006 fishery. I said that we would. This was a market availability issue, not an AFA issue. All AFA vessels had time to catch their Pollock after the inshore Whiting season closed. Any behavior changes in fishing schedules were due to economic or other decisions not because we didn't have adequate time to catch our 'B' season Pollock in Alaska. In fact, many MTC member-vessels are choosing to lease their 'B' season pollock even though they have adequate time to harvest it themselves after the shoreside whiting fishery ends.

MTC is using AFA sideboards as a strategy to eliminate a select few vessels from participating in the West Coast trawl fisheries. Rather than spending the Council's time and resources creating winners and losers in an allocation battle, I ask the Council to continue to allocate its time to the continued development and hopeful implementation of a trawl ITQ program. A trawl ITQ program will stop these kinds of fish grabs and allow us all to work productively.

Chris Garbrick



THE FURY GROUP

Fisherman's Terminal West Wall Bldg. 4005 20th Ave. W. Ste 207 Seattle, WA 98199 (206) 783-3844 Fax (206) 783-3871

August 29,2006

Mr. Donald K. Hansen, Chairman Pacific Fishery Management Council 7700 NE Ambassador Place, Suite 200 Portland, OR 97220-1384

RECEIVED SEP (7 2006 PFMC

Re: Midwater Trawlers Cooperative's "AFA Sideboard" Whiting Proposal

Dear Chairman Hansen,

I am the president of Fury Group Inc., a Seattle-based commercial fishing company that owns and operates three vessels: the AFA trawlers Nordic Fury and Pacific Fury, and the crabber / pot cod boat Ocean Fury. These boats have been part of the Alaskan fisheries since the early 1970's.

The Pacific Fury and Nordic Fury began participating in the Pacific whiting fishery in 1989 working in the US-Japanese Joint Venture with a Taiyo mothership (now re-named the Excellence). Since then the boats have been operating as catcher vessels in the mothership fishery for the Ocean Phoenix, Arctic Storm, and Arctic Fjord.

The Nordic Fury was sponsoned to 37 feet breadth amidships in 1993. This allowed us to bring fish into shore plants, and we began taking cod and pollock to various processors in Alaska.

In 1998 Fury Group purchased a Federal Pacific Coast Groundfish Permit for one boat. The cost was nearly half a million dollars, but it was a strategic investment in the future. Our other boat leased a permit from an entity that had retired their vessel and was no longer participating in the whiting fishery. Besides paying a fee for use of the permit, we also were committed to deliver fish to a certain processor. Since one vessel did not have a groundfish permit, we actively sought to acquire one to provide more flexibility and independence. We were unable to secure a shore side market for Pacific whiting in Oregon as the processing plants were at capacity and there was no need for more catcher vessels. Our trawlers stayed offshore.

In 2006 we were able to purchase another groundfish permit, again at great expense. This permit was previously owned by Rainier Investments and used by the AFA trawler Ocean Leader. She delivered Pacific whiting both offshore to Golden Alaska and other motherships as well as inshore to Merino's, and Pacific Coast Seafoods during the period from 1994 to 2000. As part of the sale agreement, we acquired all history and any resultant quota that may be associated with the permit.

After trying to secure a shore-side market for the Nordic Fury for some time, we were fortunate to have an opportunity to fish for Pacific Coast Seafoods in Warrenton this year. Nordic Fury had a successful whiting season, delivering nearly 3,700 tons. We had positive discussions with Ocean Gold Seafoods and Del Mar Seafoods regarding future shore side markets as well.

Recently, Midwater Trawlers Cooperative, which is predominately made up of vessel owners that reside in Newport Oregon, specifically named the Nordic Fury (and also erroneously the Pacific Fury) among their "hit list" of AFA trawlers that need to be excluded from the Pacific whiting shoreside fishery. We have no intention of taking the Pacific Fury inshore, as her capacity is too limited. They say this is an effort to stop adverse impacts by "recent entry AFA vessels" that threaten to overcapitalize the fishery. They stated that these boats are taking advantage of the rationalization of the pollock fishery to increase participation in the whiting fishery. We were called "capitalists" by a spokesperson from MTC. I see us simply as small fishing businesses trying to strengthen our base and secure our positions before a few "vocal locals" try to claim it all for themselves.

The fact is that the MTC proposal to sideboard certain AFA vessels is a thinly disguised fish grab. Their data is riddled with half-truths and downright deception. Their goal is to eliminate the competition prior to the formal rationalization process. I'd like to make a few comments regarding this:

- (1) Despite the attempt by MTC to tie the American Fisheries Act into their argument, this is not an AFA issue. Federal Pacific Coast Groundfish Permits are not in any way related to the AFA. The AFA did not create incentive for vessels to seek inshore whiting markets. The incentive is the availability of markets and a good fish price. The groundfish permits already effectively restrict entrance into the fishery, as vessels must have a specific length endorsement on the permit to participate. Any history associated with a groundfish permit can be used effectively in the future to "rationalize" the fishery and reduce any "overcapitalization" concerns. If a vessel is AFA or non-AFA shouldn't matter at all.
- (2) Assuming the "new entrant" boats that are listed by MTC have legally acquired groundfish permits, under current regulations in force they have the same right to fish for whiting that anyone else holding a permit does. To restrict a vessel's ability to land fish based on participation during some earlier time period is contrary to the existing law. The future rationalization process will determine whether an operator has adequate history (and resulting quota) available to justify participation. If an owner doesn't have enough quota available they should still be able to lease or purchase additional quota if they choose to do so in order to maintain a successful business. This is the fair way to "rationalize" things.
- (3) The MTC proposal to link catch history and quotas to the steel hull is illogical. This devalues all the existing permits, takes the history away from the rightful owner (the legal permit holder), and essentially creates another vessel replacement problem like the one the AFA fleet has been trying to correct for years. The US fishing fleet is already made up of old steel, why continue on that trend? If history is linked to steel, the legal battles will pile

up on by the score. How many permits have legally changed hands over the years? How many millions have been invested?

- (4) MTC claims that a few AFA vessels (as opposed to the AFA boats that are members of MTC) are taking advantage of the rationalization process in order to harvest whiting. This is absurdly hypocritical. Most of the MTC vessels lease their pollock each B season and have for years. Prior to AFA rationalization of the pollock fishery this was impossible. Some of the MTC boats also prosecute the Gulf of Alaska cod fishery during the Bering Sea A season (after leasing their pollock quota). Why are they held to a different standard? The MTC member boats were the first ones to utilize the advantages of a rationalized pollock fishery to focus on whiting.
- (5) A member of MTC recently claimed that "new entrants" have "shortened the season by three weeks". This is preposterous. I have seen a graph developed by MTC that purports to reflect the impact of the AFA boats shortening the season from 199 days in 1992 to 65 days in 2005. What it does not show is that the onshore processing capacity increased dramatically during recent years due to additional facilities and more modern equipment. The efficiency of pelagic trawlers has also increased with greater hold capacities and engine horsepower (including many MTCmember vessels that were sponsoned and re-powered). Improved fishing gear technology (low-drag supermesh trawl designs) and electronics (i.e. netsounder-located scanning sonar) have resulted in faster catches and larger tows. This dynamic that is not represented in the MTC figures.
- (6) The Nordic Fury replaced a vessel of comparable length and capacity (Ocean Leader) that exited the whiting fishery. A number of other AFA boats also left the fishery when motherships did not participate or when shoreside markets were not available. Some of these boats were replaced during more recent years by boats of comparable size. These "new entrants" should not be impacting the fishery any more than comparable boats did in the past. Basically there's a new name on a hull, but not much else has really changed. MTC is using smoke and mirrors.
- (7) MTC has also tried to show that the Pollock B season start and end dates have only recently allowed AFA boats to catch whiting shoreside. The dates they use in their data are wrong, as shown in the accurate UCB documents sent to the council. In reality, the B season dates are not even an issue, there's still plenty of time to go north after the Pacific whiting fishery and take pollock during B season. The decision to lease pollock or not is purely economic. It is not based on time constraints.

I ask that the council devote its time wisely to develop a fair and equitable rationalization process that takes the Pacific whiting fishery well into the future. This is a monumental task and will be an accomplishment worthy of the effort

invested toward that goal. We don't need to waste more time on the latest MTC fish grab. It's just a re-match of an old fight that pits fishermen against fishermen. The council went through this all before in 2001. Once again MTC is trying to turn a federal fishery into an old boys club. Move on to the bigger rationalization picture and the dispute will take care of itself.

The AFA sideboard proposal should be discarded for the unfair idea that it is. Should it be determined by the council that AFA sideboards really are beneficial to this fishery, then any restriction should be enforced for <u>ALL</u> AFA boats equally, regardless of which state they come from or when they entered the fishery.

Please consider the issue of linkage of history to steel very carefully. I believe it is absolutely the wrong method to develop history and quota. I'm sure most lawyers will agree. This is a Pandora's box. History and quota should be tied to the legal groundfish permit owner and affiliated vessel, as it is under the current regulatory program.

Just to clarify my personal position: I support the idea of rationalization of the Pacific whiting fishery. I am in favor of a cooperative-based program as proposed by UCB, rather than any formal IFQ system like we have in the Bering Sea crab fisheries. I am opposed to processor shares of any kind, but I understand that some protection measures such as closing the class of at-sea processors and restricting shoreside-processing permits may be necessary. In my opinion bycatch issues are best addressed in the co-op format under the umbrella of an offshore and inshore bycatch allocation.

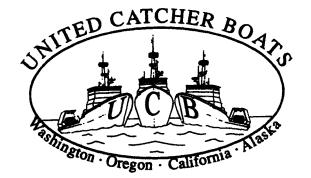
I trust that the council will be cautious and thoughtful in deliberation, as the future livelihood of many people will depend on the wisdom shown by a few. I thank you for taking the time to read this letter.

Sincerely,

Mr. Stone

Mike Stone

Agenda C.5 Public Comment



August 18, 2006

Mr. Donald K. Hansen, Chairman Pacific Fishery Management Council 7700NE Ambassador Place, Suite 200 Portland, Oregon 97220-1384

Re: Whiting Fishery/AFA Trawlers

Dear Chairman Hansen:

The June 2006 PFMC meeting witnessed Midwater Trawlers Cooperative's (MTC) presentation of a packet of information aimed at identifying and retroactively excluding current legal participants from participating in future West coast whiting fisheries. Specifically, MTC proposes on page 5 of the packet, that the Council develop new regulations as follows:

- 1. AFA qualified vessels that have not harvested at least 50 tons of whiting in the mother ship fishery in the years 1994 through September 16, 1999 will be ineligible to participate in the mother ship fishery for whiting in the future.
- 2. AFA qualified vessels that have not landed at least 50 tons of whiting in the inshore whiting fishery in the years 1994 through September 16, 1999 will be ineligible to participate in the inshore whiting fishery in the future.
- 3. AFA qualified vessels that do not have landings of ground fish other than whiting in the years 1994 through September 16, 1999 will be prohibited from participating in those fisheries in the future. By-catch amounts of other ground fish in the Pacific Whiting fishery shall not be eligible for qualifying a vessel under this provision.
- 4. The Council should immediately announce a control date of September 16, 1999 to the extent necessary to preserve the status quo.

MTC asserts that catcher vessels qualified to participate in the Bering Sea Pollock fisheries (AFA qualified), be excluded from future participation in west coast whiting fisheries if they did not participate in whiting fisheries during 1994-1999. They blame the Council for not having considered, completed and implemented such regulations six or seven years ago. This proposed restriction now seeks to implement a participation "control date" of 1999 irrespective of the changes in the fishery that have since occurred, irrespective of the fact that "would be" excluded vessels have limited entry permits to rightfully participate in these fisheries; irrespective of transfers of permits that have occurred between vessel owners and vessels; irrespective of investments that fishermen and processing plants have made in the whiting fishery since 1999 or before 1994; irrespective of the fact that "would be" excluded vessels have build legitimate catch histories in the whiting fisheries since 1999 that would pertain to future west coast rationalization programs being considered by PFMC; irrespective of the fact that shore-side whiting markets have opened up for these vessels since 1999 and especially so in the Washington and northern Oregon region; irrespective of catcher boat processor contracts for future years; and irrespective of "recency requirements" on establishing new control dates.

A major contention by MTC is that prior to year 2000 implementation of the AFA, catcher vessels fishing Bering Sea Pollock "all returned to the Bering Sea to participate in the more lucrative Pollock B season by mid June", which they contend precluded such catcher vessels from participating in the west coast shore side fishery which started June 15. This statement, which was provided to the PFMC at the June meeting, is grossly misleading and factually incorrect. You may recall that Bob Alverson asked me about this matter of the timing of seasons when I testified at the June Council meeting against the MTC proposal. My statement in reply to Alverson's rather key question was that the Pollock B season start date prior to the AFA had typically been in August, and though I was unsure of exact dates over the years, pre-AFA catcher boats absolutely had the opportunity to fish mothership and shoreside whiting before the Pollock B season opened. In fact, many did so. Since the June Council meeting I have checked federal records of Bering Sea Pollock season start dates over recent years and summarized those in Exhibit 1. Please note that pre-AFA Pollock B season start dates were August 1 in 1999, August 15 in 1994 and 1995 and September 1 in 1996, 1997 and 1998. All of these pre-AFA season start dates provided vessels a whiting fishery in the mothership fishery starting May 15, the inshore fishery starting June 15, or both. Since implementation of the AFA, the Bering Sea B season start date has been June 10. It is true that since passage of the AFA, Pollock vessels do have their own quota and that

2

some vessels (both UCB vessels and MTC vessels) have made business decisions to lease their B season Pollock quota rather than fish it themselves.

MTC argues that because the "larger" AFA catcher vessels lease their Bering Sea pollock coop allocations they are able to increase their effort into the West Coast whiting fishery thereby causing a negative effect on the whiting fishery. This is a faulty argument. The ability of the AFA vessel owners to lease Bering Sea pollock coop allocations is not the reason why AFA vessels are able to participate in the whiting fishery, or are able to increase their participation in the whiting fishery. Rather, opportunity to participate in the whiting fishery is based on market availability as well has having a valid West Coast federal trawl permit. The AFA vessels have the ability, if they establish a market to sell their fish, to participate in the whiting fishery if they lease their AFA pollock or if they chose to harvest their AFA pollock coop allocations because the timing of these fisheries do not overlap.

Under the provisions of the AFA, all AFA endorsed vessels, including vessels that are members of MTC and based out of Oregon ports, as well as vessels that are members of UCB, and based out of Washington ports, are able to cooperate together in harvesting their allocations of Bering Sea pollock. The leasing of AFA pollock coop allocations between AFA coop members occurs because of economic business decisions. For example, some of the West Coast-based AFA vessels have chosen to not harvest their Bering Sea pollock "B" season allocations because of the high cost of traveling to Alaska. Attached to this letter are copies of the 2004 and 2005 pollock allocations and harvest amounts by vessel for the Akutan Catcher Vessel Association. As can be seen by these tables, a number of this coop's member-vessels do not harvest their Bering Sea pollock allocations, including some of the MTC member vessels. Instead, these catcher vessel owners have chosen to lease their pollock coop share to other coop members.

We ask that the Pacific Council, in considering this issue of AFA sideboards, treat all AFA vessels equally and not discriminately favor one group of AFA vessels over the other when in fact any AFA vessel that holds a West Coast trawl permit is eligible to participate in the West Coast trawl fisheries, including the whiting fishery.

In conclusion Mr. Chairman, the establishment of a 6-7 year retroactive control date as proposed by MTC is absolutely unreasonable from UCB's perspective, and it is unreasonable for the multitude of reasons documented in this letter. I have contacted NOAA GC about the legalities of

3

now considering the re-establishment of a long ago abandoned control date given the control date "recency" requirements. We trust that her advice will be informative.

We ask that the Council not spend any additional time on this issue. Rather, MTC's concerns are more properly addressed under the Council's development of a rationalization program for whiting.

Sincerely,

untes

Steve Hughes United Catcher Boats

CC: PFMC Members Ilene Cooney, NOAA GC UCB Board of Directors Richard Carrol, Ocean Gold Seafoods, INC Bob and John Dooley, *F/V Pacific Prince and Caitlin Ann* Mike Stone, *F/V Nordic Fury and Pacific Fury* Rick Mezich, *F/V Starward* Chet Peterson, Chris Peterson and Burt Parker *F/V Pacific Challenger* Chris Garbreck, *F/V Mark I* Steve Olsen, *F/V Western Dawn* Bering Sea pollock seasonal history summary, 1994-2006. Source: NMFS, Juneau.

			INSHORE			OFFSHORE	
Year	Period	Opening Date	Closing Date	Days Duration	Opening Date	Closing Date	Days Duration
1994	A	1/20/94	3/2/94	41.0	1/20/94	2/18/94	29.0
1994	B	(8/15/94)	(10/4/94)	50.0	(8/15/94)	9/24/94	40.0
1994	B2	<u> </u>	<u> </u>		12/5/94	12/20/94	15.0
1995	Α	1/20/95	3/1/95	40.0	1/26/95	2/21/95	26.0
1995	В	8/15/95	9/23/95	39.0	8/15/95	9/20/95	36.0
1995	B2				10/20/95	10/23/95	3.0
1996	Α	1/20/96	3/2/96	42.0	1/26/96	2/26/96	31.0
1996	В	9/1/96	10/17/96	47.0	9/1/96	10/17/96	47.0
1 997	Α	1/20/97	2/19/97	30.0	1/26/97	2/20/97	25.0
1 997	В	9/1/97	10/16/97	45.0	9/1/97	10/2/97	31.5
1998	Α	1/20/98	2/26/98	37.0	1/26/98	2/20/98	25.0
1998	В	9/1/98	10/29/98	58.0	9/1/98	10/19/98	49.0
1999	A1	1/20/99	2/15/99	26.0	1/20/99	2/15/99	26.0
1999	A2	2/20/99	2/28/99	8.0	2/20/99	4/13/99	52.0
1 999	В	8/1/99	8/26/99	25.0	8/1/99>	9/15/99	45.0
1999	C	9/15/99	10/6/99	21.0	9/15/99	10/31/99	46.0
1999	С	1 0/24/99	10/26/99	2.3			
2000	AB	1/20/00	4/4/00	75.0	1/20/00	4/30/00	101.0
2000	CD	6/10/00	11/4/00	147.0	6/21/00	10/29/00	130.0
2001	Α	1/20/01	4/9/01	80.0	1/20/01	4/26/01	96. 0
2001	В	6/10/01	10/27/01	139.0	6/10/01	11/1/01	144.0
2002	Α	1/20/02	4/21/02	88.0	1/20/02	4/9/02	79 .0
2002	В	6/10/02	10/25/02	137.0	6/10/02	10/11/02	123.0
2003	Α	1/20/03	4/5/03	75.0	1/20/03	4/9/03	79 .0
2003	B	6/10/03	10/25/03	137.0	6/10/03	10/13/03	125.0
2004	A	1/20/04	6/10/04	142.0	1/20/04	6/10/04	142.0
2004	В	6/10/04	11/1/04	144.0	6/10/04	11/1/04	144.0
2005	Α	1/20/05	6/10/05	141.0	1/20/05	6/10/05	141.0
2005	В	6/10/05	(11/1/05)	144.0	6/10/05	11/1/05	144.0
2006	Α	1/20/06	6/10/06	141.0	1/20/06	6/10/06	141.0
2006	B	6/10/06	11/1/06	144.0	6/10/06	(11/1/05)	144.0

Notes: 1999 through 2003 dates in this table are start and stop of actual fishing periods under AFA.

Post AFA season in 1999 and 2000 had multi season splits (A-D).

,

General post AFA seasons after 2001 follow the A season (1/20-6/10) and B season (6/10-11/1) regulations.

Attachement 2

AKUTAN CATCHER VESSEL ASSOCIATION 2005 POLLOCK ALLOCATIONS AND HARVEST BY VESSEL

2005 Total Pollock Allocation:

183,910 MT

Vessel	Coop Percent	2005 Allocation	Vessei Harvest	(Over/Under Allocation
	2005	(MT)	(MT)	(MT)
ALDEBARAN	5.13%	9,441	8,739	702
ARCTIC EXPLORER	5.77%	10.603	12.804	(2,201)
NORDIC EXPL.	3.85%	7,076	0	7,076
INTREPID EXPL.	4.16%	7,655	1.387	6,268
ARCTURUS	5.41%	9,950	9,497	453
BLUE FOX	1.22%	2.236	0	2,236
COLUMBIA	5.05%	9,284	12,510	(3,226)
CAPE KIWANDA	0.82%	1,502	1,148	354
DOMINATOR	6.23%	11,455	13,763	(2,308)
SOVEREIGNTY	8.37%	15,390	14,907	483
NORTHERN PATRIOT	8.58%	15,786	16,250	(464)
EXODUS	1.06%	1,957	0	1,957
GLADIATOR	5.84%	10,739	6,352	4,387
GOLDEN DAWN	6.43%	11,818	13,949	(2,131)
GOLDEN PISCES	0.96%	1,771	3,031	(1,260)
HAZEL LORRAINE	1.38%	2,544	2,025	519
LESLIE LEE	1.93%	3,545	3,527	18
LISA MELINDA	0.76%	1,404	510	894
MAJESTY	3.54%	6,516	4,438	2,078
MARCY J	0.64%	1,178	1,210	(32)
MARGARET LYN	0.12%	223	0	223
NW EXPLORER	0.84%	1,551	9,700	(8,149)
PACIFIC RAM	0.72%	1,332	533	799
PACIFIC VIKING	3.90%	7,173	6,697	476
PEGASUS	2.47%	4,549	2,148	2,401
PEGGY JO	1.18%	2,174	2,995	(821)
PERSEVERANCE	1.05%	1,933	288	1,645
PREDATOR	0.78%	1,425	662	763
RAVEN	2.49%	4,581	2,589	1,992
ROYAL AMERICAN	3.45%	6,348	8,729	(2,381)
SEEKER	1.31%	2,418	1,466	952
TRAVELER	0.15%	270	104	166
VIKING EXPLORER	4.23%	7,784	9,641	(1,857)
MARK I	0.16%	296	150	146
BRISTOL EXPLORER	Contract Vessel	0	5,621	(5,621)
SEADAWN	Contract Vessel	0	2,102	(2,102)
OCEAN LEADER	Contract Vessel	0	194	(194)
SUNSET BAY	Contract Vessel	0	406	(406)
HALF MOON BAY	Contract Vessel	0	298	(298)
ANITA J	Contract Vessel	0	161	(161)
STORM PETREL	Contract Vessel	0	181	(181)
POSEIDON	Contract Vessel	0	221	(221)
COMMODORE	Contract Vessel	0	186	(186)
ROYAL ATLANTIC	Contract Vessel	0	168	(168)
TOTALS	100.00%	183,910	181,287	2,623

AKUTAN CATCHER VESSEL ASSOCIATION 2004 POLLOCK ALLOCATIONS AND HARVEST BY VESSEL

2004 Total Pollock Allocation:

?

182,433

Vessel	Coop percent	2004 Initial	Vessel	(Over/Under
	2004	Allocation (MT)	Harvest (MT)	Allocation (MT)
ALDEBARAN	5.14%	9,381	9,041	340
ARCTIC EXPLORER	5.77%	10,535	13,328	(2,793)
NORDIC EXPL	3.85%	7,031	0	7,031
NTREPID EXPL.	4.17%	7,606	0	7,606
ARCTURUS	5.42%	9,886	9,314	573
BLUE FOX	1.22%	2,222	317	1,905
COLUMBIA	5.06%	9,224	9,697	(473)
CAPE KIWANDA	0.82%	1,493	1,234	258
DOMINATOR	6.24%	11,382	12,964	(1,582)
SOVEREIGNTY	8.38%	15,291	16,018	(726)
NORTHERN PATRIOT	8.60%	15,684	16,825	(1,141)
EXODUS	1.07%	1,944	1,953	(8)
GLADIATOR	5.85%	10,669	9,580	1,090
GOLDEN DAWN	6.44%	11,742	12,587	(845)
GOLDEN PISCES	0.96%	1,760	2,400	(640)
HAZEL LORRAINE	1.39%	2,528	1,912	616
LESLE LEE	1.93%	3,522	3,510	12
LISA MELINDA	0.76%	1,395	642	753
MAJESTY	3.55%	6,474	3,857	2,617
MARCY J	0.64%	1,170	773	397
MARGARET LYN	0.12%	222	0	222
NW EXPLORER	0.84%	1,541	10,592	(9,151)
PACIFIC RAM	0.73%	1,323	530	794
PACIFIC VIKING	3.91%	7,127	6,757	370
PEGASUS	2.48%	4,520	4,124	396
PEGGY JO	1.18%	2,160	2,568	(408)
PERSEVERANCE	1.05%	1,920	3,258	(1,338)
PREDATOR	0.78%	1,416	0	1,416
RAVEN	2.49%	4,551	3,255	1,296
ROYAL AMERICAN	3.46%	6,307	6,515	(207)
SEEKER	1.32%	2,403	1,505	897
TRAVELER	0.15%	259	258	1
VIKING EXPLORER	4.24%	7,734	8,897	(1,163)
BRISTOL EXPLORER	Am69		2,191	(2,191)
SEADAWN	Am ð 9	L L L L L L L L L L L L L L L L L L L	2,007	(2.007)
TOTALS	100.00%	182,433	178,517	3,916

GROUNDFISH ADVISORY SUBPANEL REPORT ON EXEMPTED FISHING PERMITS FOR 2007 FISHERIES

The Groundfish Advisory Subpanel (GAP) reviewed the three applications for exempted fishing permits (EFPs) as proposed for 2007 found in Agenda Item C.6.a. All of the EFPs would allow access to the abundant chilipepper rockfish stock in waters off central California using various hook and line gear configurations.

The GAP reviewed Steve Berkeley's EFP application (Agenda Item C.6.a, Attachment 1) and unanimously approved this project with the one exception being a recommended change in the canary rockfish annual cap from 360 lbs to 100 lbs.

Josh Churchman's EFP proposal (Agenda Item C.6.a, Attachment 2) was approved by the GAP after Mr. Churchman agreed to modify his overfished species' caps to be consistent with those caps found in the Berkeley EFP application.

Robert Kraencke's EFP proposal (Agenda Item C.6.a, Attachment 3) was also approved after Mr. Kraencke agreed to modify his proposal to include the same overfished species' caps specified in the Berkeley EFP application. The GAP also asked Mr. Kraencke to change the depths proposed for fishing under the EFP to specify depths greater than 80 fathoms and Mr. Kraencke agreed.

The GAP therefore recommends approving all three EFPs with the modifications agreed to by Mr. Churchman and Mr. Kraencke as addressed above. The GAP recognizes the constraints to EFP activities and the directed fishery imposed by low canary rockfish OYs and therefore strongly recommends each of these EFPs specify an annual cap of 100 lbs of canary rockfish.

The GAP also believes a structure for standardized data reporting should be established for these approved EFPs. While a report of EFP activities is required under Council Operating Procedure 19, a standardized reporting format and required elements are not specified.

PFMC 09/13/06

GROUNDFISH MANAGEMENT TEAM REPORT ON EXEMPTED FISHING PERMITS FOR 2007 FISHERIES

The Groundfish Management Team (GMT) reviewed the three exempted fishing permit (EFP) applications for chilipepper rockfish. The primary focus of the EFP fisheries is to test different gear types—all proposals use troll and/or vertical hook-and-line gear in different areas at comparable depth ranges, and specify maximum amounts of hooks. The purpose of the fisheries is to evaluate the effectiveness of using these gear types in various areas to target chilipepper rockfish while avoiding bycatch of overfished rockfish.

Similar to yellowtail rockfish, chilipepper rockfish is an example of a stock that has not been able to be accessed because of overfished rockfish concerns; as a result, a substantial amount of the optimum yield remains unharvested each year.

Over the past few years, the GMT has received requests to provide targeted trawl and non-trawl chilipepper rockfish fisheries, but the Council has not been able to accommodate these requests because of the estimated bycatch of overfished stocks associated with these fisheries. The data collected through these EFPs could help the Council evaluate future requests for targeted non-trawl chilipepper fisheries.

In June, as part of the 2007-2008 biennial specifications process, the Council adopted the following bycatch caps for overfished rockfish for EFPs in 2007:

Table 1.					
Bocaccio	Canary	Cowcod	Darkblotched	Widow	Yelloweye
6.9 mt	0.4 mt	0.1 mt	0.4 mt	3.6 mt	0.1 mt

The proposed caps in the EFP applications are:

Table	2.
--------------	----

	Bocaccio	Canary	Cowcod	Darkbl	Widow	Yelloweye
EFP # 1	3.3 mt	0.2 mt	1 fish	0.4 mt	0.7 mt	1 fish
EFP # 2	7.3 mt	0.4 mt	0.2 mt			0.2 mt
EFP # 3	1.6 mt	0.1 mt	6 fish			6 fish
Total	12.2 mt	0.7 mt	0.2 mt	0.4 mt	0.7 mt	0.2 mt

The GMT recommends that the bycatch caps specified in June for canary, cowcod, and yelloweye rockfish remain in place; however, there is residual remaining in the bocaccio estimate to accommodate the proposed increase. As a suggestion, the EFP applicants may wish to have one overall bycatch cap specified for the EFP, and individual caps for each participating vessel. This approach would allow the EFP to continue if one vessel reached its individual cap. Additionally, the GMT recommends that the EFP permits specify that vessels must fish seaward of a line approximating 100 fms to avoid bycatch of canary rockfish, in particular. Both of these

provisions would help ensure that these EFPs are prosecuted for a sufficient amount of time to collect the bycatch data needed to evaluate the bycatch rates of these fisheries.

As the number of participants, size of vessels, and maximum number of hooks is different for each EFP, the GMT believes that each EFP should remain separate. The GMT recommends that the proposed caps for bocaccio, darkblotched, and widow rockfish presented in Table 2 apply. For canary rockfish, a bycatch cap of 110 lbs/vessel for the duration of the EFP would apply, and the following EFP caps would apply for canary, cowcod, and yelloweye rockfish:

Table 5.			
	Canary	Cowcod	Yelloweye
Att # 1	330 lbs	50 lbs	50 lbs
Att # 2	440 lbs	225 lbs	225 lbs
Att # 3	110 lbs	50 lbs	50 lbs
Total	0.4 mt	0.1 mt	0.1 mt

Table 3.

The GMT recommends that the data from these three EFPs be coordinated through one source, preferably an agency such as California Department of Fish and Game. Additionally, a comparison of results should be provided in a single report to facilitate an effective evaluation the respective viability of the results from each EFP for management.

GMT Recommendations:

- 1. Approve the three EFP applications for chilipepper rockfish with the following bycatch caps for overfished species:
 - a. For bocaccio, darkblotched, and widow rockfish, use caps in Table 2.
 - b. For canary, cowcod, and yelloweye rockfish, use caps in Table 3.
- 2. Specify individual vessel bycatch cap of 110 lbs/vessel for canary rockfish.
- 3. Require vessels fishing under each EFP to fish seaward of 100 fms to protect canary rockfish.
- 4. Consider how data and analysis should be compiled amongst the three EFPs.

PFMC 09/14/06

Proposal

The goal of this exempted fishing permit (EFP) is to demonstrate it is possible to harvest healthy stocks of Chilipepper Rockfish while avoiding other species deemed less healthy. This EFP would allow a limited number of vessels (6) take Chilipepper rockfish shoreward of the RCA boundary line using trolled hook and line gear known as "carpet runner" gear. At this time pursuing this underealized resource is economically unfeasible due to Chilipepper rockfish being considered part of the 200 pound bimonthly shelf rockfish limit. Allowing Chilipepper rockfish to be in a separate category and increasing the limit to 2000 pounds per month would make this a viable fishery. This would provide an alternative to replace lost fishing opportunities available to small vessels as a result of other closures. By allowing fishing with selective gear in the present RCA, the fishing would be done in the area where the targeted fish are found in the greatest numbers. There would be 100% retention of legal fish with only prohibited species being discarded. Trips would have 100% observer coverage to document and record the species caught. The data recorded is also to include: location, gear details, fish size, catch per hook/per set, sex ratio of Chilipepper and price per pound of fish sold.

Long Term Goal

The long term goal of this project is to provide access to Chilipepper rockfish stocks in the open access category fisherman. The monthly limits would be set by the biological abundance data. It is not known how many vessels would participate so the season may need adjustments to control the overall take.

Rationale:

- 1. The California Department of Fish and Game, in their regulations encourages experimental fishing methods (section 8606). This section allows new types of commercial fishing gear and methods in areas otherwise closed. Carpet runner gear allows for the use of existing salmon fishing machinery with limited expenditure for modifications.
- 2. The Chilipepper rockfish stock is healthy and harvest should be allowed if it is proven that non-target fish stocks can be avoided. A quote from a DFG document: dfg.ca.gov/MRD/MLPA/response/shelf "A few shelf rockfish species such as Chilipepper and Yellowtail appear to be comparatively healthy; their allowable take has been set at levels below the potential yield to protect the weaker species that tend to be caught with them, such as Bocaccio and Canary".
- 3. The fishing gear proposed can be set at a depth that is less likely to have contact non-target species such as Canary rockfish (further from the bottom). Cowcod and Yelloweye rockfish are not commonly found in the proposed fishing area. During several salmon fishing trips within the RCA in 2005 the abundance of Chilipepper

rockfish was noted. No Bocaccio rockfish were encountered with the trolled salmon gear during those trips.

- 4. Trolled gear, unlike trawl gear, has a relatively small catch capacity. The number of hooks used limits the catch in any one "set" so any contact with non-targeted species would be limited. The tows are much shorter in duration than trawl tows and the vessel can easily move to another fishing area if non-targeted species are encountered.
- 5. The fish caught by hook and line are handled much differently than trawl caught fish. Their superior appearance allows them to be more easily sold in the round for a higher price than trawl fish destined for the fillet market. The large ethnic communities in the San Francisco Bay area represent a consistently reliable market for this high quality round fish. A similar fish, Ocean Perch, are currently being imported from Canada to fill this market. Hook and line fishing seems to be a way of allowing a small harvest of a healthy resource for the most economic benefit to small vessel fishermen.
- 6. The limited availability of observers presents a challenge, however most vessels are already fishing in the groundfish fishery where observers are required. If the experimental fishing were done during the period the observer was already required to be aboard the vessel there would not be a net increase in observer coverage. The assumed higher catch rate fishing Chilipepper rockfish over nearshore fishing would allow the limit to be reached with fewer trips so it is possible the number of observer covered trips could actually be reduced.

Fishing Gear

The fishing gear would consist of the following elements:

A vertical 3/32 diameter stainless steel cable attached to a 50 pound lead ball. A horizontal main line of 400 pound test monofilament line with crimped stops and swivels placed approximately every 30 inches. Attached to the swivel is an approximately 12 inch piece of 80 pound test monofilament line and an artificial shrimp fly. A float is attached at midpoint and at the end of the horizontal main line to prevent the line from sinking. The main line would contain a maximum of 200 hooks. The main line is deployed and retrieved from a separate reel. The main line is overlayed with a piece of plastic carpet runner between wraps to prevent the hooks from tangling.

Fishing Technique

The vessel will motor through areas know to hold Chilipepper rockfish. Once a school of fish is located using depth sounder readings, a test line using a maximum of 6 hooks will be lowered to the indicated depth to determine the species of fish present. If other non-target species are found a new location will be sought. If Chilipepper rockfish are present the boat will be positioned to troll the gear through the school of fish at the depth noted by depth sounder readings. The hooks will be kept at least 10 fathoms from the bottom by noting the amount of vertical main line extended.

Bycatch Caps Pounds

Species	Vessel 2 month Period	Annually vessel
Widow/yellowtail	200	600
Bocaccio	200	600
Canary	20	60
Cowcod	1 fish	1 fish
Yelloweye	1 fish	1 fish
Target species		
Chilipepper	4000 lbs.	16,000 .

Applicant Information:

Applicants:	Robert Kraencke 280 Douglane Ave. San Jose, Ca. 95117 Phone: 408-887-4567		Jerry Pemberton 426 Beach Street Half Moon Bay, Ca. 94019 Phone 650-619-0388	
Vessel:	Lady LeBlanc			
	F&G 49548			

Fishing Area: Latitude 38N to 36:50 Depth 80 to 120 fathoms

Time Period: April - November for a 1 year period

Revision B Summary

Proposal – added details of data recorded by Observer Fishing Gear – added information to include floats on main line Bycatch caps – revised amounts to reflect one vessel's catch Fishing area – revised fishing depth from 60 – 100 fathoms to 80 to 120 fathoms

(Michele Culver) I move the following:

- 1. The Allocation Committee meet in October 2006 to discuss Intersector Allocation
- 2. The Allocation Committee meet again in the December 2006-February 2007 timeframe to develop initial policy recommendations on key elements, such as:
 - a. Initial allocation (Programs A, B, and C)
 - b. Overfished species (e.g., IFQ vs. cumulative limits, individual vs. pool)
 - c. At-sea observers/monitoring
 - d. Area management
- The Council receive progress reports from the Allocation Committee at the March 2007 Council meeting
- 4. At the March meeting, the Council would consider the recommendations of the Allocation Committee and provide guidance on the next steps relative to Stage I

Rationale:

The intent of the Allocation Committee discussion is not to debate the merits of the different approaches that are supported by one sector or another, but rather, to develop a suite of alternatives that address the key elements listed above resulting in a reasonable range of feasible, supported alternatives that can be presented in a clear, concise manner for Council consideration.



State of California – The Resources Agency DEPARTMENT OF FISH AND GAME http://www.dfg.ca.gov 916-653-7667



July 31, 2006

The Honorable Maria Cantwell 717 Hart Senate Office Building Washington, DC 20510

Dear Senator Cantwell:

I am writing on behalf of the California Department of Fish and Game and as a member of the Pacific Fishery Management Council ("the Council") to respectfully request your assistance on legislation that would reauthorize the Magnuson-Stevens Fishery Conservation and Management Act ("MSA"), specifically a potential provision legislating a "two-pie" management plan for the hake (or whiting) fishery over the express objections of the Council. Such a provision would have serious negative consequences for fisheries management in California and off the west coast, and we urge you not to include any provisions dictating such a management plan to the Council.

The Pacific Fisheries Management Council is hard at work looking at opportunities and options for establishing a "dedicated access" program for the groundfish fishery that would provide, we believe, important economic and conservation benefits to a fishery that is in very poor shape from both perspectives. The State of California has invested heavily in this process and believes this important work should come to fruition. The Council expects to complete the final environmental impact statement for the whiting fishery catch shares program within the next twelve to eighteen months. The proper design of the program is essential to achieve conservation benefits and economic stability to the coastal communities that depend upon these fisheries. We are on track to achieve this, but the potential last-minute intervention into the process legislatively threatens progress and undermines the investment of the Council, the industry, the states and many others in this effort.

Certain interests, namely west coast processors, have aggressively advocated for legislation establishing a mandatory "two pie" quota program consisting of both harvester shares and controversial processor shares. Legislation was introduced in the Senate by Senator Gordon Smith (OR) to legislate a "two-pie" management plan. That legislation, S. 1549, the Cooperative Hake Improvement and Conservation Act, was introduced earlier this Congress and has generated substantial opposition within the fishing industry and among the fishery managers along the west coast, including myself. (Notably, the Senate passed legislation reauthorizing the MSA without including the language of Sen. Smith's bill.) S. 1549 would require harvesters to match up their catch shares with an equal amount of processor catch shares before harvesters could go fishing. The Department of Justice has opined that processor quotas, such as those in S. 1549, result in severe anticompetitive practices, limit markets for fishermen and increase consolidation in the industry. Processor quotas would also disproportionately advantage the two processing corporations now dominating the industry – and thus hurt the smaller processors. The outcomes would be bad for the fishing community, bad for the coastal economies that depend on widely dispersed processing opportunities, and bad for competition. Broddrick-Whiting Letter July 31, 2006 Page 2

Requiring a "two pie" system also would set a very bad precedent for other fisheries across the country, including the west coast groundfish fishery, and it would be a severe setback for the current efforts of the Council to properly design a program that will work for the fishery as a whole.

For these reasons, I am respectfully requesting that you oppose legislation mandating a "two-pie" fishery management system for Pacific whiting, including as part of a MSA reauthorization bill. Legislating highly controversial processor quotas or "two-pie" management systems for the whiting fishery would significantly undermine the Council process and would have adverse impacts on the Council's efforts to effectively manage its groundfish fishery. At the very least, the Council should be given an opportunity to complete its work on developing a comprehensive groundfish management program before Congress steps in to legislate a management program for a particular specifies of groundfish.

In closing, we encourage your support for the passage of a strong reauthorization of the MSA this year, and also request that you oppose any provisions as part of that bill, including in conference, that would legislate processor quotas or a "two-pie" management system (e.g. provisions of S. 1549) as part of the MSA reauthorization bill. Should your staff have any questions about this request or need additional information, please encourage them to contact me directly or Marija Vojkovich, at 805-568-1246.

Sincerely yours,

L. Ryan Broddrick Director

. **1**1

Members, Pacific Fisheries Management Council
 William Hogarth, Director, National Marine Fisheries Service
 Members of the Subcommittee on Fisheries and Coast Guard of the Senate Commerce
 Committee
 Members of the Subcommittee on Fisheries and Oceans of the House Resources
 Committee

House and Senate Leadership

September 2006

Attention Groundfish Trawl Crew and Captains: Individual Fishing Quota (IFQ) Program Being Considered

WHAT is being considered

Individual Fishing Quotas (IFQs) for the West Coast Groundfish Limited Entry Trawl Fishery

IFQs are also known as ITQs (individual transferable quotas), TIQs (trawl individual quotas), QS (quota shares) and QP (quota pounds)

WHO is considering it

The Pacific Fishery Management Council, the states of Washington, Oregon and California, and the National Marine Fisheries Service

WHEN will it happen

It is being considered now. If adopted, it will not take place until 2010 at the earliest.

SOME POSSIBLE EFFECTS OF IFQs:

There might be fewer vessels and fewer jobs Remaining vessels might make more and operate more days a year Remaining jobs might be safer and more stable Over time, vessels and jobs might be in different ports than they are now Crew and captains might be paid more or paid less Special entry-level opportunities might be created

Crew, captains and others could become owners in the fishery by acquiring small amounts of quotas at a time

SEE THE ATTACHED FLYER FOR MORE INFORMATION

or call (866) 806-7204 toll free, or visit http://www.pcouncil.org/groundfish/gfifq.html

Public comments should be sent to Mr. Donald Hansen, Chairman, Pacific Fishery Management Council, 7700 NE Ambassador Place, Suite 101, Portland, Oregon 97220-1384, or emailed to pfmc.comments@noaa.gov



ATTENTION TRAWL CREW AND CAPTAINS

Trawl crew and captains may be affected by potential changes to the West Coast trawl fishery. Read below to learn more about what's going on and decide if it could be helpful for you to get involved.

What's going on?

The Pacific Fishery Management Council (or "the Council"), the organization responsible for coordinating management of fisheries off California, Oregon, and Washington, is in the process of organizing a new management system for the groundfish trawl fishery. This new system is a **trawl individual quota program** (often called an Individual Transferable Quota, ITQ, or an Individual Fishing Quota, IFQ).

An IFQ is a specific portion of a fishery's total harvest limit that can be harvested solely by the <u>individual</u> <u>or business</u> holding the IFQ. When IFQ is expressed as a percentage it is called a **quota share**. Though the amount of quota pounds given to quota share holders may change as the total allowable harvest increases or decreases, the privilege to harvest the quota pounds is more-or-less guaranteed for the year (though the IFQ program could be canceled or changed by decisionmakers at a future time).

If this program is put in place, the trawl fishery is likely to *consolidate*. That is, the most efficient vessels will continue fishing and accumulate more quota shares, while the less efficient vessels will leave the fishery. The result is that there may be fewer trawl vessels along the coast, but the remaining vessels may have higher profits and operate for more days each year. In order to enter into the fishery, a person would have to purchase or lease quota from someone else.

One of the reasons that some people are in favor of an IFQ system is that it makes fishing more *flexible*. The trawl fishery would no longer be managed by trip limits, at least for target species and possibly for all species. By knowing that their quota of fish is reserved exclusively for them to harvest over the year, fishermen under the IFQ system can look for markets for their product when it's the best time to fish – such as when the weather is safest or when the market prices are high. IFQs should also allow vessel owners to do more long-term business planning than before, because there will be more certainty about the amounts they will be able to harvest. This may make the West Coast trawl fishery more stable in the long-term.

How could these changes affect YOU?

There are a number of good and bad ways that crew and captains could be affected by an IFQ program. Some are listed below. Over the next year, the Council will be deciding exactly how to structure the program; how they choose to organize the program could make the impacts to crew and captains lesser or greater.

- § Fewer vessels means fewer jobs for crew and captains
- § Trawl vessels under the IFQ program may be located in different home ports than they are now.
- § Remaining jobs may be safer and more stable
- § The jobs may pay better... or they may pay worse
- § Crew, captains, and others may have an opportunity to become owners in the trawl fishery by purchasing small amounts of IFQ at a time.
- § Special entry level opportunities might be created.

Why is it helpful for crew and captains to get involved?

So far, the Council has heard little from crew and captains during the process of developing the IFQ program. Listening to comments from the public is an important part of how the Council makes decisions. The Council needs to hear how you feel the IFQ program would affect you and specific ways that the program could be changed to lessen negative impacts.

How can crew and captains get involved?

You can get involved on your own or work together with others. There may be organizations already in place that you could become involved with.

Here are some different ways to voice your ideas to the Council:

- Present your comments during a Council meeting;
- Talk with someone in your area who is already involved with the Council (such as a Council member or a member of a Council advisory committee);
- Write a letter to the chair of the Council (send to the address below).

Your comments are most effective when they are related to the kinds of decisions that the Council is making at that time. See below for a key to that timing.

For more information

Future Council Meetings2006Nov. 12-17Del Mar, CA (near San Diego)2007March 4-9Sacramento, CAApril 1-6WA or OR (location TBD)June 10-15Foster City, CA (near San Francisco)Sept. 9-14WA, OR, or CA (location TBD)Nov. 4-9San Diego, CA

Expected Timeline	What's going on	Useful kinds of public comment
Fall 2006 – Winter 2007	Council and Council staff are continuing discussions the options for how to structure the IFQ program and analyzing how these options could affect the fishery.	Explain how the IFQ program could affect you; Suggest ways that the program could be adjusted to change those impacts
Winter 2007 – Spring 2008	Council makes final decision on the specifics of the IFQ program.	Describe whether the analysis accurately reflects how the IFQ program would affect you; Explain which, if any, of the options for how to structure the IFQ program is best in your opinion
Summer – Fall 2007	NMFS considers whether or not to implement the IFQ program that the Council developed.	Explain to NMFS why you think the program should or shouldn't be put in place.
2010	Fishing under IFQ program begins	

- Read more about IFQs and what the Council is proposing at: http://www.pcouncil.org/facts/ifq.pdf and http://www.pcouncil.org/groundfish/gfifq/Status_0606.pdf
- Read "Navigating the Council process" for more info on what the Council is and how to get involved in the Council process: http://www.pcouncil.org/guide/Guide-intropage.html.
- See the links to trawl and other organizations on the Council's website at http://www.pcouncil.org/links.html
- Call the Council office at (503) 820-2280

Public comments should be sent to:Mr. Donald K. Hansen, ChairmanPacific Fishery Management Council7700 NE Ambassador Place, Suite 101Portland, Oregon 97220-1384Or: pfmc.comments@noaa.gov

TRAWL INDIVIDUAL QUOTA COMMITTEE REPORT ON TRAWL INDIVIDUAL QUOTA: STAGE I ALTERNATIVES AND PROGRESS REPORT ON STAGE II

The Trawl Individual Quota Committee (TIQC) met on Sunday September 10, 2006 and addressed the following issues:

- Whiting Individual Fishing Quota (IFQ) Rollover Between Sectors
- Bycatch Management in the Whiting Fishery
- Whiting Co-operatives
- Community Stability Program

The TIQC has tentatively scheduled its next meeting for November 7 and 8, 2006.

Whiting IFQ Rollover Between Trawl Sectors

The TIQC worked on development of an option to allow the rollover of whiting IFQ from one whiting sector to another. The TIQC notes that the need to consider rollover mechanisms assumes that trawl sectors are maintained. Management Regime Alternatives 2 and 3 would maintain subdivision of the trawl sector divisions while Management Regime Alternative 4 would create a single trawl sector. While the decision on whether to have a single or subdivided trawl sector is a Council policy call, the TIQC discussed the tradeoffs underlying the decision on whether to maintain trawl sectors. These are summarized as follows.

Reasons for Maintaining Trawl Sector Subdivision

If the IFQ program does not include sector subdivisions, it is believed that the vast majority of the whiting would be sold to and taken by the catcher-processor sector. This would have adverse effects on communities and those invested in shoreside and mothership operations. Independent vessels, jobs on the vessels, and current ways of doing business could disappear. Losses to communities with investments in the fisheries, docks, and fish industry services could also be very significant.

There are values other than efficiency that are addressed in the objectives. Rationalization should not be allowed to increase efficiency without constraint. Preservation of the existing sectors would limit the potential for rapid, radical and unanticipated transformations under IFQs.

Reasons for Creating a Single Trawl Sector

The distribution of harvest among different trawl harvest modes should be market based. Artificial divisions should not be created to protect weak members of industry. While protection for markets and diversity may be desirable, costs associated with lost efficiency and program administration are

too high. This tradeoff between the costs and benefits of maintaining sectors needs to be evaluated

by maintaining an option that would have no sector divisions.

Flexibility in the distribution of IFQ among sectors is needed to deal with unforeseen circumstances. The option proposed below for IFQ rollover between sectors is basically voluntary (based on declarations of intent). Given the voluntary nature of the rollover option, the only alternative which provides the needed flexibility is the alternative with one sector (Alternative 4).

Whiting Rollover Option

Assuming that the Council decides to move forward with alternatives that include subdivision of the trawl sector, the **TIQC recommends** that the following rollover option be analyzed.

- In advance of the season, any processors potentially interested in processing off/on the West Coast must declare that intent.
- For each sector with unused whiting IFQ, the National Marine Fishery Service will survey potential processors on Sept 15 (or another date which may be specified preseason by the Council).
- If for any sector there is no interest/commitment to processing any of the remaining unused whiting IFQ for that sector then the whiting IFQ for that sector will be released from the sector constraint and may be used in any trawl sector.

Pros and Cons of a Whiting IFQ Rollover

The TIQC did not reach a consensus on whether or not a rollover option would be needed if sectors are maintained. The discussion on this issue is summarized as follows.

Reasons for No Whiting IFQ Rollover

Elimination of the rollover option would simplify the program and reduce program costs. If the program is implemented and there is a problem with fish being left on the table, a rollover option could be developed through a trailing amendment. Not including a rollover option would encourage innovation among those having difficulty using their IFQ. It is difficult to design a rollover system that would not be subject to manipulations that might have adverse conservation effects or effectively eliminate the sector divisions.

Reasons for a Whiting IFQ Rollover

A rollover would reduce the chance that fishermen, communities and consumers will forgo benefits by leaving fish in the water. For example, catcher vessel IFQ for mothership deliveries could be stranded and left unused if mothership processors decide not to participate at a level sufficient to take the available allocation.

Bycatch Species Management In the Whiting Fishery

Alternative 2 provides that there would be a separate pool of bycatch species for each sector. **The TIQC recommends** that an option be added to provide a single pool of bycatch species for all whiting sector deliveries. This option may provide the sectors with more flexibility to utilize the available bycatch while accessing their whiting IFQ. Options have yet to be developed for the possible rollover of bycatch species between sectors, if separate sectors are established.

Whiting Co-operatives

No consensus was reached on whether or not whiting co-operatives should be included in an alternative.

TIQC Whiting Sector and Nonwhiting Processor Member Recommendation: The Council should incorporate a co-op option for all whiting sectors as part of the permit stacking alternative and move it forward for analysis as part of the package. The TIQC should be directed to more fully develop the co-op options.

The **other members of the TIQC note** the co-op alternative as one for Council consideration but do not make a recommendation as to whether or not the Council should include the co-op option in one of the alternatives.

The TIQC believes some Congressional action may be required to allow co-ops involving shoreside processors.

Community Stability Program

The TIQC recommends that the Council incorporate all of the attached changes to the community stability program into the current version of the program (IFQ Program C) but at the same time notes there may be substantial administrative costs associated with a community stability program.

The intent of the community stability program is to economically benefit coastal communities. Market development and enhancement, flexibility/coordination with market forces, facilitation of new operations, and industry stabilization at the local level are all desired outcomes. While the program allows any partnership that includes an IFQ holder to apply for community stability quota, ideally the partnerships coming forward will involve fishermen, processors, and others associated with the community.

The community stability program is proposed to further the following IFQ objectives.

- 5. Increase stability for business planning.
- 7. Minimize adverse effects from an IFQ program on fishing communities to the extent practicable.
- 8. Promote measurable economic and employment benefits through the seafood catching, processing, distribution elements, and support sectors of the industry.

The TIQC notes that substantial additional work needs to be done in developing objective quantifiable criteria. Criteria should address objectives including stabilization, innovation, and employment opportunities. Development of objective quantitative criteria that are applicable across diverse communities and would appropriately rank proposals is a challenging task.

Further development of these alternatives requires additional technical expertise as well as general policy guidance of the type provided by the TIQC. If the Council is to move ahead with a community stability program, **the TIQC requests** that the Council provide the needed technical support.

PFMC 09/13/06

CHANGES TO THE COMMUNIT STABILITY PROGRAM PROVISIONS RECOMMENDED FOR CONSIDERATION. EXCERPT FROM TABLE 2-4.

D	D	Þ	D
	D	Þ	Þ
Council before being forwarded to NMFS. Committee Role: Use specific measurable criteria to make recommendations to the Council on the amount of quota pounds to be allocated for proposals presented by QS owners/lessees for the purpose of achieving specific community development, enhancement, or stabilization goals. Composition: The committee would be composed of representatives of West Coast regions, port districts, processors, and fishermen as determined under a Council operating procedure. Option A (B.4.2.2) Joint Staffing and Administration: Committee reports would be included as part of program costs to be covered by fees. Other staffing functions would be carried on the burb fees.			
D	Þ	Þ	D
Council before being forwarded to NMFS.Council before being forwarded to NMFS.Committee Role: Use specific measurable criteria to make recommendations to the Council on the amount of quota pounds to be allocated for proposals presented by QS owners/lessees for the purpose of achieving specific community development, enhancement, or stabilization goals.Composition: The committee would be composed of representatives of West Coast regions, port districts, processors, and fishermen as determined under a Council operating procedure.Option A (8.4.2.2) Joint Staffing and Administration: Committee reports would be developed for the committee by the staff of the NMFS Limited Entry Office and related expenses would be included as part of program costs to be covered by fees. Other staffing functions would be carried out by the Council	Option B (B.4.2.2) Council Staffing and Administration: All staffing functions would be carried out by the Council.	SubElement B.4.2.3 Eligibility for Participation. Proposals may be submitted by partnerships of QS holders, including partnerships with QS holders and non-QS holders (e.g. community groups) or individual QS holders. QS holders may only participate in one proposal for any given time period.	 SubElement B.4.2.4 Criteria allocating among proposals. A set of quantitative criteria will be usedd to objectively determine the amount of QP to be allocated to a proposal. The Council may determine that for stability and planning reasons the allocations for some or all proposals should be for periods longer than 1 or 2 years. Future modifications of criteria. As the program progresses over time, the need to modify the criteria may arise. The criteria may be modified. deleted, or augmented as part of the biennial specifications process, or a three meeting process. so long as the modifications are consistent with the objectives identified for the Community Stability Program. Calculation of Allocation. Each criterion will be scaled such that they are evenly weighted and values fall between 0 and 1 (or between 0 and 100). Scores for all or the process or a score or all between 0 and 1 (or between 0 and 100). Scores for all or the process or between 0 and 1 and the process or between 0 and 1 a

	D	D	Þ	D	
	Þ	D	Þ	B	
	Þ	D	Þ	. 5	
scores for all proposals would be summed. The amount to be allocated to each collaborative proposal would be the score for that proposal divided by the sum of all scores times the total holdback for each species covered by the application. <u>Seven potential criteria are listed in the following options. The Council may select one or all of the criteria options.</u> The following are not necessarily mutually exclusive.	The first three criteria are reasonably well developed, the other criteria probably need more development before they would be ready for use. Option A (8.4.2.4) Past Performance: The degree to which the quota committed to previous projects was utilized in accordance with the commitments made (does not apply to overfished species). This criterion comes into effect in the second year of the program. Past performance will not be available in the initial year.	<i>Option B (B.4.2.4)</i> Quota pounds committed to the project by the applicants: The exvessel fair market value of all pounds committed (based on previous year's prices) will be summed and divided by the fair ex-vessel value of all pounds committed by all proposals. For this criterion, scores of all proposals will be scaled proportionally such that a score of 1 will be assigned to the proposal with the greatest amount of pounds committed to the proposal.	<i>Option C (B.4.2.4)</i> Port Dependence: Proportion of port <u>governing body</u> revenue from activities of vessels, buyers, and processors divided by total port revenues. Proportion of revenues in all proposals will be adjusted proportionally such that the largest proportion of revenues receives a score of one.	The remaining criteria probably need further review and development. Option D (8.4.2.4) Utilization: Proportion of raw product to be converted to consumptive and non-consumptive human use (including meal and fertilizer).	

	D	Þ	D	Þ
	Þ	Þ	D	Þ
	D	Þ	D	Þ
times past performance on utilization commitments. Indicator of wastage and potential pollution externalities. Indicator of <i>Wastage and potential pollution externalities</i> . Indicator of <i>Option E (8.4.2.4)</i> Local Added Value: Fair market value of proposed exports from community divided by fair market value of ex-vessel landings. The committee will determine a fair market value for the proposed product and apply the same per pound market values to all proposals. (Apply as a past performance measure if advance commitment to product forms is not tenable). For this criterion, scores of all proposals will be scaled proportionally such that a score of 1 will be assigned to the proposal with the greatest added value ratio.	<i>Option F (B.4.2.4)</i> Local Labor 1: Local employees divided by total individuals employed (FTE) by the firms that are parties to the proposal.	<i>Option G (B.4.2.4)</i> Local Labor 2: Total local wages to be paid per dollar fair market value of proposed exports or final products. The committee will determine a fair market value for the proposed product and apply the same per pound market values to all proposals. Proportionally scale the scores of all proposals such that the proposal with the largest ratio is scaled to one.	Option H (B.4.2.4) Public Debt Related to Fisheries Development: For the port in which the landings will be made, the amount of public debt directly related to investments supporting the fishing industry and relying on fishing activity for debt recovery divided by the total amount of debt identified in all such proposals and scaled proportionally such that a score of 1 is assigned to the proposals benefiting ports with the greatest fishing infrastructure related debts.	<i>Option I (B.4.2.4)</i> Public Investment Dedicated to Fisheries: For the port in which the landings will be made, the amount of public investments directly supporting the fishing industry divided by the total amount of other investments in the port (not related to fishing) . Identify investments in all such proposals and scale proportionally such that a score of 1 is assigned to the proposals benefiting ports with the greatest fishing

CHANGES TO THE COMMUNIT STABILITY PROGRAM PROVISIONS RECOMMENDED FOR CONSIDERATION. EXCERPT FROM TABLE 2-4.

	$\mathbf{\Sigma}$	$\mathbf{\Sigma}$
	D	D
	Þ	
industry related debts.	SubElement B.4.2.5 Accumulation Limits. All additional quota acquired by a preson through participation in a proposal will count toward accumulation caps.	SubElement B.4.2.6 Transferability. Quota pounds issued for proposals may be transferred as long as their use is consistent with the <u>original</u> proposal and fish are caught, handled and landed in all manners originally specified in the <u>original</u> proposal.

E:\EX_c7b_TIQC_table.doc

ŝ

ENFORCEMENT CONSULTANTS (EC) REPORT ON TRAWL INDVIDUAL QUOTAS: STAGE I ALTERNATIVES AND PROGRESS REPORT ON STAGE II

The EC recommends forwarding the enforcement and monitoring alternatives contained in the Trawl Individual Quota Stage I document for analysis.

In addition we endorse the comments and recommendations of the Groundfish Management Team, supplemental report in particular recommendations 3 and 4.

#3 Moving forward with the development of a coast wide electronic fish ticket system. The EC would like to be involved so as to make sure necessary elements for enforcement are included. i.e.: access, accountability

#4 Initiating discussions between the Northwest Region and the Northwest Science Center regarding development of monitoring and observation programs in support of a trawl individual quota program.

PFMC 09\14\06

GROUNDFISH ADVISORY SUBPANEL REPORT ON TRAWL INDIVIDUAL QUOTAS: STAGE I ALTERNATIVES AND PROGRESS REPORT ON STAGE II

The Groundfish Advisory Subpanel (GAP) reviewed trawl individual quota (TIQ) development documents in the briefing book and was briefed by staff. The GAP continues to believe that timely development and implementation of a comprehensive individual quota (IQ) program for the groundfish trawl fishery is a high priority. However, the GAP continues to be frustrated by the complexity of the information. The GAP believes we would be better able to provide constructive input to the TIQ development process if the information was presented in a more comprehensible manner. The GAP recommends the Council direct staff to work with the Groundfish Management Team (GMT) and National Marine Fisheries Service Northwest Region to structure the alternatives into programmatic themes, for example, a structure that best fits the needs of the trawl fishery, a structure that best fits conservation needs, and a structure that best fits community needs. The GAP also recommends the Council direct staff to review the current alternatives to determine if specific aspects could be individually analyzed. These individual analyses could help determine if certain alternatives could be modified or eliminated; a task the GAP is continually asked to perform, but has been unable to accomplish.

The GAP also believes that several issues currently impeding the TIQ development process should be dealt with by the Council, including – harvest quota shares to processors, inter-sector allocation, and de-coupling of the whiting fishery from the TIQ program.

The GAP continues to get hung up on the issuance of harvest shares to processors. The GAP suggests the Council consider formal action on this issue in the near future.

Secondly, the GAP urges the Council to make significant progress on the issue of inter-sector allocation.

Finally, the GAP discussed (but could not resolve) the question of whether the whiting trawl fishery should be de-coupled from the non-whiting trawl fishery in development of the IQ program. However, the GAP believes this is an important issue that merits formal consideration by the Council.

Specific to the current TIQ alternatives, the GAP recommends addition of two alternatives:

- 1. Under permit stacking scale cumulative limits to limited entry permit history.
- 2. Under eligibility criteria only individual U.S. citizens or single-owner U.S. corporations should be eligible to obtain quota shares through purchase, lease, or transfer. Corporations and individuals eligible to receive initial allocation of quota shares would be exempt from this requirement.

Finally, the GAP discussed the United Catcher Boat (UCB)/Mothership sector proposal (Agenda Item C.7.d, Public Comment) for a cooperative management alternative under the IQ program. Like IQs, cooperative-based management is a type of Limited Access Privilege Program. The GAP is not recommending that the specific alternative in the UCB/Mothership proposal be added

to the TIQ analysis. However, a majority of the GAP believes there are merits to the cooperative-based management approach and recommends the Council add for an analysis a cooperative-based management approach (developed by all stakeholders) to the TIQ program.

Minority Report:

A minority of the GAP recommends the Council not include for development a fallback option to the TIQ Program. The co-op program, as outlined by the mothership sector, in concert with others within that sector, is particularly troublesome and should not go forward in its present form for the following reasons:

There was testimony in the GAP regarding development of co-op type management would speed up and facilitate development of the TIQ program. Exactly the opposite is the case. It will require program development, as well as allocation on the sector and the individual vessel level. Allocation to sectors and vessels is an integral component in development of the TIQ system, is ongoing and must be completed before either the TIQ program, stacking or co-ops management can be implemented.

Legislative action is needed to implement co-ops as outlined in the mothership proposal. This will take time and may be more burdensome than completion of an IQ program.

The inclusion of co-op management as a fall back, should the TIQ program not be implemented, will provide an incentive for those who favor this option to undermine the IQ program thereby assuring its failure.

The dedicated time and money which has been spent on the IQ program must not be squandered or wasted. The Council and staff should focus on the primary task at hand - completion of the TIQ program.

This proposal would create a closed class of fishers and processors. Floating processors would be recognized as a class. This issue concerning processors and how they will be dealt with under a Dedicated Access Program has yet to be decided by the Council.

Neither the TIQ Committee, nor the GAP discussed particular components but moved to a majority and minority statement posture.

We believe, if the Council is to go forward with development and analysis of a co-op type management it should be an open concept, developed with all stakeholders, managers and Council. Many fishers who do not belong to UCB, Midwater Trawler Cooperative and other stakeholders, have not been consulted, and have not signed off. They should be included.

The options contained within the TIQ analysis should be modified to facilitate co-op management, not as a separate program.

We are all frustrated with the slowness and now near stagnation in the TIQ process, however, we should stay the course. Completion of an IQ system for the trawl sector will deal with all the issues more effectively than through a co-op. The GAP heard testimony to the effect many

fishers would not favor a co-op alternative if they thought the trawl quota program would 'ever' be completed.

Any further delay in implementing the trawl IQ program continues to facilitate waste, inefficiency and lack of real-time science. It is important the Council rededicates itself, without distraction, to the development of the IQ program. Let's put all our resources into scaling hurdles such as processor consideration, inter-sector and individual allocation, where appropriate, as well as sector definitions and move this program forward.

PFMC 09/14/06

GROUNDFISH MANAGEMENT TEAM REPORT ON TRAWL INDIVIDUAL QUOTAS: STAGE I ALTERNATIVES AND PROGRESS REPORT ON STAGE II

The Groundfish Management Team (GMT) would like to commend the substantial amount of work accomplished by the Trawl Individual Quota (TIQ) committee and Council staff in the development of the Stage 1 document. The GMT spent considerable time discussing the alternatives and design elements in preparation for the September 2006 Council meeting and at the September 2006 Council meeting. The primary focus of GMT discussion was on the management regime alternatives found in Table 2-1, and although there are substantial issues in tables other than 2-1, the GMT did not have time to fully discuss those issues. The GMT feels that further work needs to be done in identifying the implementation feasibility and management implications of the suite of alternatives prior to moving forward with the adoption of the alternatives for further analysis. This could be accomplished by identifying the elements that are critical and pivotal to the successful implementation of a TIQ program and that discussion and analysis of those elements could be provided prior to proceeding with the Stage 2 document. Enhancing the understanding of those critical elements would facilitate understanding and simplification of the alternatives in the Stage 1 document.

The GMT acknowledges that a number of competing workload priorities such as the essential fish habitat environmental impact statement (EIS), inseason management issues, and the 2007-2008 Annual Management Specifications EIS have limited the ability of the GMT, and others, to fully engage in the development of the elements of Stage I despite invitations from Council staff over the past 2 years. However, the GMT believes that input on the part of management and agency staff is critical in moving forward to reduce the complexity of the current document and provide comment on the practicability of components of the current alternatives.

The GMT provides some comment on Stage 1 in this statement, and has also provided additional comment directly to the TIQ Committee. However, we stress that these comments only represent the GMT's first critical evaluation, and we look forward to providing further input as the process unfolds.

An Overview of Concepts Discussed in the GMT Statement

- Overfished Species Management
 - The GMT discussed the integration of an individual fishing quota (IFQ) system with respect to the need to protect and rebuild overfished species and believes that while IFQs have the potential to assist the conservation of overfished species and the prosecution of the fishery under those constraints, the potential exists to exacerbate current problems in the West Coast Groundfish fishery if the IFQ program is not correctly constructed. Some of these concepts are found under the discussion of 'Race for Fish', 'Cumulative Catch Limits', and 'Groundfish Catch with Non-Trawl Gear'.
- Prohibited Species (salmon and Pacific halibut)
 - The GMT discussed how prohibited species would be impacted by the implementation of an IFQ program. The GMT believes that an IFQ program has the potential to reduce impacts to prohibited species if correctly constructed, and

that designing a program with this objective in mind would further the goals of bycatch minimization. This concept is discussed under 'Prohibited Species'.

- Race for Fish
 - While IFQ programs are widely believed to eliminate the race for fish, the GMT believes that overfished species and other species with Low optimum yields (OY) may encourage race for fish behavior if the IFQ program is not constructed to allow for cooperative type management or IFQ pooling. This concept is further discussed under 'Race for Fish'.
- Minimizing Disruption to Current Limited Entry (LE) Trawl Participants
 - The GMT discussed the impact to current LE trawl participants if an IFQ program were to be put in place and believes that substantial disruption could occur if an allocation scheme is solely based on landed catch history. The GMT identified several methods for a more equitable distribution of initial allocation. Some of those concepts are discussed under 'Minimize Disruption to Current Trawl Participants'.
- Gear Switching under an IFQ Program
 - Allowing vessels to switch gear under an IFQ program would help foster the flexibility necessary for fishers to appropriately balance IFQ accounts and prosecute the IFQ fishery. The GMT outlined an approach for allowing IFQ to be prosecuted with non-trawl groundfish gear.
- Holdback Provisions
 - One element that exists in the Stage 1 document is a holdback provision used to protect communities. The GMT believes that a holdback provision could be constructed to fulfill a more general purpose that includes community protection as well as conservation objectives, protection for crewmembers, and the testing of new gears for example.
- Area Management
- Cumulative Catch Limits

Achievement of Magnuson-Stevens Act and West Coast Groundfish FMP Objectives

IFQs are a management tool that has the potential to help foster the achievement of conservation and economic goals found in the Magnuson-Stevens Act (MSA) and the West Coast Groundfish fishery management plan (FMP). However, if a system is designed in an incorrect manner, there is a risk that such a system could exacerbate some of the problems that currently exist in the West Coast Groundfish fishery. Although many of the alternatives and design elements found within the current Stage 1 TIQ document are likely to help achieve MSA and FMP objectives, some of the alternatives and design elements may not, and indeed some elements may make matters worse.

Changes in Discard

Under each of the non-status quo alternatives identified in the Stage 1 document, it is anticipated that all of them would have the effect of reducing discards compared to status quo. This is because each of the alternatives is a total catch program (landings and discard mortality) whereas current management uses landed catch limits. Landed catch limits allow for regulatory discard and high grading whereas total catch limits may eliminate regulatory discard and eliminate the majority of incentives associated with high grading.

Race for Fish

One implied notion of an IFQ program is that fishers have the flexibility to operate in such a way that they manage their catch at an individual vessel level better than agencies can regulate them. This requires that individual vessel operators have a defensible guarantee of catch from year to year, and that amount of catch cannot be impacted by what another vessel does. However, if the quota held by one vessel is put at risk by another vessel, those vessels have an incentive to engage in race-for-fish behavior.

Assuming that the LE bottom trawl fleet obtains an 8.0 metric ton fleetwide allocation of canary rockfish, the average vessel would receive somewhere on the order of 100 pounds of canary rockfish for the year if divided equally. While fishers can influence the type and amount of species that are caught on a tow by tow basis, the probability that a single tow will catch more than that 100 pound amount of quota is relatively great even when trying to avoid canary rockfish. While the theory of a free flowing market would suggest that a vessel exceeding its quota amount would simply purchase more quota to cover that overage, reality suggests that to purchase quota there must be willing sellers of that quota. Given that canary is likely to constrain the catch of many target species there may not be any willing sellers of canary quota, and if there are, that quota is likely to be extremely expensive. In any case, a fisher with a canary overage may not be able to cover the overage with quota, which means that the sector would need to be closed down before each vessel has achieved their quota pounds for the year. Not doing so could mean exceeding the OY. This is a scenario where quota pounds are not defensible and encourages race for fish behavior.

For species where the allocation of quota is likely to result in extremely small amounts of annual pounds at the vessel level (such as canary rockfish), a mechanism that allows for pooling the catch of that species across multiple vessels is likely to reduce or eliminate the incentive to race for fish. Mechanisms such as fishing cooperatives in the whiting catcher processor fleet, and allowing for IFQ pooling in the BC trawl fleet, have proven to work in such a way that they counter the race for fish incentive and help to foster behavior that avoids impacts to non-abundant species. The GMT believes that allowing cooperative type management or IFQ pooling for constraining species should be considered for the successful implementation and operation of a Dedicated Access Program in the West Coast Groundfish fishery. The GMT notes that the current alternatives do not preclude the formation of cooperatives or pooling of IFQ.

Impacts to Prohibited Species (Salmon and Pacific Halibut)

Salmon and Pacific halibut are caught incidentally in the groundfish trawl fishery. An IFQ program has the potential to reduce the catch of these species, however prohibited species quota is not considered in any of the alternatives and design elements. While issuing IFQ for prohibited species is likely to be difficult and should be considered carefully, the conservation benefits of including salmon and Pacific halibut under an IFQ program are likely to be greater than not including those species under an IFQ program so long as fishers cannot benefit from the catch of prohibited species (e.g. prohibited species could not be retained).

Minimize Disruption to Current LE Trawl Participants

The approach identified for issuing quota to fishing vessels is by using historical landings prior to 2003. The fishery at that time was much different than the fishery today, and in particular, some of the overfished species were trawl targets. Under an IFQ program it is unlikely that any vessel would acquire enough IFQ to actively target overfished species, so allocating IFQ based

on a period when targeting on these species was common place may not be the best mechanism. If the objective is maintaining the catch and focus of the fishery on current target species, and maintaining current participants in the fishery, the Council may want to continue considering an allocation scheme that allocates overfished species based on a bycatch rate to target species, rather than historical landings of overfished species. Such a consideration would be a change to Component 2.

The alternatives for allocating species across sectors (Component 6) is currently described as a process that would compare the landed catch of species in the non-whiting shorebased sectors of the trawl fishery to total catch of species in the whiting fishery. Not including estimated discard mortality in the non-whiting shorebased fishery inherently biases the allocation scheme toward the whiting sectors of the trawl fishery and fails to take into account the actual catch that should be attributed to the non-whiting fishery.

Catch history attributed to vessels that participated in the buyback program could be attributed to future IFQ holders in several ways. One method discussed has been to identify the portion of groundfish caught by buyback trawlers during the qualifying period, and attribute that catch to current permit holders on an equal basis. The GMT would like to point out that this type of allocation scheme would give IFQ to active participants in the LE trawl fishery as well as to latent permits. Granting IFQ to latent permits would mean that active fishers would not receive access to fish species that are accessed under current management. If the intention is to not give IFQ to latent permits, a type of recent participation requirement could be considered to eliminate the granting of IFQ to latent trawl permits.

Groundfish Catch of Limited Entry Trawl Vessels Using Gears Other Than Groundfish Trawl Gear

Elements 3.1 and 3.2 identify mechanisms for dealing with the catch of groundfish made by trawl IFQ holders using gears other than trawl gear. These alternatives include counting that catch toward the trawl IFQ and the trawl IFQ sector allocation or not counting that catch toward IFQ and counting it toward the sector in which the vessel is participating. In order to simplify the alternatives within the Stage 1 document, this component could be eliminated. The GMT envisions this component could be eliminated by allowing vessels to transition between sectors without counting other sector groundfish catch against IFQ. For example, trawl IFQ holders could engage in the sablefish tier fishery without having catch that occurs in that fishery count toward IFQ pounds for the year. This would require that (A) vessels declare the fishery they are planning to engage in before leaving port, (B) that the allocation of groundfish be made based on the historical catch of LE trawl vessels while the trawl permit was active and while using trawl gear (catch made with non-trawl gear by a LE trawl permit while a permit is active would be attributed to the appropriate non-trawl sectors), and (C) this may require that sideboard type protection mechanisms be put in place for non-IFQ fisheries to ensure that those fisheries do not exceed their groundfish allocation, and to protect those other sectors from economic harm caused by a potential increase in effort on the part of IFQ holders.

In addition to the above method described to reduce the complexity of the existing alternatives, the GMT discussed whether gear switching to prosecute IFQ should be allowed. One notion of an IFQ program is that fishers can balance their catch more successfully than agencies can regulate that catch. Allowing IFQ holders to switch gears to prosecute their IFQ would help foster the flexibility necessary for fishers to balance their catch accounts and maximize economic

returns. Because different gears are likely to have different impacts to groundfish species (for example, yelloweye is primarily caught with hook and line gear and not trawl gear), if those species are covered under a correctly constructed IFQ program, gear switching should not cause conservation concerns or pose risks to other sectors of the fishery.

Cumulative Catch Limits

Alternative 2 includes IFQs for target species but manages other species with cumulative limits. This creates a management regime with two systems and could eliminate the potential bycatch gains that are usually attributed to managing overfished species with IFQ or something similar. Empirical studies have generally shown that under systems that operate like an IFQ program, the incidental catch of non-target species is reduced over time. Managing overfished species under a system that does not create the same incentives as an IFQ, or an IFQ-like program, jeopardizes the formation of some of the incentives and behavior that would lead to a reduction in the catch of overfished species. Elements in the Stage 1 document that include the use of cumulative catch limits could be replaced with mechanisms that allow pooling of IFQ or the formation of co-ops for managing those species. These programs would create the same type of bycatch reduction incentives as IFQs and are likely to result in less management complexity than a system with both IFQs and cumulative catch limits. However, allowing for IFQ pooling or the formation of co-ops for species that would otherwise be managed with cumulative catch limits could require that IFQ or co-op allocations be constructed without a formal allocation of those groundfish species. The GMT discussed three methods for granting dedicated access privileges for species without an allocation. One method discussed would involve maintaining the most recent status quo catch sharing across sectors and attributing IFQ or co-op allocations based on that amount and a particular vessels catch history. Another method would involve constructing an allocation formula that would be triggered if a dedicated access privilege program becomes necessary for a particular species. The third method could involve either status quo catch sharing across sectors or an allocation formula, but instead of allocating IFQ or co-op amounts based on catch history, the allocation could be made based on a ratio of species that are caught alongside the species that needs a dedicated access program. The GMT believes this type of mechanism would avoid the incentive of fishing for catch history (and targeting species that aren't currently targeted) that might occur if catch history is used to grant IFQ.

Community Holdback Provisions

An IFQ program has the potential to result in fleet consolidation. This means that some communities may lose relatively more (or all) of their trawl vessels and negatively impact some of those fishing dependent communities. While protecting communities from the unintended consequences of an IFQ program should continue to be considered, the GMT identified other issues for which a holdback provision could apply including holdbacks that can be used to protect crewmembers and holdbacks that could be used as a buffer to protect against the chance that a particular sector could catch more groundfish than is eventually allocated. The Council may want to considerations (such as one to protect communities and crewmembers), for conservation considerations (such as a buffer to help ensure that OYs are not exceeded), or to preserve opportunity for the development of new fisheries or new fishing methods.

Whiting Seasons

Elements 1.7 and 1.8 address the whiting season start date and the whiting season closing date. The current justification for having the whiting primary season start June 15 is because of the

impacts to Endangered Species Act listed salmon, and therefore, the GMT does not feel that the whiting season start date is necessarily an issue that is related to IFQ development. Therefore, in the interest of reducing the amount of complexity associated with moving forward on the IFQ program, the Council could consider eliminating the reconsideration of a whiting season start date or reconsider the whiting season start date after the IFQ program moves forward.

Single Sector

The GMT believes that there is merit in establishing limits on how much each sector can own/hold, and therefore the GMT is not in favor of establishing an IFQ system with only one sector. As an example, consider the difference between the at sea sector and the shoreside sector. Each sector is essentially operating on the different plane of revenues, and therefore, their purchasing power for trading IFQs is different. One sector obtains revenues from the catching and processing of groundfish (the at sea sector) and the other obtains revenues only from the catching of groundfish (shoreside catcher vessels). To illustrate this concept, consider a catcher processor vessel versus a shoreside catcher vessel. A catcher processor vessel essentially makes revenues off the catching and processing of whiting, whereas a shoreside whiting vessel makes money only off the catching of whiting. This means that a catcher processor would view whiting (and therefore whiting fishing quota) as more valuable than a shoreside catcher vessel (catching revenue plus processing revenue vs. catching revenue) and would be more likely to purchase fishing quota than a catcher vessel. This could result in less whiting landed shoreside than what would otherwise be the case. This would most likely be an inefficient transfer of quota because shoreside processors may not be considered in the decision of whether to purchase or sell IFQ, but would be impacted nonetheless. Without a carefully crafted set of regulations pertaining to IFQ trades between whiting sectors, the likely outcome would be a socially inefficient amount of IFQ being held in one sector.

Infrastructure Issues

A critical component of a successful IFQ program is quota tracking and monitoring (Component 4), and this requires that an appropriately designed observer program be put in place. The GMT believes that the structure and design of that observer program should be identified as quickly as possible in the process so that the appropriate analysis can proceed. For example, the observer roles could be concentrated upon biological sampling or compliance monitoring. The GMT also encourages further investigation into the feasibility of using electronic monitoring (e.g. cameras) in a multi-species trawl environment.

Furthermore, timelines and logistics for implementing a standardized electronic fish ticket reporting system and logbooks should be developed. The GMT recommends this as a priority because of the complexity of developing this system.

Area management issues

Given that the current broad-scale management approach likely falls short of addressing the spatial structure of some fish populations, a system that makes fishing effort even more fluid has the potential to exacerbate this situation. Concentration of quota shares in a region might make sense economically, but might have unforeseen biological consequences.

A process is outlined in the alternatives for how quota would be re-allocated if a stock is divided geographically into separate acceptable biological catches/OYs, after the IFQ program has been implemented. This procedure and other considerations need more detail, and therefore the GMT

supports the process option included under the non-status quo alternatives (Component 4, Table 2-1) that tasks a group to consider the need for additional regional management areas and other related management issues.

Recency requirement in initial sector allocation

Under Component 6 (Table 2-1), Alternatives 2 and 3, the application of a recency requirement is considered in the calculation of sector specific allocation within the trawl allocation. If this requirement is applied, the catch history of any permit that has not been active in recent years would be eliminated from the sector calculation. The GMT is concerned about the equity issues that could arise from this option. If a permit has historical catch but does not meet the recency requirement, these historical catches would be removed from the total sector's historical catches, thereby penalize the remaining permits by reducing the size of that sector relative to the other sectors. Therefore, the GMT recommends that the Council strike the recency requirement from Component 6 when calculating sector allocations. However, eliminating the recency requirement for sector allocation would not preclude the use of a recency requirement for the use of vessel or permit allocation of IFQ.

GMT Recommendations

- 1. Task the GMT and other state and federal managers to provide a more thorough review and comment at the November 2006 Council meeting.
- 2. Proceed with the intersector allocation process.
- 3. Begin the development of a standardized electronic fish ticket reporting system for West Coast fisheries.
- 4. Initiate discussions between council, Northwest Region, and the Northwest Fisheries Science Center on the use of cameras, observers, and other necessary infrastructure to monitor the TIQ fishery.
- 5. Identify and analyze the critical design elements associated with a West Coast Trawl Quota program.

PFMC 09/14/06

HABITAT COMMITTEE REPORT ON TRAWL INDIVIDUAL QUOTAS: STAGE I ALTERNATIVES AND PROGRESS REPORT ON STAGE II

The Habitat Committee (HC) discussed Trawl Individual Quotas (IQs). The HC endorses the gear switching option which allows fishermen to use any gear (not just trawl gear) to fulfill their quotas. The HC recommends expanding this option to include the use of any gear types that reduce habitat impacts and bycatch of non-target species.

The HC also recommends expanding the concept of reserving quota shares for community benefit to also include the concept of reserving quota shares for testing fishing techniques that reduce bycatch and habitat impacts. This could be an incentive program to seek out better ways to catch fish with minimal adverse impacts to other species and habitats.

The HC believes that a privileged access to a fishery resource through IQs should imply an additional responsibility to share data. The HC supports analyzing existing logbook data and believes managers should have appropriate access to existing observer, video, and vessel monitoring system data (while recognizing confidentiality concerns). Managers should also be creative about collecting future fishery data. A combination of technologies, such as video and global positioning systems, could be used to track how many and what fish are being removed from specific areas. The use of appropriate technology may allow the observer program to collect better data while minimizing inconveniences to fishers.

Finally, the HC supports developing options for finer area management. Because quota shares may lead to shifts in effort based on economic or other factors, managers may need finer levels of area management to control excessive effort in various areas.

PFMC 09/13/06

SCIENTIFIC AND STATISTIC COMMITTEE REPORT ON TRAWL INDIVIDUAL QUOTAS: STAGE I ALERNATIVES AND PROGRESS REPORT ON STAGE II

Trawl Individual Quotas-Stage I Alternatives and Progress Report Stage II.

Jim Seger (Pacific Fishery Management Council [PFMC]) and Marcus Hartley (Northern Economics Inc.) briefed the Scientific and Statistical Committee (SSC) on the status of Stage I of the Trawl Individual Quota (TIQ) Program Analysis and provided an update of the plan of work for Stage II.

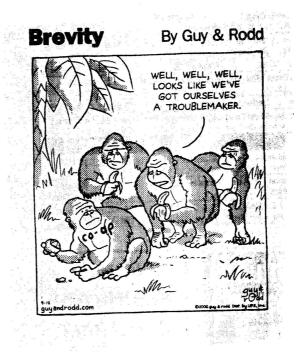
The SSC provided some specific comments on the Stage I document during the June 2006 PFMC meeting (see attached SSC Statement). These comments remain germane as the analysis moves toward Stage II. The SSC has several additional comments on the Stage I document and the presentation by Seger and Hartley.

- Some simplification of the alternatives has been accomplished. However, the links between the performance measures, the management regime alternatives, and the program goals are not clear.
- Although the implementation of a TIQ or a permit stacking program is not anticipated to have a marked impact on the likely status and trends of groundfish stocks, changes to the spatial distribution of catch may have biological implications. The SSC notes that existing analytical tools (e.g., stock assessments and rebuilding analyses) could be used to assess the effects of the different programs.
- The Stage II analysis will assume constant 2005 prices of affected species. Other TIQ programs (e.g., in Alaska) have resulted in changes to ex-vessel as well as market prices. Therefore, some sensitivity analysis of possible price changes should be undertaken. If such analyses are not possible, the document should at least include a discussion of price changes experienced in other programs that may be relevant, and whether similar changes might be expected.
- Accumulation leading to concentration of quota shares and/or market power is a real risk of any TIQ program. Information on ownership of vessels and processing plants is available through public and NMFS sources. The amount of present and potential concentration should be included in the analysis.
- The impact of TIQ programs on catches of overfished species is proposed to be analyzed by assuming that between 25% and 50% of the tows with the highest bycatch rates are eliminated. The justification for this range is not provided and use of an unduly high percentage may lead to overly optimistic expectations. Lower values for the reduction in bycatch of overfished species should be included in the analysis unless evidence in support of the lower end of the current range can be provided, for example from other TIQ programs.

Finally, the SSC wishes to restate that the complexity of the efficiency and equity trade-offs which are likely to occur in any ITQ program may lead to unforeseen consequences. A range of estimates for the potential efficiency gains (i.e. benefits) and costs of implementing should be available to inform the Council after the analysis proposed in the Stage I Draft document is complete.

PFMC 09/13/06

Agenda Item C.7.d Supplemental Public Comment 2 September 2006



Environmental Defense Testimony to Pacific Fishery Management Council September 14, 2006

These comments are primarily in response to the discussion on initial allocation to processors that took place on Tuesday, September 12th. A major theme of the discussion was the significant investment of resources that the processors have made in the groundfish fishery; and how the advent of an IQ program would affect that investment.

Our request to the Council is that you evaluate the processors' real underlying concerns about their investment in the fishery; and analyze ways other than initial quota allocation to address those concerns. Initial allocation is not the only way to address processor concerns, and could set a harmful precedent.

Environmental Defense's interest is in ensuring that the outcome of this IQ process is fair and equitable, and something that can be a model – with positive and not negative precedent. We support DAPs as a tool to solve a fundamental economic problem: that of the "tragedy of the commons" that characterizes our commercial fisheries. By allocating quota to fishermen, DAPs move away from a race for fish towards a more rational system of management in which fishermen develop a clear stake in the long-term conservation and economic aspects of a fishery.

We have advocated for the use of DAPs for more than a decade, and have worked for the past three years with the Council and stakeholders to ensure the most equitable and reasonable program design alternatives for the proposed groundfish IQ program. All of you know Dorothy Lowman, our representative, who has worked tirelessly as on the TIQC and in conducting outreach and analysis to support the process. Our major interest is that the program succeed from environmental, economic and social measures.

Over the past three years, however, we have been increasingly concerned about the degree of controversy surrounding the question of allocation to processors – both in the context of the traditional groundfish fishery, and in the processors' efforts to push a 2-pie system through Congress for the whiting fishery. This battle in Congress in particular has exacerbated tensions between the major stakeholders, and been an enormous distraction from the more fundamental issues at hand. We think these efforts have added an undue burden on the Council and stakeholders.

Furthermore, the political controversy surrounding the question of initial allocation to processors has stymied a reasoned evaluation of the processors' underlying concerns regarding both investment and access to fish. This has left unanswered the more fundamental question of how to compensate industry participants – if at all – when that industry is subject to a change in regulation.

Our proposal to you today, and the one we laid out in our comment letter on the Draft EIS, is to take a step back from the presumption that allocation to processors is the only way to address processor concerns and thus is necessary for this IQ program. We emphasize that this is would be the first time in history that processors would receive an allocation of harvester quota based solely on their processing history. We are particularly fearful of the dampening effect such a precedent would have on the Administration's stated commitment to implementing DAPs in other fisheries since future DAP proposals would be rife with the same conflicts that are plaguing this one.

To be clear, Environmental Defense does not oppose processors (or other participants) owning quota. Our concern is the precedent that initial allocation would set; and the total lack of economic rationale for such an action when other forms of compensation or lack of compensation -- have ample precedent in other US industries that have been subject to change in regulation.

We recommend that the Council instead ask first whether compensation is merited, and if so, to look at the investment the processing industry participants have made, and look at other means and methods of compensation as appropriate. This is a familiar problem and we urge the Council to look at solutions that have worked elsewhere, rather than jump into unknown territory that could have very harmful precedent for efforts in the future to rationalize fisheries.

Environmental Defense would like to offer its assistance to the Council in any way we can to further a more robust analysis of potential processor impacts from transitioning to IFQ 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 <u>only</u> remedy is an initial allocation of quota.

Agenda Item C.7.d Supplemental United Catcher Boats Public Comment September 2006



PROPOSED WHITING CO-OP STRUCTURE

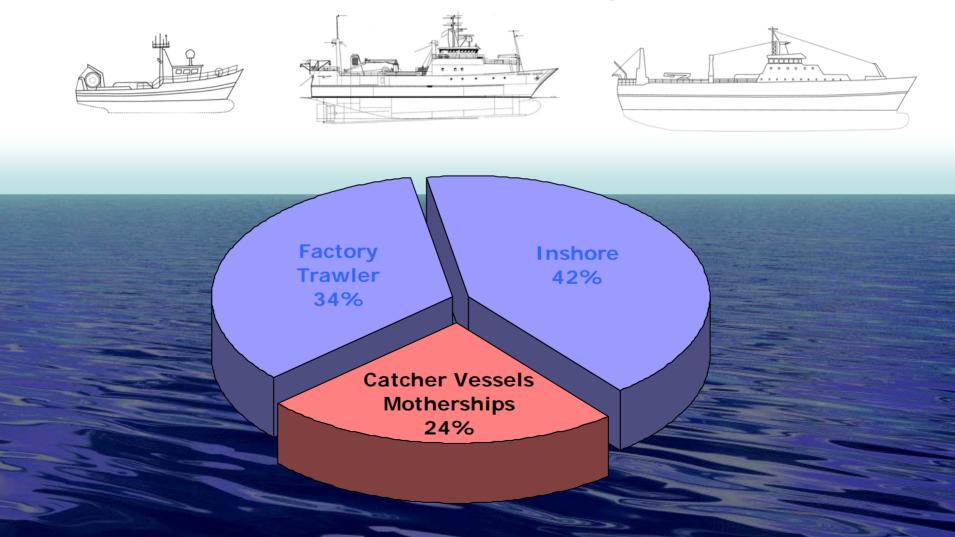
IN THE CATCHER VESSEL / MOTHERSHIP SECTOR OF THE WEST COAST PACIFIC WHITING FISHERY

Presented to The Pacific Fishery Management Council

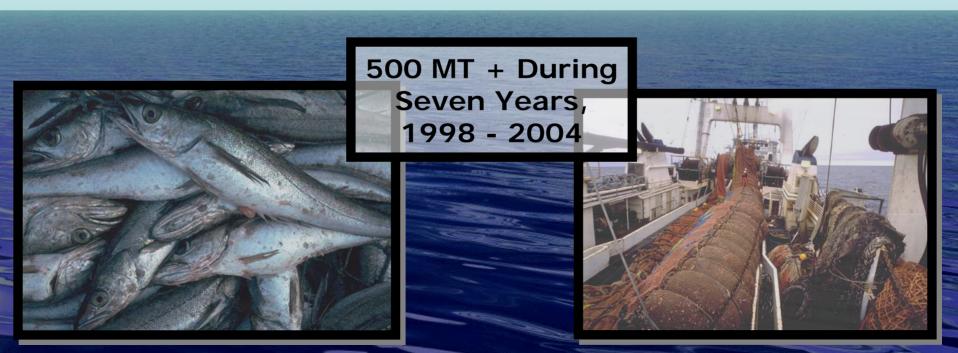
by

UNITED CATCHER BOATS Supreme Alaska Seafoods, M/V Excellence Doug Christianson, F/V Arctic Fjord & Arctic Storm Premiere Pacific Seafoods, SS Ocean Phoenix Golden Alaska Seafoods, M/V Golden Alaska

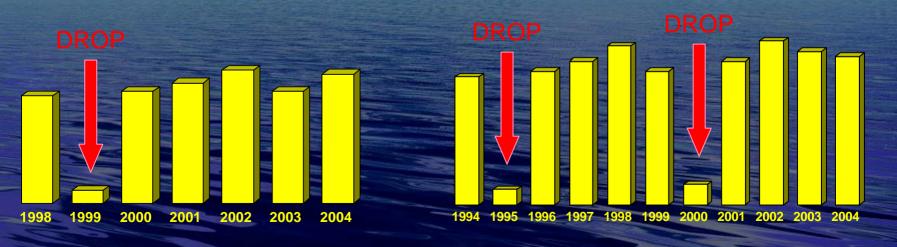
1) Retain 3 Sector Whiting Allocation



- 2) Eligible Catcher Boat Owner
 - MUST HAVE DELIVERED 500 MT OR MORE WHITING TO MOTHERSHIPS DURING 1998-2004



- 3) Initial Whiting Allocations to Legal Registered Owner of Valid WCGF Permit Based on Official Catch History



Yr Drop 2 Example

7 Yr Drop 1 Example

5) Whiting Allocation with WCGF Permit may be Transferred to Another WCGF CV Trawl Permit Holder

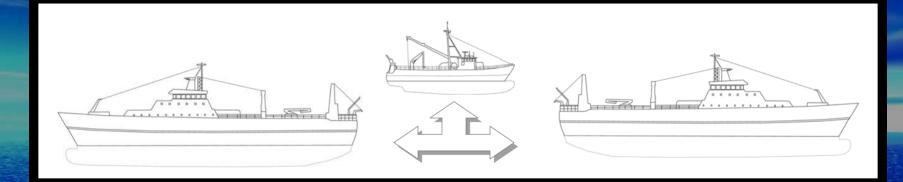
 Any Vessel with WCGF CV Trawl Permit May Harvest Whiting for Delivery to Mothership

 Whiting Allocations are NOT Separable from WCGF Permit

6) Owners of WCGF Permits with Whiting Allocations

May Form CV Co-Ops May Not Join Co-Op but May Remain in Open Access

6) ... continued



CVs Deliver to Most Recent Mothership OR

CVs Can Move to Another Mothership Market by Mutual Agreement

 Open Access for One Year to Effect Permanent Move to Different Mothership

7) Catcher Vessel Cooperative Formation



OPTION: One or More Co-Ops OPTION: Multiple Co-Ops Required Matched to Mothership

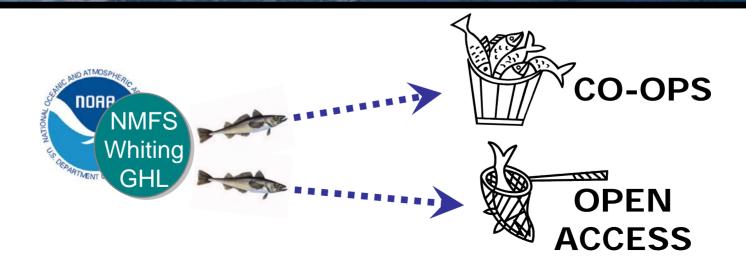
8) Annual Registration

 Owners of WCGF Permits Must Register Annually with NMFS

→ As a Co-Op Member

→ As an Open Access Member

BASIC PROGRAM STRUCTURE 9) NMFS Allocates Whiting Annually To Open Access To Co-Ops Based on Aggregate Catch History Attributed to Permits that are Registered



10) Catcher Vessel Co-Ops

- Governed by Private Contract
 - Annual Updates
 - Members Identified
 - Enforcement Rules

Co-Op "Golden Rule"

"Allocation Equals Contribution to Co-Op But No More"

11) After First Year of Co-Op

CV May Change Mothership Market



12) Bycatch in the Whiting Fishery



If Allocated on Sector Level, Should Be Done On Whiting Tonnage Pro Rata Basis
Provisions To Be Made to Manage Bycatch

at a Co-Op Level – Co-Op Responsible

13) Co-Op Members Can Transfer Quota Amongst Other Co-Op Members Via:



Inter Co-Op Transfers
Intra Co-Op Transfers
Contract with any Trawl Vessel with WCGF Permit

14) Co-Op Members May Not Transfer Whiting Outside of Their CV/MS Sector



15) Rollovers of Whiting or Bycatch

- Administered by NMFS
 as Currently Practiced
- Not Allowed

16) Ownership Limits at Sector Level• To Be Analyzed / Developed

- 17) Class of Motherships
- Limited to Entities that Operated in the Mothership Sector and Processed a Minimum of 1,000 mt of Whiting in any Two Years from 1998 – 2004
- Qualified Mothership Entities Received Federal Permits that are Transferable







BASIC PROGRAM STRUCTURE 18) To Process Whiting in the

Mothership Sector:

Must Possess Valid MS Processing Permit

 May Not Harvest Whiting that Year on Same Vessel

 MS Processing Permit May Only be Assigned to One Vessel per Year

Agenda Item C.8.b Supplemental NMFS PowerPoint September 2006

Shore-based Whiting Monitoring

FMP Amendment 10 and Beyond

Purpose of New Regulations

- Efficient prosecution of the fishery
- Maintain product quality
- Minimize discard
- Standardized reporting methodology
- Adequately monitor maximized retention

Components of Implementation

- 2007 season EFP and processor regulations
- Shoreside sector monitoring program development
- Regulatory development
- Electronic fish tickets and logbooks
- Overage and prohibited species disposition
- Funding

2007 Season

Management designed to transition fishery into federal regulations, using:

- Vessel EFPs with requirements as similar as possible to intended regulations
- Temporary 2007 processor regulations to test converting state requirements to federal regulations

2007 Vessel EFPs

Collect data adequate to:

Allow vessels to retain until landing unsorted catch, including prohibited species and groundfish in excess of trip limits

States terms and conditions for fishing, landing, reporting, recordkeeping & monitoring

2007 Temporary Processor Regulations

 Convert requirements of current stateprocessor agreements to temporary Federal regulations

- Provide terms and conditions for processing whiting in 2007
 - Monitoring
 - Access to catch
 - Reporting and recordkeeping

Long-term Monitoring Goals

Collection of data adequate to:

- Measure total catch by species for inseason tracking and management
- Measure cumulative total catch for postseason bycatch rate analyses
- Track disposition of salmon and other prohibited species

Monitoring Vessel Activities At Sea

- Video monitoring with performance standards for equipment defined in regulation
 - Performance standards based on EFP tests
 - Standards modified through regulatory amendment
- Video coverage requirements in regulation, 100% coverage to maintain integrity of maximized retention requirement
- Logbooks for data confirmation

Monitoring Landings Shoreside

- Electronic fish ticketing
 - Test electronic fish ticketing first at largest plants in whiting fishery
 - Equipment standards and usage requirements in long-term regulations
- Shoreside fish ticket verification system through 3rd party weighmaster/samplers (atsea processor model)
- Logbooks for data confirmation (at-sea processor model)

Regulatory Development

November 2006Alternatives & core regulationsMarch 2007Draft EA for PFMC final actionSummer 2007Proposed rule publishesNovember 2007Report to PFMC on electronic logbooksWinter 2008Final Rule publishesApril 2008Action for core regulations effective

Additional rulemakings may be needed for: Temporary 2007 processor regulations Electronic logbook and fish ticket requirements, if recommended by PFMC

Electronic Fish Tickets and Logbooks?

- Greater data and reporting needs
 - timing adequate to monitor bycatch limits and quotas
 - species specific accounting needed
 - Consultation with PSMFC required
- Electronic logbook and fish ticket testing
 - acquire existing software
 - field test software in 2007
 - establish parallel database for inseason data
 - define hardware standards
 - report to PFMC in November 2007

Catch Disposition

Overage fish
 Currently forfeited to the states

Prohibited species

– Salmon

– Pacific Halibut

– Dungeness crab in WA and OR

Funding Considerations

No dedicated state or federal funds

 Data analysis and inseason monitoring infrastructure paid by existing funds or temporary funds

At-sea video systems

- Lease of equipment including installation and maintenance
- Direct pay by participants (at-sea sectors observer model)

Shoreside sampling/monitoring

- 3rd party samplers paid for by processors (at-sea processor model)
- Hardware/software for electronic fish tickets and logbooks

Areas Where PFMC Guidance is Needed:

- 2007 processor temporary regulations and long-term whole-program regulations
 - Desired level of sampling/monitoring for fish ticket verification (Management strategy and data accuracy)
 - Consideration of processor to pay for sampling/monitoring
 - Consideration of a weighmaster program
- Funding for cameras in 2007 & long-term
- Electronic logbook and fish ticket field testing
 - Shore-based vessels
 - Processors
 - Mothership sector catcher vessels
- Camera field testing on mothership sector catcher vessels

GROUNDFISH ADVISORY SUBPANEL REPORT ON FMP AMENDMENT 10 (SHORE-BASED WHITING MONITORING)

The Groundfish Advisory Panel (GAP) heard a presentation from the National Marine Fisheries Service (NMFS) staff regarding the implementation of Amendment 10 requirements for monitoring of the shoreside whiting fishery.

The GAP supports an industry-federal exempted fishing permit (EFP) designed to develop effective and enforceable regulations to operate the whiting fishery. It is critical that regulations are in place for the 2007 season.

The GAP urges the Council to move forward expeditiously on the transition from the statesponsored EFP process to the federal regulatory process. Action can be taken at this meeting by identifying a subcommittee of industry members and state representatives to advise NMFS on the development of the program.

User groups should be involved with the design of the program from inception to ensure an efficient and cost-effective program is developed. The ad-hoc committee should include 3 fishermen and 3 shoreside whiting processors, one from each state. In addition, the committee should include a state representative from Washington, Oregon and California. The committee should discuss the design of the program, funding impediments and options for on-shore monitoring, bycatch management and a protocol for observation at plants, complementary at-sea monitoring requirements, and overall program funding.

The GAP reiterates that, in order to have something in place for the 2007 season, there should be a draft regulatory rule approved at the November 2006 Council meeting. To facilitate adequate time for review and discussion, the proposed language should be completed by the November 2006 briefing book deadline.

PFMC 09/14/06

THE GROUNDFISH MANAGEMENT TEAM REPORT ON FINAL CONSIDERATION OF INSEASON ADJUSTMENTS

The Council adopted several inseason adjustments as part of Agenda Item C.3 and asked the Groundfish Management Team (GMT) and Groundfish Advisory Subpanel (GAP) to revisit the projected mortality of canary rockfish in the bycatch scorecard. The GMT reviewed several options regarding canary rockfish and have the following recommendations for consideration by the Council.

RECREATIONAL

The Council recommended that the GMT consider reducing the WA/OR recreational mortality estimate for canary rockfish from 8.5 mt to 8.3 mt. Catch of canary rockfish is reported to be tracking behind schedule in the WA/OR recreational fisheries. Through July, OR recreational mortality is estimated to be at 1.9 mt and WA at 0.7 mt, or 2.6 mt out of the 8.5 mt WA/OR harvest guideline. Because recreational fisheries are tracking behind schedule, a reduction in the recreational estimate in the bycatch scorecard should be a better estimate of actual projected mortality. While the Council recommended a reduction to 8.3 mt, the GMT feels a reduction to 8.0 mt can be accommodated based on current landings and projections for the year. Therefore, the GMT recommends a reduction in the WA/OR recreational total mortality estimate from 8.5 mt to 8.0 mt in the bycatch scorecard, with the actual harvest guideline remaining at 8.5 mt in regulation. Both the Oregon and Washington fisheries trend sharply downward beginning in September, so savings in these fisheries will become much firmer well before the end of the year.

RESEARCH

As previously mentioned under Agenda Item C.3, catch of canary rockfish by research vessels is higher than projected in the bycatch scorecard for 2006. Based on preliminary information from research vessels to date, the current research catch estimate is 7.5 mt (7.2 mt from the NMFS triennial trawl survey and 0.3 mt from research off Oregon). The NMFS triennial trawl survey is continuing from Eureka to San Diego. The GMT reviewed historical survey trend data from 2003-2005 and estimates that an additional 0.3 mt should cover the remainder of the research catch for that area. However, the survey vessel is conducting its survey in the area between 41° N. latitude and 40°10' N. latitude (off of Eureka), which is a known "hot spot" area. To cover the potential for a high tow of canary rockfish, the GMT estimates that 1.0 mt is a safer estimate until the vessel has moved south of 40°10' N. latitude. This would raise the scorecard amount to 8.5 mt through the end of the year. The vessel is estimated to be out of the "hot spot" area by next week.

The GMT recommends two scenarios:

- 1) To accommodate an unexpectedly high tow of canary rockfish while the trawl survey is still being conducted in the "hot spot," the bycatch scorecard will estimate another 1.0 mt of canary rockfish in research for the remainder of the year, bringing the total to 8.5 mt.
- 2) After the survey is south of 40°10' N. latitude and if they did not have an unexpectedly high tow of canary rockfish, then the estimate in the bycatch scorecard will be reduced to 7.8 mt (7.5 mt currently taken + 0.3 mt estimated additional take). NMFS should have this information in time to make adjustments to the inseason action to be effective October 1.

COMMERCIAL

The Council recommended that the GMT consider reducing the canary rockfish bycatch limit in the non-tribal whiting fishery from 4.7 mt to 4.0 mt in regulation. The non-tribal whiting fishery has currently taken 2.5 mt out of their 4.7 mt canary rockfish bycatch limit. As a comparison, the non-tribal whiting fishery took 3.3 mt of canary rockfish in 2005; however, the 4.7 mt bycatch limit is based on historical catch before 2005. Given other updates to the bycatch scorecard, the non-tribal whiting bycatch limit would need to be reduced to 4.0 mt, to make the estimates within the scorecard remain within the OY for canary rockfish. With the shorebased fishery closed and limited amounts of the whiting allocation remaining for the mothership and catcher/processor sector, the non-tribal whiting fishery will likely remain within the lower 4.0 mt canary rockfish bycatch limit. Based on the scenarios listed under the research catch, if the trawl survey does not have a high tow of canary rockfish before it is south of $40^{\circ}10^{\circ}$ N. latitude, then the bycatch limit would not need to be reduced to 4.0 mt.

As a reminder, the tribal whiting fishery has taken 0.3 mt through August out of a projected 1.6 mt canary mortality. As a comparison, the tribal whiting fishery took 0.6 mt of canary rockfish in 2005. The tribal midwater trawl fishery is also tracking behind in the bycatch scorecard.

SCORECARD UPDATE

The GMT took a closer look at estimates and projections in the bycatch scorecard for canary rockfish. An extra column has been added to the right of the scorecard to reflect scenario 2) in the research catch above (i.e., the scorecard estimates if the research total mortality for canary rockfish is 7.8 mt rather than 8.5 mt.). The attached scorecard reflects changes to the bycatch limit for the non-tribal whiting fishery and the WA/OR recreational total mortality estimate as previously mentioned in the statement.

As suggested by the Council under Agenda Item C.3, the estimate for take of canary rockfish in the salmon troll fishery has been adjusted based on lower Chinook salmon opportunities in 2006. The bycatch scorecard previously estimated 1.6 mt of canary would be caught in the salmon troll fishery. The 1.6 mt estimate was a direct carryover from the 2005 bycatch scorecard. However, opportunity to participate in the Chinook salmon fishery has been reduced by roughly 75% coastwide. If the same 75% reduction is applied to the canary rockfish estimate in the bycatch scorecard, that would lower the canary estimate to 0.4 mt. Doubling this estimate as a precautionary adjustment leaves a revised estimate of 0.8 mt of canary rockfish taken in the salmon troll fishery.

Also, the GMT reviewed estimates for canary rockfish take in the directed open access fisheries. The directed open access estimate for canary is reduced in the scorecard from 3.0 mt to 2.8 mt. This reflects an estimated savings of 0.2 mt because all of nearshore target species in this fishery are estimated to be below their harvest targets through the year.

With all of these updates to the bycatch scorecard and under the two research scenarios presented, projected total mortality of canary rockfish for the year in the bycatch scorecard is 47.1 mt, equivalent to the OY for 2006. However, as mentioned previously, many fisheries are expected to come in below their projections of canary rockfish take for the year. Therefore, the canary rockfish take is expected to be within the OY.

WIDOW ROCKFISH UPDATE

Bycatch scorecard adjustments to the bycatch limit for widow rockfish in the non-tribal whiting sectors have been adjusted from 200 mt to 220 mt per the Council's recommendation under Agenda Item C.3.

TRIP LIMIT TABLES

Draft trip limit tables adjusted based on recommendations from Agenda Item C.3 are attached to this statement.

GMT RECOMMENDATIONS

1. Recommend that NMFS reduce the bycatch limit for the non-tribal whiting fishery to 4.0 mt if the survey has an unexpectedly high take of canary rockfish between 41° N. latitude and 40°10' N. latitude, otherwise, the Council should recommend an appropriate bycatch limit.

PFMC 09/15/06

SCENARIO 1) BASED ON HIGH RESEARCH CANARY CATCH

SCENARIO 2) BASED ON LOW RESEARCH CANARY CATCH

Estimated Total Mortality Impacts Updated with 2006 OY levels - Proposed September Trawl Adjustments

9/15/2006 9:26 Fishery Bocaccio a/ Canary Cowcod Dkbl POP Widow Yelloweye Limited Entry Trawl- Non-whiting 57.5 7.3 2.5 162.5 57.0 0.6 0.1 Limited Entry Trawl- Whiting 0.0 At-sea whiting motherships 1.0 At-sea whiting cat-proc 25.0 220.0 4.0 2.9 0.0 Shoreside whiting 1.8 0.0 Tribal whiting 1.6 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 13.4 1.2 0.1 1.3 0.4 0.5 2.9 Open Access: Directed Groundfish 10.6 2.8 0.1 0.2 0.1 0.1 3.0 Open Access: Incidental Groundfish CA Halibut 0.1 0.1 0.0 0.0 CA Gillnet b/ 0.5 0.0 0.0 0.0 CA Sheephead b/ 0.0 0.0 0.0 0.0 CPS- wetfish b/ 0.3 CPS- squid c/ Dungeness crab b/ 0.0 0.0 0.0 0.0 HMS b/ 0.0 0.0 0.0 Pacific Halibut b/ 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 Pink shrimp 0.1 0.1 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 d/ WA 8.0 6.7 OR 1.4 CA 98.0 9.3 0.4 8.0 3.7 Research: Includes NMFS trawl shelf-slope surveys, the IPHC halibut survey, and expected impacts from SRPs and LOAs.

	2.0	8.5	0.1	3.8	3.6	0.9	2.0
Non-EFP Total	182.8	47.1	3.2	192.9	71.1	278.0	21.1
EFPs e/							
CA early season whiting S. of 40°10'	0.3	0.0	0.0	0.0	0.0	0.0	0.0
EFP Subtotal	0.3	0.0	0.0	0.0	0.0	0.0	0.0
TOTAL	183.1	47.1	3.2	192.9	71.1	278.0	21.1
2006 OY	309	47.1	4.2	200	447	289	27
Difference	125.9	0.0	1.0	7.1	375.9	11.1	5.9
Percent of OY	59.3%	99.9%	76.2%	96.4%	15.9%	96.2%	78.0%
Кеу		= either not a	pplicable; tra	ce amount (<	0.01 mt); or n	ot reported in	available data

a/ South of 40°10' N. lat.

b/ Mortality estimates are not hard numbers; based on the GMT's best professional judgment.

c/ 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).

d/ Values for yelloweye in California represent specified harvest guidelines.

e/ Values are proposed EFP bycatch caps, not estimates of total mortality. The EFP is terminated inseason if the cap is projected to be attained early.

Canary
7.3
4.7
1.6
1.8
0.8
0.5
0.3
1.2
2.8
0.1
0.0
0.0
0.0
0.0
0.0
0.0
0.0
8.0
9.3

7.8
47.1
0.0
0.0
47.1
47.1
0.0
99.9%

Table 3 (North) to Part 660, Subpart G -- 2006 Trip Limits for Limited Entry Trawl Gear North of 40°10' N. Lat. Other Limits and Requirements Apply -- Read § 660.301 - § 660.390 before using this table

C	Other Limits and Requirements Apply F	Read §	660.301	- § 660.390 be	fore using this	s table		62006
		JAN	FEB	MAR-APR	MAY-JUN	JUL-AUG	SEP-OCT	NOV-DEC
Rock	fish Conservation Area (RCA) ^{6/} :	75 f	m -		·			75 fm -
	North of 40°10' N. lat.	modifie fm	ed 200	75 - 2	00 fm	100 - 250 fm	75 fm - 250 fm	modified 250 fm ^{7/}
	ective flatfish trawl gear is required shorewa gear) is permitted seaward of the RCA. Mic							
See	See § 660.370 and § 660.381 for Addi §§ 660.390-660.394 for Conservation Ar		criptior	•	ates (includin	•		
	State trip limits may be more res	trictive	than feo	deral trip limits, p	particularly in w	aters off Orego	n and California.	
	linor slope rockfish ^{2/} & Darkblotched ockfish	2,00 mo		4,000 lb/ :	2 months		1,000 lb/ 2 months	6
2 F	Pacific ocean perch	1,50 mo				3,000 lb/ 2 mon	ths	
3 C	OTS complex							
4	Sablefish							
5	large & small footrope gear	7,00 moi		14,000 lb/ 2 months		20,000 lb/ 2 months		
6	selective flatfish trawl gear	2,50 mo		7,000 lb/ 2 months	13,500 lb	2 months	7,000 lb/ 2 months	5,000 lb/ 2 months
7	multiple bottom trawl gear ^{8/}	2,50 mo		7,000 lb/ 2 months	13,500 lb.	/ 2 months	7,000 lb/ 2 months	5,000 lb/ 2 months
8	Longspine thornyhead							
9	large & small footrope gear	7,50 mo		15,000 lb/ 2 months	:	23,000 lb/ 2 moi	nths	15,000 lb/ 2 months
10	selective flatfish trawl gear	1,50 mo				3,000 lb/ 2 mon	ths	
11	multiple bottom trawl gear ^{8/}	1,50 moi				3,000 lb/ 2 mon	ths	
12	Shortspine thornyhead					-		
13	large & small footrope gear	2,00 mo		4,000 lb/ 2 months	5,800 lb/ 2 months	7,500 lb	/ 2 months	4,000 lb/ 2 months
14	selective flatfish trawl gear	1,50 mo				3,000 lb/ 2 mon	ths	
15	multiple bottom trawl gear ^{8/}	1,50 mo			3,000 lb/ 2 months			
16	Dover sole							
17	large & small footrope gear	25,00 mo		50,000 lb/ 2 months		35,000 ll	o/ 2 months	
18	selective flatfish trawl gear	10,00 mo			28,000 l	b/ 2 months		20,000 lb/ 2 months
19	multiple bottom trawl gear ^{8/}	10,00 mo			28,000 l	b/ 2 months		20,000 lb/ 2 months



Table 3 (North). Continued

22 flatfish ^{3/} & English sole month 110,000 lb/ 2 months, no more than 30,000 lb/ 2 months of which may be petrale sole. 70 23 large & small footrope gear for Petrale sole 30,000 lb/ month 90,000 lb/ 2 months, no more than 30,000 lb/ 2 months of which may be petrale sole. 70 24 selective flatfish trawl gear for Other flatfish ^{3/} & English sole 45,000 lb/ month 90,000 lb/ 2 months, no more than 28,000 lb/ 2 months, no more than 28,000 lb/ 2 months of which may be petrale sole. 90 25 selective flatfish trawl gear for Petrale sole 12,500 lb/ month 90,000 lb/ 2 months, no more than 28,000 lb/ 2 months, no more than 28,000 lb/ 2 months of which may be petrale sole. 90 25 selective flatfish trawl gear for Petrale sole 12,500 lb/ month 90,000 lb/ 2 months, no more than 28,000 lb/ 2 months, no more than 28,000 lb/ 2 months of which may be petrale sole. 90 26 multiple bottom trawl gear ⁸⁰ Other flatfish ^{3'} and English sole: 45,000 lb/ 2 months, no more than 28,000 lb/ 2 months, no more than 28,000 lb/ 2 months of which may be petrale sole. 90,000 lb/ 2 months, no more than 28,000 lb/ 2 months of which may be petrale sole. 90 26 multiple bottom trawl gear ⁸⁰ Other flatfish ^{3'} and English sole: 45,000 lb/ 2 months of which may be petrale sole. 90,000 lb/ 2 months of which may be petrale sole. 90 26 multiple bottom trawl gea	110,000 lb/ 2 months 70,000 lb/ 2
sole 110,000 lb/ 2 months, no more than 30,000 lb/ 2 months of which may be petrale sole. 111,000 lb/ 2 months, no more than 30,000 lb/ 2 months of which may be petrale sole. 111,000 lb/ 2 months, no more than 28,000 lb/ 2 months of which may be petrale sole. 111,000 lb/ 2 months, no more than 28,000 lb/ 2 months, no more than 28,000 lb/ 2 months of which may	months
22 flatfish ^{3/s} & English sole month 110,000 lb/ 2 months, no more than 30,000 lb/ 2 months of which may be petrale sole. 70 23 large & small footrope gear for Petrale sole 30,000 lb/ month 30,000 lb/ month 90,000 lb/ 2 months, no more than 30,000 lb/ 2 months of which may be petrale sole. 70 24 selective flatfish trawl gear for Other flatfish ^{3/s} & English sole 45,000 lb/ month 90,000 lb/ 2 months, no more than 28,000 lb/ 2 months, no more than 28,000 lb/ 2 months of which may be petrale sole. 90 25 selective flatfish trawl gear for Petrale sole 12,500 lb/ month 90,000 lb/ 2 months, no more than 28,000 lb/ 2 months, no more than 28,000 lb/ 2 months of which may be petrale sole. 90 26 multiple bottom trawl gear ⁸⁰ Other flatfish ^{3/s} osle: 45,000 lb/ 2 months, sole: 45,000 lb/ 2 months of which may be petrale sole. 90,000 lb/ 2 months, no more than 28,000 lb/ 2 months, no more than 28,000 lb/ 2 months, sole: 45,000 lb/ 2 months of which may be petrale sole. 90,000 lb/ 2 months, no more than 28,000 lb/ 2 months, sole which may be petrale sole. 90	months
23 large & small footrope gear for Petrale sole 30,000 lb/ month 30,000 lb/ month 70 24 selective flatfish trawl gear for Other flatfish ^{3/} & English sole 45,000 lb/ month 90,000 lb/ 2 months, no more than 25,000 lb/ 2 months of which may be petrale sole. 90,000 lb/ 2 months, no more than 25,000 lb/ 2 months of which may be petrale sole. 90,000 lb/ 2 months, no more than 25,000 lb/ 2 months of which may be petrale sole. 0ther sole	70.000 lb/ 2
24 flatfish ^{3/} & English sole 90,000 lb/ 2 month month, no more than 25,000 lb/ 2 months of which may be petrale sole. 90,000 lb/ 2 months, no more than 28,000 lb/ 2 months of which may be petrale sole. month 25 selective flatfish trawl gear for Petrale sole 12,500 lb/ month 12,500 lb/ month 90,000 lb/ 2 months of which may be petrale sole. 90,000 lb/ 2 months, no more than 28,000 lb/ 2 months of which may be petrale sole. month 26 multiple bottom trawl gear 8/ 8/ lb/ month petrale sole: Other flatfish ^{3/} petrale sole: 90,000 lb/ 2 months, no more than 25,000 lb/ 2 months of which may be petrale sole. 90,000 lb/ 2 months, no more than 25,000 lb/ 2 months of which may be 90,000 lb/ 2 months, no more than 25,000 lb/ 2 months of which may be petrale sole. Other petrale sole:	months
25 selective flatfish trawl gear for Petrale sole 12,500 lb/ months of which may be petrale sole. months of which may be petrale sole.	90,000 lb/ 2 months, no more than
26 multiple bottom trawl gear ^{8/} and English sole: 45,000 more than 25,000 lb/2 months, no more than 28,000 lb/2 lb/ months of which may be petrale sole. 12,500 lb/ which may be 12,500 lb/ which may be betrale sole.	25,000 lb/ 2 months of vhich may be petrale sole.
	Dther flatfish ^{3/} and English sole: 90,000 lb/ 2 months Petrale sole: 25,000 lb/ 2 months
27 Arrowtooth flounder	(v
28 large & small footrope gear 50,000 lb/ month 100,000 lb/ 2 months	(z
29 selective flatfish trawl gear 40,000 lb/ month 80,000 lb/ 2 months	o r
30 multiple bottom trawl gear ^{8/} 40,000 lb/ month 80,000 lb/ 2 months	-
31 Whiting	n
32 midwater trawl Before the primary whiting season: CLOSED During the primary season: mid-w. permitted in the RCA. See §660.373 for season and trip limit details After the whiting season: CLOSED	
33 large & small footrope gear Before the primary whiting season: 20,000 lb/trip During the primary season: 10,000 lb/trip - After the primary whiting season: 10,000 lb/trip	0,000 lb/trip - 🛋
34 Minor shelf rockfish ^{1/} , Shortbelly, Widow & Yelloweye rockfish	
35 midwater trawl for Widow rockfish Before the primary whiting season: CLOSED During primary whiting season: In Ieast 10,000 lb of whiting, combined widow and yellowtail limit of 500 lb/ trip, curr widow limit of 1,500 lb/ month. Mid-water trawl permitted in the RCA. See §660. primary whiting season and trip limit details After the primary whiting season:	umulative 0.373 for
36 large & small footrope gear 150 lb/ month 300 lb/ 2 months	
37 selective flatfish trawl gear 300 lb/ month 1,000 lb/ month, no more than 200 lb/ month of which may be yelloweye rockfish 300	300 lb/ month
38 multiple bottom trawl gear ^{8/} 300 lb/ month 300 lb/ 2 months, no more than 200 lb/ month of which may be yelloweye rockfish	



39	Canary rockfish							
40	large & small footrope gear			CLO	DSED			
41	selective flatfish trawl gear	100 lb.	/ month	300 lb/	month	100 lb/ m	nonth	
42	multiple bottom trawl gear ^{8/}			CLO	DSED			
43	Yellowtail							
44	midwater trawl	least 10,000 yellowtail lim) Ib of whiting: c it of 2,000 lb/ mo	ombined widow onth. Mid-water	and yellowtail lin trawl permitted	ry whiting season: mit of 500 lb/ trip, in the RCA. See § ary whiting seaso	cumulative 660.373 for	TABL
45	large & small footrope gear	150 lb/ month	50 lb/ month 300 lb/ 2 months					
46	selective flatfish trawl gear	1,000 lb/ month 2,000 lb/ 2 months						ω
47	multiple bottom trawl gear 8/	150 lb/ month		:	300 lb/ 2 months	6		Î
48	Minor nearshore rockfish & Black rockfish							0
49	large & small footrope gear			CLC	DSED			
50	selective flatfish trawl gear			300 lb	/ month			
51	multiple bottom trawl gear ^{8/}			CLC	DSED			h)
52	Lingcod ^{4/}							0
53	large & small footrope gear							Ö
54	selective flatfish trawl gear	600 lb/ month		1	,200 lb/ 2 month	าร		con'
55	multiple bottom trawl gear ^{8/}							-
56	Pacific cod	Not limited	30,000 lb/ 2 months	7	70,000 lb/ 2 mon	ths	30,000 lb/ 2 months	
57	Spiny dogfish	Not limited	200,000 lb/ 2 months	150,000 lb/ 2 months	10	0,000 lb/ 2 month	S	
58	Other Fish ^{5/}			Not	limited			

1/ Bocaccio, chilipepper and cowcod are included in the trip limits for minor shelf rockfish.

2/ Splitnose rockfish is included in the trip limits for minor slope rockfish.

- 3/ "Other flatfish" are defined at § 660.302 and include butter sole, curlfin sole, flathead sole, Pacific sanddab, rex sole, rock sole, sand sole, and starry flounder.
- 4/ The minimum size limit for lingcod is 24 inches (61 cm) total length.
- 5/ "Other fish" are defined at § 660.302 and include sharks, skates, ratfish, morids, grenadiers, and kelp greenling.

Cabezon is included in the trip limits for "other fish."

- 6/ The Rockfish Conservation Area is a gear and/or sector specific closed area generally described by depth contours but specifically defined by lat/long coordinates set out at § 660.390.
- 7/ The "modified 200 fm" line is modified to exclude certain petrale sole areas from the RCA.

8/ If a vessel has both selective flatfish gear and large or small footrope gear on board during a cumulative limit period (either simultaneously or successively), the most restrictive cumulative limit for any gear on board during the cumulative limit period applies for the entire cumulative limit period.

To convert pounds to kilograms, divide by 2.20462, the number of pounds in one kilogram.



Table 3 (South) to Part 660, Subpart G -- 2006 Trip Limits for Limited Entry Trawl Gear South of 40°10' N. Lat. Other Limits and Requirements Apply -- Read § 660.301 - § 660.390 before using this table

	Other Limits and Requirements Apply I	Read § 660.3	01 - § 660.390 be	fore using this	s table		62006	
		JAN FEE	MAR-APR	MAY-JUN	JUL-AUG	SEP-OCT	NOV-DEC	
Roc	kfish Conservation Area (RCA) ^{6/} :							
	40°10' - 38° N. lat.	75 fm - 150 fm	100 fm ·	- 150 fm	100 fm - 200 fm	100 fm - 250 fm	75 fm - modified 250 fm ^{7/}	
	38° - 34°27' N. lat.	75 fm - 150 fm		100 fm	1 - 150 fm		75 fm - 150 fm	
	South of 34 ^o 27' N. lat.	75 fm - 150 fm along the mainland coast; shoreline - 150 fm around islands	;	•	ainland coast; sł d islands	noreline - 150 fm	75 fm - 150 fm along the mainland coast; shoreline - 150 fm around islands	
S	mall footrope gear is required shoreward of t		awl gear (large fo seaward of the RC		er trawl, and sm	all footrope gear)	is permitted	
Se	See § 660.370 and § 660.381 for Add e §§ 660.390-660.394 for Conservation Ar			ates (including				ΤAΒ
	State trip limits may be more res	strictive than f	ederal trip limits,	particularly in w	aters off Orego	n and California.		L S
	Minor slope rockfish ^{2/} & Darkblotched rockfish							ш
2	40°10' - 38° N. lat.	4,000 lb/ month	8,000 lb/	2 months		1,000 lb/ 2 months	3	З
3	South of 38° N. lat.	20,000 lb/ month		2	10,000 lb/ 2 mor	nths		S)
4	Splitnose							0
5	40°10' - 38° N. lat.	4,000 lb/ month	8,000 lb/	2 months		1,000 lb/ 2 months	3	u t
6	South of 38° N. lat.	20,000 lb/ month		2	10,000 lb/ 2 mor	nths		h)
7	DTS complex						1	
8	Sablefish	8,500 lb/ month		17,000 ll	b/ 2 months		20,000 lb/ 2 months	
9	Longspine thornyhead	9,500 lb / month		1	19,000 lb/ 2 mor	nths		
10	Shortspine thornyhead							
	40°10' - 38° N. lat.	2,450 lb/	4 900 lb/	2 months	7,500 lb	o/ 2 months	4,900 lb/ 2	
	South of 38° N. lat.	month	4,900 10/	2 11011115	4,900 lk	o/ 2 months	months	
11	Dover sole	25,000 lb/ month	50,000 lb/ 2 months		35,000 I	b/ 2 months		
12	Flatfish (except Dover sole)							
13	Other flatfish ^{3/} & English sole							
14	40°10' - 38° N. lat.	55,000 lb/	Other flatfis	h, Enalish sole	& Petrale sole:	110,000 lb/ 2	110,000 lb/ 2	
15	South of 38° N. lat.	month		nore than 30,00		of which may be	months	
16	Petrale sole	30,000 lb/ month					70,000 lb/ 2 months	



17	Arrowtooth flounder							
18	40°10' - 38° N. lat.	5,000 lb/		1(0,000 lb/ 2 month	9		
19	South of 38° N. lat.	month				0		
20	Whiting							
21	midwater trawl		• •	660.373 for sea	During the prir son and trip limit on: CLOSED	•		
22	large & small footrope gear	Before the prin			trip During the p ng season: 10,00		10,000 lb/trip -	
23	Minor shelf rockfish ^{1/} , Chilipepper, Shortbelly, Widow, & Yelloweye rockfish							A L
24	large footrope or midwater trawl for Minor shelf rockfish & Shortbelly			300 lb	/ month		I '	ω
25	large footrope or midwater trawl for Chilipepper	1,000 lb/ months	2,000 lb/ 2 months	12,000 lb/	2 months	8,000 lb/ 2		
26	large footrope or midwater trawl for Widow & Yelloweye			CLC	DSED			
27	small footrope trawl for Minor Shelf, Shortbelly, Widow & Yelloweye	200 /			300 lb/ i	month		ယ ()
28	small footrope trawl for Chilipepper	300 10/	month		500 lb/ i	month		0
29	Восассіо							L L
30	large footrope or midwater trawl	150 lb/ month			300 lb/ 2 months			~
31	small footrope trawl			CLC	DSED			5
32	Canary rockfish							_
33	large footrope or midwater trawl			CLC	DSED			con't
34	small footrope trawl	100 lb/	month	300 lb/	month	100 lb/ n	nonth	2
35	Cowcod			CLC	DSED			4
36	Minor nearshore rockfish & Black rockfish							
37	large footrope or midwater trawl			CLC	DSED			
38	small footrope trawl			300 lb	/ month			
39	Lingcod ^{4/}							
40	large footrope or midwater trawl	600 lb/ month		1	,200 lb/ 2 months			
41	small footrope trawl			I	,200 10/ 2 monune	•		
42	Pacific cod	Not limited	30,000 lb/ 2 months	7	0,000 lb/ 2 month	IS	30,000 lb/ 2 months	
43	Spiny dogfish	Not limited	200,000 lb/ 2 months	150,000 lb/ 2 months	100	,000 lb/ 2 month	s	
44	Other Fish ^{5/} & Cabezon			Not I	imited			

1/ Yellowtail is included in the trip limits for minor shelf rockfish.

2/ POP is included in the trip limits for minor slope rockfish

3/ "Other flatfish" are defined at § 660.302 and include butter sole, curlfin sole, flathead sole, Pacific sanddab, rex sole, rock sole, sand sole, and starry flounder.

4/ The minimum size limit for lingcod is 24 inches (61 cm) total length.

5/ Other fish are defined at § 660.302 and include sharks, skates, ratfish, morids, grenadiers, and kelp greenling.

6/ The Rockfish Conservation Area is a gear and/or sector specific closed area generally described by depth contours but specifically defined by lat/long coordinates set out at § 660.390.

7/ The "modified 200 fm" line is modified to exclude certain petrale sole areas from the RCA.

To convert pounds to kilograms, divide by 2.20462, the number of pounds in one kilogram.



Table 4 (North) to Part 660, Subpart G -- 2006 Trip Limits for Limited Entry Fixed Gear North of 40°10' N. Lat.

_	Other Limits and Requirements Apply -	- Read § 660.3	01 - § 660.390 I	before using th	is table		42006			
		JAN-FEB	MAR-APR	MAY-JUN	JUL-AUG	SEP-OCT	NOV-DEC			
Roc	kfish Conservation Area (RCA) ^{6/} :									
	North of 46°16' N. lat.			shoreline	- 100 fm					
	46°16' N. lat 40°10' N. lat.			30 fm -	100 fm					
	See § 660.370 and § 660.382 for Add	itional Gear, T	rip Limit, and (Conservation A	rea Requirem	ents and Restr	ictions.			
See	§§ 660.390-660.394 for Conservation Ar		ns and Coordin Cordell Banks).		I RCAs, YRCA	A, CCAs, Farall	on Islands, and			
	State trip limits may be more res	strictive than fee	deral trip limits,	particularly in wa	aters off Orego	on and California	a.			
	Minor slope rockfish ^{2/} & Darkblotched rockfish			4,000 lb/	2 months					
2	Pacific ocean perch		1,800 lb/ 2 months							
3	Sablefish	300 lb/ day	300 lb/ day, or 1 landing per week of up to 1,000 lb, not to exceed 5,000 lb/ 2 months							
4	Longspine thornyhead		10,000 lb/ 2 months							
5	Shortspine thornyhead	2,000 lb/ 2 months								
6	Dover sole	5 000 #	o/ month							
7	Arrowtooth flounder		N. lat., when							
8	Petrale sole		other flatfish,"							
9	English sole		hook-and-line more than 12	South of 40o N	,	b/ month	otfich "vessele			
10	Other flatfish ^{1/}	no larger tha hooks, which r (0.44 inches) and up to 1 l weight per line	e, using hooks n "Number 2" neasure 11 mm point to shank, b (0.45 kg) of are not subject RCAs.	using hook-and-line gear with no more than 12 hooks per line, using hooks no larger than "Number 2" hooks, which mm measure 11 mm (0.44 inches) point to shank, and up to two ank, 1 lb (0.45 kg) weights per line are not subject to the RCAs. of						
11	Whiting			10,000	lb/ trip					
12	Minor shelf rockfish ^{2/} , Shortbelly, Widow, & Yellowtail rockfish			200 lb/	month					
13	Canary rockfish			CLO	SED					
14	Yelloweye rockfish			CLO	SED					
15	Minor nearshore rockfish & Black rockfish									
16		5,000 lb/ 2 mo	nths, no more tl			species other the	an black or blue			
10	North of 42° N. lat.									
17	42° - 40°10' N. lat.	6,000 lb/ 2 mo	nths, no more tl	han 1,200 lb of v rockfi		species other th	an black or blue			
18	Lingcod ^{4/}	CLC	SED		800 lb/ 2 month	าร	CLOSED			
	Pacific cod	Not limited			000 lb/ 2 mont		<u> </u>			
20	Spiny dogfish	Not limited	200,000 lb/ 2 months	150,000 lb/ 2 months	1(00,000 lb/ 2 mor	nths			
21	Other fish ^{5/}			Not lii	mited					

1/ "Other flatfish" are defined at § 660.302 and include butter sole, curlfin sole, flathead sole, Pacific sanddab, rex sole, rock sole, sand sole, and starry flounder.

2/ Bocaccio, chilipepper and cowcod are included in the trip limits for minor shelf rockfish and splitnose rockfish is included in the

2/ Bocaccio, chilipepper and cowcod are included in the trip limits for minor shelf rockfish and splitnose rockfish is included in the trip limits for minor slope rockfish.
3/ For black rockfish north of Cape Alava (48°09.50' N. lat.), and between Destruction Is. (47°40' N. lat.) and Leadbetter Pnt. (46°38.17' N. lat.), there is an additional limit of 100 lb or 30 percent by weight of all fish on board, whichever is greater, per vessel, per fishing trip
4/ The minimum size limit for lingcod is 24 inches (61 cm) total length.
5/ "Other fish" are defined at § 660.302 and include sharks, skates, ratfish, morids, grenadiers, and kelp greenling.
Cabezon is included in the trip limits for "other fish."
6/ The Rockfish Conservation Area is a gear and/or sector specific closed area generally described by depth contours but specifically defined by lat/long coordinates set out at § 660.390.
To convert pounds to kilograms, divide by 2.20462, the number of pounds in one kilogram.



	Other Limits and Requirements Apply -	JAN-FEB	MAR-APR	MAY-JUN	JUL-AUG	SEP-OCT	NOV-DEC
200	kfish Conservation Area (RCA) ^{5/} :	0, 111 25			0027.00	02. 00.	101 220
	40°10' - 34°27' N. lat.	30 fm -	150 fm	20 fm -	150 fm	30 fm -	- 150 fm
	South of 34°27' N. lat.		60 fm	- 150 fm (also a	pplies around is	slands)	
	See § 660.370 and § 660.382 for Add	itional Goar T			••	,	rictions
See	§§ 660.390-660.394 for Conservation Ar	ea Description		nates (including			
	State trip limits may be more res	strictive than fee	deral trip limits,	particularly in w	aters off Orego	n and California	a.
	Minor slope rockfish ^{2/} & Darkblotched rockfish			40,000 lb/	2 months		
	Splitnose			40,000 lb/	2 months		
3	Sablefish						
4	40°10' - 36° N. lat.	300 lb/ day	, or 1 landing p	er week of up to	1,000 lb, not to	exceed 5,000	lb/ 2 months
5	South of 36° N. lat.	350 lb	o/ day, or 1 land	ling per week of	up to 1,050 lb	landir	b/ day, or 1 ng per week of to 1,050 lb
6	Longspine thornyhead			10,000 lb	2 months	•	
7	Shortspine thornyhead			2,000 lb/	2 months		
-	Dover sole	5,000 lb	o/ month				
9	Arrowtooth flounder		N. lat., when				
10	Petrale sole	0	other flatfish," hook-and-line		5 000 14	o/ month	
11	English sole		more than 12	South of 420 N			latfish," vessels
12	Other flatfish ^{1/}	no larger tha hooks, which n (0.44 inches) and up to 1 l weight per line	e, using hooks n "Number 2" neasure 11 mm point to shank, b (0.45 kg) of are not subject RCAs.	line, using hooks no larger than "Number 2" hooks, which m measure 11 mm (0.44 inches) point to shank, and up to two 1 lb (0.45 kg) weights per line are not subject to the RCAs.			
1.3	Whiting	10 110	110/10.	10,000	lb/ trip		
	Minor shelf rockfish ^{2/} , Shortbelly, & Widow rockfish			,	<u></u>		
15	40°10' - 34°27' N. lat.	300 lb/ 2 months	CLOSED	200 lb/ 2	? months	300 lb/	2 months
16	South of 34°27' N. lat.			3,000 lb/	2 months		
17	Chilipepper rockfish	2,000 lb/	2 months, this	opportunity only	v available seav	vard of the non	trawl RCA
	Canary rockfish			CLO			
	Yelloweye rockfish			CLO			
20	Cowcod			CLO			
21	Bocaccio						
22	40°10' - 34°27' N. lat.	200 lb/ 2 months	010055	100 lb/ 2 months	;	300 lb/ 2 month	IS
23	South of 34°27' N. lat.	300 lb/ 2 months	CLOSED		300 lb/ 2	2 months	
24	Minor nearshore rockfish & Black rockfish						
25	Shallow nearshore	300 lb/ 2 months	CLOSED	500 lb/ 2 months	600 lb/ 2 months	500 lb/ 2 months	300 lb/ 2 months
26	Deeper nearshore						
27	40°10' - 34°27' N. lat.				500 lb/ 2	2 months	
		500 lb/ 2	CLOSED				400 lb/ 2
28	South of 34 ^o 27' N. lat.	months		6	600 lb/ 2 month	S	months
29	California scorpionfish	300 lb/ 2 months	CLOSED	300 lb/ 2 months	400 lb/ 2	2 months	300 lb/ 2 months

Table 4 (South). Continued

30	Lingcod ^{3/}	CLO	SED	8	800 lb/ 2 months CLOSED			
31	Pacific cod	Not limited		1,000 lb/ 2 months				
32	Spiny dogfish	Not limited	200,000 lb/ 2 months	150,000 lb/ 2 months	100,000 lb/ 2 mon	ths	(South) c	
33	Other fish ^{4/} & Cabezon			Not li	mited		on't	

1/ "Other flatfish" are defined at § 660.302 and include butter sole, curlfin sole, flathead sole, Pacific sanddab, rex sole, rock sole sand sole, and starry flounder.

2/ POP is included in the trip limits for minor slope rockfish. Yellowtail is included in the trip limits for minor shelf rockfish. 3/ The minimum size limit for lingcod is 24 inches (61 cm) total length.

4/ "Other fish" are defined at § 660.302 and include sharks, skates, ratfish, morids, grenadiers, and kelp greenling. 5/ The Rockfish Conservation Area is a gear and/or sector specific closed area generally described by depth contours but specifically defined by lat/long coordinates set out at § 660.390.

To convert pounds to kilograms, divide by 2.20462, the number of pounds in one kilogram.



Table 5 (North) to Part 660, Subpart G -- 2006 Trip Limits for Open Access Gears North of 40°10' N. Lat.

	Other Limits and Requirements Apply	Read § 660.301	- § 660.390 befor	e using this table	-		42006			
		JAN-FEB	MAR-APR	MAY-JUN	JUL-AUG	SEP-OCT	NOV-DEC			
oc	kfish Conservation Area (RCA) ^{6/} :									
	North of 46°16' N. lat.			shoreline	e - 100 fm					
	46°16' N. lat 40°10' N. lat.			30 fm -	100 fm					
Se	See § 660.370 and § 660.383 fo e §§ 660.390-660.394 for Conservation Area		• •		•					
	State trip limits may be me	ore restrictive than	federal trip limits,	particularly in wate	rs off Oregon and	California.				
1	Minor slope rockfish ^{1/} & Darkblotched rockfish		Per trip, no	more than 25% of	weight of the sab	lefish landed				
2	Pacific ocean perch		100 lb/ month							
3	Sablefish	of up to 1,000 l	00 lb/ day, or 1 landing per week of up to 1,000 lb, not to exceed 5,000 lb/ 2 months 300 lb/ day, or 1 landing per week of up to 1,000 lb, not to exceed 3,000 lb/ 2 months CLOSED							
1	Thornyheads			CLC	SED					
5	Dover sole	lb of which may	no more than 300 be species other	es other						
5	Arrowtooth flounder	than Pacific sanddabs. South of 420 N. lat., when fishing for "other flatfish," vessels using hook-and- than Pacific sanddabs. South of 420 N. lat., when fishi								
7	Petrale sole	hooks per line,	no more than 12 using hooks no umber 2" hooks,	flatfish," vessels using hook-and-line gear with no more than 12 hooks per line, using hooks no larger than "Number 2" hooks, which measure 11 mm (0.44 inches) point to shank, and up to two 1 lb (0.45 kg)						
3	English sole	inches) point to s	re 11 mm (0.44 hank, and up to 1 eights per line are	weig	ghts per line are n	ot subject to the R	RCAs.			
9	Other flatfish ^{2/}		to the RCAs.							
0	Whiting			300 lb/	/ month					
1	Minor shelf rockfish ^{1/} , Shortbelly, Widow, & Yellowtail rockfish			200 lb/	month		1			
2	Canary rockfish			CLC	SED					
3	Yelloweye rockfish			CLC	SED					
4	Minor nearshore rockfish & Black rockfish									
15	North of 42° N. lat	N. lat. 5,000 lb/ 2 months, no more than 1,200 lb of which may be species other than black or blue rockfish								
16	42° - 40°10' N. lat									
17	Lingcod ^{4/}	CLOSED 300 lb/ month CLOSED								
8	Pacific cod	Not limited			1,000 lb/ 2 month	s				
19	Spiny dogfish	Not limited	200,000 lb/ 2 months	150,000 lb/ 2 months		100,000 lb/ 2 mont	ths			
n	Other Fish ^{5/}			Not li	mited					

Table 5 (North). Continued

21	PINK SHRIMP NON-GROUNDFISH TRAWL (not subject to RCAs)						
22	North	Effective April 1 - October 31: groundfish 500 lb/day, multiplied by the number of days of the trip, not to exceed 1,500 lb/trip. The following sublimits also apply and are counted toward the overall 500 lb/day and 1,500 lb/trip groundfish limits: lingcod 300 lb/month (minimum 24 inch size limit); sablefish 2,000 lb/month; canary, thornyheads and yelloweye rockfish are PROHIBITED. All other groundfish species taken are managed under the overall 500 lb/day and 1,500 lb/trip groundfish limits. Landings of these species count toward the per day and per trip groundfish limits and do not have species-specific limits. The amount of groundfish landed may not exceed the amount of pink shrimp landed.	TABLE 5 (No				
23	23 SALMON TROLL						
24	North	Salmon trollers may retain and land up to 1 lb of yellowtail rockfish for every 2 lbs of salmon landed, with a cumulative limit of 200 lb/month, both within and outside of the RCA. This limit is within the 200 lb per month combined limit for minor shelf rockfish, widow rockfish and yellowtail rockfish, and not in addition to that limit. All groundfish species are subject to the open access limits, seasons and RCA restrictions listed in the table above.	h) con't				

sand sole, and starry flounder. 3/ For black rockfish north of Cape Alava (48°09.50' N. lat.), and between Destruction Is. (47°40' N. lat.) and Leadbetter Pnt. (46°38.17' N. lat.), there is an additional limit of 100 lbs or 30 percent by weight of all fish on board, whichever is greater, per vessel, per fishing trip.

 4/ The size limit for lingcod is 24 inches (61 cm) total length.
 5/ "Other fish" are defined at § 660.302 and include sharks, skates, ratfish, morids, grenadiers, and kelp greenling. Cabezon is included in the trip limits for "other fish."

6/ The Rockfish Conservation Area is a gear and/or sector specific closed area generally described by depth contours but specifically defined by lat/long coordinates set out at § 660.390.
To convert pounds to kilograms, divide by 2.20462, the number of pounds in one kilogram.



Bocaccio, chilipepper and cowcod rockfishes are included in the trip limits for minor shelf rockfish. Splitnose rockfish is included in the trip limits for minor slope rockfish.
 'Other flatfish' are defined at § 660.302 and include butter sole, curlfin sole, flathead sole, Pacific sanddab, rex sole, rock sole,

Other Limits and Requirements Apply Read § 660.301 - § 660.390 before using this table 62006									
		JAN-FEB	MAR-APR	MAY-JUN	JUL-AUG	SEP	OCT	NOV-DEC	
Rockfish Conservation Area (RCA) ^{5/} : 40°10' - 34°27' N. lat.		30 fm - 150 fm		20 fm - 150 fm		30 fm - 150 fm		150 fm	
South of 34°27' N. lat. 60 fm - 150 fm (als See § 660.370 and § 660.383 for Additional Gear, Trip Limit, and Conservation A See §§ 660.390-660.394 for Conservation Area Descriptions and Coordinates (including RCAs,					a Requirements a	and Restr		ordell Banks).	
	State trip limits may be mo	re restrictive than f	iederal trip limits, p	particularly in water	rs off Oregon and	California	I.		
1	Minor slope rockfish ^{1/} & Darkblotched rockfish								
2	40°10' - 38° N. lat.		Per trip, no	more than 25% of	5	efish land	ed		
3	South of 38° N. lat.			10,000 lb/					
4	Splitnose			200 lb/	month				
5 6	Sablefish 40°10' - 36° N. lat.	of up to 1,000 lb	1 landing per week l lb, not to exceed b/ 2 months 300 lb/ day, or 1 landing per week of up to 1,000 lb, not to exceed 3,000 lb/ 2 months				CLOSED		
7	South of 36° N. lat.	350 lb/ day, or 1 landing per week of up to 1,050 lb 500 lb/ day, or 1 land per week of up to 1,050 lb					T A		
8	Thornyheads								ω
9	40°10' - 34°27' N. lat.			CLO	SED				
10	South of 34°27' N. lat.		50	b/ day, no more th	an 1,000 lb/ 2 mor	nths			Π
	Dover sole Arrowtooth flounder	3,000 lb/month, no more than 300 lb of which may be species other than Pacific sanddabs. South of 420 N. lat., when fishing for "other 3,000 lb/month, no more than 300 lb of which may be species of					5 (S		
13	Petrale sole	flatfish," vessels using hook-and- line gear with no more than 12							0
14	English sole	hooks per line, larger than "Nu which measure	using hooks no mber 2" hooks, e 11 mm (0.44	per line, using hooks no larger than "Number 2" hooks, which measure 11 mm (0.44 inches) point to shank, and up to two 1 lb (0.45 kg) weights per line are not subject to the RCAs					u t
15	Other flatfish ^{2/}	inches) point to shank, and up to 1 lb (0.45 kg) of weight per line are not subject to the RCAs.				<u>ь</u>			
16	5		300 lb/ month						
17	Minor shelf rockfish ^{1/} , Shortbelly, Widow & Chilipepper rockfish								
18	40°10' - 34°27' N. lat.	300 lb/ 2 months	CLOSED	200 lb/ 2	months		300 lb/ 2	months	
19	South of 34°27' N. lat.	750 lb/ 2 months							
20		CLOSED							
21	Yelloweye rockfish	CLOSED							
22	Cowcod	CLOSED							
23	Bocaccio								
24	40°10' - 34°27' N. lat.	200 lb/ 2 months	CLOSED	100 lb/ 2	months		200 lb/ 2	months	
25	South of 34°27' N. lat.								

Table 5 (South) to Part 660, Subpart G -- 2006 Trip Limits for Open Access Gears South of $40^{\circ}10'$ N. Lat.



Table 5 (South). Continued									
26	Minor nearshore rockfish & Black rockfish								
27	Shallow nearshore	300 lb/ 2 months	CLOSED	500 lb/ 2 months	600 lb/ 2 months	500 lb/ 2 months	300 lb/ 2 months		
28	Deeper nearshore								
29	40°10' - 34°27' N. lat.				500 lb/ 2	2 months			
30	South of 34°27' N. lat.	500 lb/ 2 months	CLOSED		600 lb/ 2 months 400 lb/ 2 mo				
31	California scorpionfish	300 lb/ 2 months	CLOSED	300 lb/ 2 months	400 lb/ 2	2 months	300 lb/ 2 months		
32	Lingcod ^{3/}	CLO	SED	300 lb/ m	onth, when nears	nore open	CLOSED		
	Pacific cod	Not limited			1,000 lb/ 2 months	3			
34	Spiny dogfish	Not limited	200,000 lb/ 2 months	150,000 lb/ 2 months	100,000 lb/ 2 months				
35	Other Fish ^{4/} & Cabezon			Not li	mited				
36	RIDGEBACK PRAWN AND, SOUTH OF 38°5	7.50' N. LAT., CA	HALIBUT AND S	EA CUCUMBER N	NON-GROUNDFIS	SH TRAWL			
37	NON-GROUNDFISH TRAWL Rockfish C	onservation Area	(RCA) for CA Ha	libut and Sea Cu	cumber:			_	
38	40°10' - 38° N. lat.	75 fm - modified 200 fm ^{7/}	100 fm - 200 fm	100 fm - 150 fm	100 fm - 200 fm	100 fm - 250 fm	250 fm	Þ	
39	38° - 34°27' N. lat.	75 fm - 150 fm		100 fm - 150 fm 75 fm - 150 fm				ω	
40	South of 34°27' N. lat.	75 fm - 150 fm along the mainland coast; shoreline - 150 fm around islands	100 fm - 150 fm along the mainland coast; shoreline - 150 fm around islands islands 75 fm - 150 fm around islands fm around islands					י ד ג ג ג ג ג	
41	NON-GROUNDFISH TRAWL Rockfish C	onservation Area	(RCA) for Ridge	back Prawn:				0	
42	40°10' - 38° N. lat.	75 fm - modified 200 fm ^{7/}	100 fm - 200 fm	100 fm - 150 fm	100 fm - 200 fm	100 fm - 250 fm	250 fm ^{7/}		
43	38° - 34°27' N. lat.	75 fm - 150 fm 100 fm - 150 fm 75 fm - 150 fm					75 m = 150 m	5	
44	South of 34°27' N. lat.	100 fm - 150 fm along the mainland coast; shoreline - 150 fm around islands						ĉ	
45	South of 34°27' N. lat. 100 fm - 150 fm along the mainland coast; shoreline - 150 fm around islands Groundfish 300 lb/trip. Trip limits in this table also apply and are counted toward the 300 lb groundfish per trip limit. The amount of groundfish landed may not exceed the amount of the target species landed, except that the amount of spiny dogfish landed may exceed the amount of target species landed. Spiny dogfish are limited by the 300 lb/trip overall groundfish limit. The daily trip limit may not be multiplied by the number of days of the trip. Vessels participating in the California halibut fishery south of 38 °57'30'' N. lat. are allowed to (1) land up to 100 lb/day of groundfish without the ratio requirement, provided that at least one California halibut is landed and (2) land up to 3,000 lb/month of flatfish, no more than 300 lb of which may be species other than Pacific sanddabs, sand sole, starry flounder, rock sole, curflin sole, or California scorpionfish is also subject to the trip limits and closures in line 31).								
46	46 PINK SHRIMP NON-GROUNDFISH TRAWL GEAR (not subject to RCAs)								
47	Effective April 1 - October 31: Groundfish 500 lb/day, multiplied by the number of days of the trip, not to exceed 1,500 lb/trip. The following sublimits also apply and are counted toward the overall 500 lb/day and 1,500 lb/trip groundfish limits: lingcod 300 lb/ month (minimum 24 inch size limit); sablefish 2,000 lb/ month; canary, thornyheads and yelloweye rockfish are PROHIBITED. All other groundfish species taken are managed under the overall 500 lb/day and 1,500 lb/trip groundfish limits. Landings of these species count toward the per day and per trip groundfish limits and do not have species-specific limits. The amount of groundfish landed may not exceed the amount of pink shrimp landed.								

1/ Yellowtail rockfish is included in the trip limits for minor shelf rockfish and POP is included in the trip limits for minor slope rockfish.

2/ "Other flatfish" are defined at § 660.302 and include butter sole, curifin sole, flathead sole, Pacific sanddab, rex sole, rock sole, sand sole, and starry flounder.

3/ The size limit for lingcol is 24 inches (61 cm) total length.
4/ "Other fish" are defined at § 660.302 and include sharks, skates, ratfish, morids, grenadiers, and kelp greenling.
5/ The Rockfish Conservation Area is a gear and/or sector specific closed area generally described by depth contours

but specifically defined by lat/long coordinates set out at § 660.390. 6/ The "modified 200 fm" line is modified to exclude certain petrale sole areas from the RCA. **To convert pounds to kilograms, divide by 2.20462, the number of pounds in one kilogram.**



Proposed rule new language shown in bold:

\$660.370 Specifications and Management Measures.
* * * * *

(d) Automatic actions. Automatic management actions may be initiated by the NMFS Regional Administrator without prior public notice, opportunity to comment, or a Council meeting. These actions are nondiscretionary, and the impacts must have been taken into account prior to the action. Unless otherwise stated, a single notice will be published in the Federal Register making the action effective if good cause exists under the APA to waive notice and comment. Automatic actions are used in the Pacific whiting fishery to close the fishery or reinstate trip limits when a whiting harvest guideline, commercial harvest guideline, or a sector's allocation is reached, or is projected to be reached; or to reapportion unused allocation to other sectors of the fishery. An automatic action is also used in the Pacific whiting fishery 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.

§660.373 Pacific Whiting Fishery Management

* * * *

(3) <u>Ocean Salmon Conservation Zone</u>. All waters shoreward of a boundary line approximating the 100-fm (183-m) depth contour. Latitude and longitude coordinates defining the boundary line approximating the 100-fm (183-m) depth contour are provided at § 660.393(a).

Agenda Item C.4.d Supplemental Public Comment September 2006

Subject: Letter from F/V MARANATHA

From: "Nancy & Jerry" <tunajerry@centurytel.net>

Date: Tue, 5 Sep 2006 10:17:45 -0700

To: <john.devore@noaa.gov>

Return-Path: <tunajerry@centurytel.net>

Received: from relay-east.nems.noaa.gov ([205.156.4.216]) by mercury.akctr.noaa.gov (Netscape Messaging Server 4.15 mercury Jun 21 2001 23:53:48) with ESMTP id J54QP600.LWV for <john.devore@noaa.gov>; Tue, 5 Sep 2006 10:17:30 -0700

Received: from mx-east2.nems.noaa.gov ([140.90.121.149]) by relay-east.nems.noaa.gov (Netscape Messaging Server 4.15) with SMTP id J54QN200.RQC for <john.devore@noaa.gov>; Tue, 5 Sep 2006 13:16:14 -0400

Received: from noaa02.newworldapps.com(65.221.110.162) by mx-east2.nems.noaa.gov via csmap id 92d96dac_3d05_11db_8970_003048245fe6_7181; Tue, 05 Sep 2006 13:40:08 -0400 (EDT) **Received:** from msa1-gh.centurytel.net (msa1-gh.centurytel.net [209.206.160.251]) by noaa02.newworldapps.com (Symantec Mail Security) with ESMTP id 187D4545 for <john.devore@noaa.gov>; Tue, 5 Sep 2006 13:17:27 -0400 (EDT)

Received: from jacobson (ppp119.fo.centurytel.net [209.206.164.150]) by msa1-gh.centurytel.net (8.13.6/8.13.6) with ESMTP id k85HHMSo014579 for <john.devore@noaa.gov>; Tue, 5 Sep 2006 12:17:22 -0500

Message-ID: <000001c6d10f\$36a4c340\$96a4ced1@jacobson>

MIME-Version: 1.0

Content-Type: multipart/related; boundary="---=_NextPart_000_0001_01C6D0D4.8A45EB40" **X-Priority:** 3 (Normal)

X-MSMail-Priority: Normal

X-Mailer: Microsoft Outlook, Build 10.0.2627

Importance: Normal

X-MimeOLE: Produced By Microsoft MimeOLE V6.00.2900.2962

X-Brightmail-Tracker: AAAAAA==

I've been fishing the same boat in the access fishery for 15 years. I have 196,669 pounds of Sablefish and 184,563 pounds of Slope Rockfish for those years. I have even continued to fish through the bad times, when a lot of other fishermen dropped out. Then in the last 5 years, we finally get a better delivery each week and all these part-time fishermen, most of them retired, and don't depend on the fishery to survive, jumped in. I think the Fishery Council should make it a federal permit, not a state permit. It should go by the effort one puts out. Please confirm receipt of this e-mail to <u>tunajerry@centurytel.net</u> Thank you, JERRY L. JACOBSON 211 SALMON DRIVE, FORKS, WASHINGTON 98331 F/V MARANATHA

1.0 INTRODUCTION AND BACKGROUND

1.1 Purpose and Need for Action

The American Fisheries Act of 1998 (AFA) mandates that, "the Pacific Fishery Management Council... shall recommend for approval by the U.S. Secretary of Commerce (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." If the Council does not recommend conservation or management measures to the Secretary, the AFA authorizes the Secretary 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."

The AFA contains several provisions specific to the Bering Sea and Aleutian Islands (BSAI) pollock fishery and requirements for the Pacific Fishery Management Council (Council) to recommend measures to protect against adverse impacts resulting from the AFA. Among the provisions of the AFA that affect vessels and processors in North Pacific fisheries are (1) allocation of the walleye pollock directed fishery allowance among the catcher vessels of the inshore component, catcher-processors of the offshore component, and catcher vessels harvesting pollock for motherships in the offshore component; (2) declaration of eligible vessels and processors – specifically naming catcher vessels, catcher-processors, and motherships eligible to participate in the offshore component; and (3) specific eligibility requirements for catcher vessels and shoreside processors in the inshore component.

The AFA also contains guidelines for "cooperatives" within each component of the fishery. Through these cooperative arrangements, harvesters and processors may arrange fishing and processing to optimally utilize their respective allocations. The AFA anticipates that, because these AFA entities can arrange their pollock fishery opportunities, these entities may be empowered to increase their participation in non-pollock fisheries (including West Coast fisheries) where they had previously participated only marginally or not at all. At issue is the concern that traditional West Coast groundfish fishery participants could be displaced by AFA entities (catcher vessels, catcher-processors, and motherships) that do not have prior fishing history in West Coast groundfish fisheries. To prevent this harm, the AFA provides the Council the opportunity to recommend management measures to protect fisheries under its jurisdiction and participants in those fisheries.

Protective management measures may be necessary because participants in cooperatives are likely to have increased flexibility to arrange fishing schedules – optimizing participation in their current fisheries and enabling entry into other fisheries. Specifically, historic West Coast groundfish fishery participants could be harmed if AFA vessels participating in pollock fishing cooperatives rearrange their pollock fishing schedules to increase participation in non-pollock fisheries such as the West Coast groundfish fishery. To participate in most limited entry groundfish fisheries, vessels only need to purchase a general limited entry permit, and a permit is not is required to participate in the open access fisheries. Because new limited entry permit holders and entrants into the open access fishery would have access rights that are equal to those who have historically participated in the fishery, entry by AFA entities may occur. Moreover, harm could also occur through the investment of funds derived by benefit of the AFA. That is, investment in the expansion of effort rather than direct transfer of vessels from AFA fisheries to West Coast fisheries. To prevent harm to current participants in West Coast fisheries, the Council is required to recommend protective management measures. Moreover, additional effort entering the groundfish fishery could exacerbate existing management problems and erode the effectiveness of measures recommended by the Council.

The AFA states:

SEC. 211. Protections for other fisheries; conservation measures.

(b) Catcher-processor restrictions.

Agenda Item C.7.a Supplemental TIQ Information Session (3) September 2006

FORMAT AND SCHEDULE

Format and time schedule for the Trawl Individual Quota Information Session (Tuesday Evening)

$\mathbf{\Omega}$	•
()	pening
$\overline{}$	pennis

	Welcome and Format for Presentations	5	Minutes				
	Background Information	15	Minutes				
Opening Statemen	nts						
	Initial Presentation	10	Minutes Each				
	Opportunity for Counter Perspectives	3	Minutes Each				
Written Advance Questions							
	Person 1 Response	3	Minutes for Each Questoin				
	Person 2 Response and Rebuttal	4	Minutes for Each Question				
	Person 1 Rebuttal	1	Minute for Each Question				
Council Member	<u>Q&A</u>	≈45	Minutes				
Closing Statemen	<u>ts</u>	5	Minutes Each				

 $G: \label{eq:generalized_constraint} G: \label$