DRAFT ANALYSIS OF PERMIT STACKING
FOR THE
LIMITED ENTRY FIXED GEAR SABLEFISH FISHERY

1.0 Introduction

Action contemplated: Permit stacking. Define what this means.

Purpose of this document.

Time line for Council process for completing consideration of this issue.

1.1 Background

Trawl/Fixed gear split late 1980s

Decision to manage fixed gear fishery with seasons.

ITQ considerations in early 1990s.

Council decision to delay and subsequent moratorium on ITQs.

Series of shortening seasons.

Sablefish endorsements.

Year of equal limits. Reallocation.

Creation of tiers. Reallocation.

The current management dilemma (include explanation of overhead)

1.2 Purpose and Need for Action

Overcapacity in the West Coast groundfish fleet is well documented (cite SSC Report). Overcapacity results in inefficiencies and regulatory constraints that distort rational action. A prime example is the current modified fixed gear sablefish fishery (three-tiered system) which can put pressure on fishers to go out in unsafe conditions. Additionally, the efforts to control harvest through the three-tier system has caused a substantial reallocation of catch from larger producers to smaller producers (cite three-tier analysis). This reallocation from the distribution that existed during the open fishery resulted in misalignment and dislocation of resources such that capital invested in larger producers goes unused while smaller producers increase their investment in order to take their catch in the short seasons allotted under current management.

Permit stacking for the limited entry fixed gear sablefish fishery is being considered as a measure to reduce capacity and right the fishery by allowing larger producers to accumulate harvest privileges more in line with their capital investment. This accumulation would occur through the voluntary transfers of permits from those enticed by the prices offered. An additional possible benefit of this consolidation of permits for the purpose of harvesting fixed gear sablefish is that harvest rights for nonsablefish groundfish species would be consolidated but not accumulated when permits are stacked. Therefore, there may be a net reduction in the capacity to target nonsablefish groundfish species.
1.3 Management Objectives to be Addressed

This section lists the national standards and management objectives of the Council's groundfish FMP that Council actions are required to meet. Also included is a section on recommendations of the strategic plan that relate to permit stacking.

In particular, permit stacking is expected to help the Council address National Standards 4, 5, 6, 7, 8, and 10. It will also affect achievement of Goals 2 (Economics) and 3 (Utilization) of the groundfish FMP through impacts related to Objectives 4, 9, 11, 12, and 13. These standards, goals and objectives that are closely related to this stacking proposal are italicized in the following sections.

The primary objectives for permit stacking are:

- rationalize the fleet (reduce overcapacity) and promote efficiency
- maintain or direct benefits toward fishing communities
- prevent excessive concentration of harvest privileges
- mitigate the reallocationsal effects of recent policies (3-tier system and equal limits)
- promote equity
- resolve or prevent new allocation issues from arising
- promote safety
- improve product quality and value
- take action without creating substantial new disruptive effects

1.3.1 National Standards

The following are the national standards that must be met by any action recommended by the Council. The national standards most relevant to permit stacking are italicized.

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.

1.3.2 Groundfish Fishery Management Plan

The following are the goals and objectives of the groundfish FMP. The goals and objectives most relevant to permit stacking are italicized.

Management Goals.

Goal 1 - Conservation. 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.

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.

Economics.

Objective 4. Attempt to achieve the greatest possible net economic benefit to the nation from the managed fisheries.

Objective 5. 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.

Objective 6. Gear restrictions to minimize the necessity for other management measures will be used whenever practicable.
Utilization.

Objective 7. Develop management measures and policies that foster and encourage full utilization (harvesting and processing) of the Pacific coast groundfish resources by domestic fisheries.

Objective 8. Recognizing the multispecies nature of the fishery, establish a concept of managing by species and gear, or by groups of interrelated species.

Objective 9. Strive to reduce the economic incentives and regulatory measures that lead to wastage of fish.

Objective 10. 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 11. When conservation actions are necessary to protect a stock or stock assemblage, attempt to develop management measures that will affect users equitably. 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. 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. Minimize gear conflicts among resource users.

Objective 13. 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 environment.

1.3.3 Strategic Plan

The strategic plan has yet to be adopted. However, when it is adopted there are likely to be goals and recommendations in the plan that relate closely to this stacking proposal, particularly with respect to capacity reduction. These will be noted in this section if the plan is adopted prior to final Council action on permit stacking.

1.4 Alternatives

The following is a description of the two major alternatives, permit stacking and status quo. The rationale for the provisions of the permit stacking alternative and the general implications are discussed in Section 3.1. Sections 3.2 and 3.3 discuss the biological, economic and social implications in more depth.

1.4.1 Alternative 1: Status Quo.

No change other than those that will occur from changes in capitalization, stock size etc., under the current management regime.

1.4.2 Alternative 2: Permit Stacking.

The following is the Council staff's interpretation of the Council motion on permit stacking. Options are listed for most of the provisions of this alternative. In most cases, "Option a" is the option most consistent with the original main motion proposed to the Council. The exception is in Provision 2 where there was some uncertainty regarding how to interpret the Council's motion. For other provisions, options were added as
friendly amendments to the main motion, for the purpose of analysis and soliciting public comment, or added by Council staff to fill out the suite of reasonable alternatives (italicized text). Where an FMP amendment is required, the related amendment language is provided in Appendix B.

Provision 1:  Basic Stacking.

Participants in the limited entry fixed gear (longline and fishpot) primary sablefish fishery would be allowed to register multiple fixed gear sablefish endorsed permits for a single vessel (allowed to stack permits). A vessel would be allowed to take up to the full fixed gear sablefish cumulative limit associated with each permit registered to the vessel. The primary fixed gear sablefish fishery includes the current directed sablefish fishery and the mop-up fishery.

Provision 2:  The Base Permit and Gear Usage.

One of the permits would be designated by the vessel owner as the base permit. The base permit would be required to have a fixed gear sablefish endorsed permit that meets the length requirement for that vessel. Permits of different fixed gear types could be stacked together.

Options:
2a. The vessel must fish fixed gear sablefish with the gear endorsed on the designated base permit.
2b. The vessel may fish fixed gear sablefish with any fixed gear endorsed on any of its stacked permits if the length endorsement associated with the permit is equal to or greater than that of the base permit. For example, a 45 foot longline permit could be stacked with a 55 foot fishpot permit designated as the base permit and the longline permit tier endorsement would add to the cumulative limit for the 55 foot vessel, but the vessel could only use fishpot gear. On the other hand, if both the base permit and the stacked permit had length endorsements 55 feet or greater then the vessel could use either longline or fishpot gear.
2c. The vessel may fish with any fixed gear endorsed on at least one of its stacked permits.

Additionally, if one of the stacked fixed gear sablefish endorsed permits includes an endorsement for trawl gear and the length endorsement is equal to or greater than that of the base permit, the vessel may continue to use trawl gear, but not in the fixed gear fishery. In such a case, if the permit is stacked on a vessel that is more than 5 feet smaller than that specified by the size endorsement for the trawl gear permit, the requirement that the trawl endorsed permit be downsized will be waived (Section 14.2.9 paragraph 3 of the FMP), unless permits are permanently stacked as specified in Options 4b and 4c.

Provision 3:  Limits on Stacking.

No more than 3 permits may be stacked on a single vessel. The analysis will include discussion of other permutations such as 2 and 4 permit stacking limits.

Provision 4:  Combination of Stacked Permits.

Options:
4a. Permits May Be Unstacked. Permits that are stacked would retain their original length, gear, fixed gear sablefish and tier endorsements and could be transferred to other vessels in the future (i.e. stacked permits would not take on the gear and length endorsement of the vessel's designated base permit when unstacked).
4b. Permits May Not Be Unstacked and Tier Endorsements are Not Tradeable. When permits are stacked on a single vessel they would be reissued as a single permit that could not be redivided and endorsements remaining on the permit would confer the fishing opportunities specified in Provisions 1 and 2. The length endorsement would be the length endorsement on the permit designated as the base permit.
4c. Permits May Not Be Unstacked and Tier Endorsements are Tradeable Among the Endorsed Fleet. Same as Option 4b except that Tier endorsements could be
transferred separate from the permit to another permit with a fixed gear sablefish endorsement. However, at least one tier endorsement must remain with the base permit. Permits would be limited to a maximum number of endorsements consistent with the maximum number of permits that can be stacked as specified in Provision 3 (a maximum of 3 endorsements per permit).

Provision 5: Fishery Duration.

Options:

5a. The fishery would extend over a number of months (the initial recommended season is April 1 thru Oct. 31). There would be no preseason and postseason closures and vessels would be required to make their final deliveries prior to closure of the season. There would be no mop-up fishery.

5b. Current Situation: The fishery would continue to be managed as a modified derby followed by a mop-up. The current preseason and postseason closures would continue to apply and vessels would be required to cease fishing upon closure of the fishery. Permits would have to be stacked before some deadline prior to the start of the seasons in order to provide analysts and the Council sufficient time to assess and recommend appropriate cumulative limits and season durations. The steps would include (1) setting the allocation in November, (2) making a preliminary estimate of season lengths and limits and setting season opening date in March, (3) a deadline for stacking of May 15, and (4) final season duration and limits set in June. (Seasons would continue to be set short enough that many vessels would be unable to fully take the allowed catch. In recent years the season duration has been slightly more than one week. Maintenance of this abbreviated fishery has been necessary to prevent the program from being classified as an individual quota program. Such programs are currently prohibited under the Magnuson-Stevens Act.)

Provision 6: At-Sea Processing.

Note that “processing,” as defined under the West Coast groundfish FMP includes such activities as freezing but excludes heading and gutting.

Options:

6a. At-sea processing would be prohibited in the fixed gear sablefish fishery.

6b. Current Situation: At-sea processing would be allowed in the fixed gear sablefish fishery. (Note: At-sea processing has not played a significant role in the fishery in recent years because of the short seasons in place since 1996.)

Provision 7: Owner-on-Board Provisions.

Options:

7a. The permit owner would be required to be onboard the vessel during fishing operations, however there would be an exception for those owning permits as of the time the stacking program is established (provisions would be as per draft Amendment 8, see the description of this option in Section 3.1 of this document).

7b. Current Situation: The permit owner would not be required to be on board the vessel during fishing operations.

7c. Same as 7a, except that the onboard requirement would apply only when permits are stacked.

Provision 8: Nonsablefish Cumulative Limits.

The stacking of permits with sablefish endorsements would not allow vessels to harvest more than one cumulative limit for non-sablefish species.
Provision 9: Vessels Without Sablefish Endorsements.

Options:
9a. Current Situation: The limited entry daily-trip-limit fishery for vessels without sablefish endorsements would be closed during the primary fixed gear sablefish fishery.
9b. The limited entry daily-trip-limit fishery for vessels without sablefish endorsements would be allowed to run at the same time as the primary fixed gear sablefish fishery.

1.5 Individual Quota Moratorium

The management system that would be created under Option 5a (a long season) would likely be categorized as an individual quota program. The Magnuson-Stevens Act prohibits the implementation of new individual quota programs until October 1, 2000. Option 5b maintains short, derby-like seasons and avoids the individual quota classification. There are a number of scenarios that may affect the option selected in Provision 5 of the alternative:

Scenario 1. The IQ moratorium expires and no new requirements constrain creation of individual quotas. Option 5a or 5b could be selected.

Scenario 2. The IQ moratorium expires and Magnuson-Stevens Act reauthorization or other congressional action establishes criteria for the creation of new IQ programs (e.g., must be self funding, must be approved by a referendum of the affected fishers). Option 5a (a long season) might be selected but a number of additional provisions may have to be added and processes followed before Option 5a could be recommended to NMFS for implementation. In this scenario, all other provisions might be recommended as a package and action on Option 5a delayed until other requirements are met.

Scenario 3. The IQ moratorium is continued either under a Magnuson-Stevens Act reauthorization or other congressional action. Prior to the Sustainable Fisheries Act (the act that last reauthorized the M-S Act) a rider was placed on a budget bill that prohibited the expenditure of Federal funds on development and implementation of IQ programs. A rider similar to that in place prior to Magnuson-Stevens Act reauthorization could require the halt of all work related to development and analysis of Option 5a.

1.6 Decision Procedures

Under the groundfish FMP, the proposal to allow the stacking of permits would likely be considered an allocative measure and would therefore have to meet the requirements of section 6.2.3 of the FMP (the socio-economic framework) and would require that the full rulemaking procedures be followed (section 6.2(D) of the FMP) and/or the procedures for amending an FMP. These procedures require that analytical documents be developed, approved by the Council and released for public review prior to a final decision.

The following table specifies which actions to implement the stacking alternatives would require plan amendments and which would require regulatory amendments. Where a plan amendment is required, specific language is provided in Appendix B.

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1/ Allowing sablefish cumulative limits to be separable from the permit may also make permit stacking more like an IQ program (Option 4c); however, the maintenance of "overhead" under Option 5b would largely alleviate this concern.
<table>
<thead>
<tr>
<th>Provision</th>
<th>No Action Needed (Provision/Option)</th>
<th>Plan Amendment Required (Provision/Option)</th>
<th>Regulatory Amendment Required</th>
<th>Authorizing Framework Language</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Basic Stacking</td>
<td></td>
<td>1</td>
<td>FMP Sec 14.2.4, para 3</td>
<td></td>
</tr>
<tr>
<td>2 Base Permit and Fixed Gear Usage</td>
<td>2 and 4a, Waiver of downsizing requirement for trawl vessels (FMP Sec 14.2.7 and 14.2.9 para 3).</td>
<td>2a Gear is that on base permit 2b Gear is that on any stacked permit with sufficient length endorsement. 2c Gear is that on any stacked permit</td>
<td>FMP Sec 14.2.4, para 3</td>
<td></td>
</tr>
<tr>
<td>3 Limits on Stacking</td>
<td></td>
<td>3</td>
<td>FMP Sec 14.2.4, para 3</td>
<td></td>
</tr>
<tr>
<td>4 Combination of Stacked Permits</td>
<td>4c Permits may not be unstacked but endorsements are tradeable (FMP Sec 14.2.6, para 4)</td>
<td>4a Permits may be unstacked 4b Permits may not be unstacked</td>
<td>FMP Sec 14.2.4, para 3</td>
<td></td>
</tr>
<tr>
<td>5 Fishery Duration</td>
<td>5b</td>
<td>5a April 1-Oct 31 Fishery</td>
<td>FMP Sec 6.2.2</td>
<td></td>
</tr>
<tr>
<td>6 At-Sea Processing</td>
<td>6b</td>
<td>6a At-sea freezing is prohibited</td>
<td>FMP Sec 6.2.3</td>
<td></td>
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<tr>
<td>7 Owner-on-Board</td>
<td>7b</td>
<td>7c Owner-on-board requirements (7a) applies only when permits are stacked</td>
<td>FMP Sec 14.2.4, para 3</td>
<td></td>
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<tr>
<td>8 Non-sablefish Limits</td>
<td>8</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9 Season for Vessels without Sablefish Endorsements</td>
<td>9a (FMP Sec 14.2.6 para 1 and 14.2.8 para 6)</td>
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<td></td>
<td></td>
</tr>
</tbody>
</table>

2.0 Description of the Fishery

(To be completed.)

3.0 Analysis

The biological and economic impacts of the stacking options may vary widely depending primarily on whether or not the season can be extended beyond the six to nine day modified derby season provided in recent years. An extension of the season is possible only with the lifting of the current IFQ moratorium or an exemption from the moratorium for the West Coast fixed gear sablefish fishery. The first part of the analysis summarizes impacts of the permit stacking provisions, provision by provision (section 3.1), then covers biological (section 3.2) and economic and social impacts (section 3.3).

3.1 General Description and Implication of the Options

Provision 1: Basic Stacking.

Participants in the limited entry fixed gear (longline and fishpot) primary sablefish fishery would be allowed to register multiple fixed gear sablefish endorsed permits for a single vessel (allowed to stack
permits). A vessel would be allowed to take up to the full fixed gear sablefish cumulative limit associated with each permit registered to the vessel. The primary fixed gear sablefish fishery includes the current directed sablefish fishery and the mop-up fishery.

Permit stacking would facilitate a certain amount of voluntary rationalization in the West Coast limited entry fixed gear groundfish fishery. Fishers would arrange among themselves for multiple permits to be assigned to the same vessel. Rationalization would occur as a result of the reduction of the number of harvesting vessels. Total utilized sablefish capacity would remain the same and the percent of sablefish capacity utilized for vessels that stacked permits would likely increase. Because limits for other groundfish species would not accumulate with the stacking of permits, there may be some reduction in total fixed gear groundfish species with respect to nonsablefish groundfish. If the sablefish season length is extended (Option 5a), individual cumulative limits for vessels that do not stack permits would decline and hence the percent utilized capacity for these vessels would decline. Overall, the sablefish harvest and harvest of other nonsablefish groundfish fishes would be consolidated among fewer vessels with the excess vessels either moving on to other fisheries or tying up at the dock.

Permit stacking would allow businesses able to acquire additional permits to increase their harvest. For operations that lost harvest has a result of the reallocation entailed in implementing the three-tier system, there would be an opportunity to move back toward previous harvest levels. Operations that had invested in equipment but had not yet scaled-up their harvest operations would also have an opportunity to more fully utilize their investments.

The more constraints that are put on the stacking option the less stacking will occur. Examples of such constraints include limits on the number of permits which can be stacked and the owner-on-board provision. A substantial amount of stacking may not occur unless the current IQ moratorium is lifted (Section 1.5) so that Option 5a may be adopted. The stacking program with Option 5b (short seasons) will put the Council in a position to more readily move to an IQ program that would reduce capacity, if the moratorium is lifted.

Provision 2: The Base Permit and Gear Usage.

One of the permits would be designated by the vessel owner as the base permit. The base permit would be required to have a fixed gear sablefish endorsed permit that meets the length requirement for that vessel. Permits of different fixed gear types could be stacked together.

Options:

2a. The vessel must fish fixed gear sablefish with the gear endorsed on the designated base permit.

2b. The vessel may fish fixed gear sablefish with any fixed gear endorsed on any of its stacked permits if the length endorsement associated with the permit is equal to or greater than that of the base permit. For example, a 45 foot longline permit could be stacked with a 55 foot fishpot permit designated as the base permit and the longline permit tier endorsement would add to the cumulative limit for the 55 foot vessel, but the vessel could only use fishpot gear. On the other hand, if both the base permit and the stacked permit had length endorsements 55 feet or greater then the vessel could use either longline or fishpot gear.

2c. The vessel may fish with any fixed gear endorsed on at least one of its stacked permits.

Additionally, if one of the stacked fixed gear sablefish endorsed permits includes an endorsement for trawl gear and the length endorsement is equal to or greater than that of the base permit, the vessel may continue to use trawl gear, but not in the fixed gear fishery. In such a case if the permit is stacked on a vessel that is more than 5 feet smaller than that specified by the size endorsement for the trawl gear permit, the requirement that the trawl endorsed permit be downsized will be waived (Section 14.2.9 paragraph 3 of the FMP), unless permits are permanently stacked as specified in Options 4b and 4c.

The main issue this provision deals with is the gears that would be usable on a vessel with stacked permits. The options on this issue revolve closely around the length endorsements. Length has been used as a
proxy for capacity in the groundfish fishery. It is assumed that vessels of similar length using the same gear have similar capacity, an admittedly rough assumption (reference earlier length analyses). Under the current limited entry program, if permits are combined in order to create a permit with a larger length endorsement, any gear endorsements that do not match between the permits being combined are not carried over to the new permit. In this provision, it is proposed that, at a minimum, the sablefish tier limit be carried over to a stacked permit, even if the gear endorsements on the stacked permits do not match. This is suggested in part as a matter of equity as there would be relatively little stacking opportunity for the 31 fishpot permit holders as compared to the 132 longline permit holders. Similarly, requiring that all stacked permits have length endorsements that match vessel size would substantially limit the ability of larger vessels to stack permits. Additionally, as discussed for Provision 1, permit stacking will redistribute the utilization of fixed gear sablefish capacity among the vessels in the groundfish fleet while leaving the total amount of sablefish harvest unchanged. With respect to sablefish, it would appear to make little difference as to whether the fish is caught with longline gear or with pot gear, or from a larger or smaller vessel, the same amount of sablefish will be caught. Therefore, in terms of total measured sablefish catch, maintaining the gear distinctions between pot and longline vessels may have little value.

With respect to other groundfish species, maintaining the distinction between pot and longline gear may continue to be important. When two permits are stacked on a single vessel, capacity for other groundfish species will be removed from the limited entry fleet. For those other species, the question may be, for example, if a 50 foot fishpot vessel stacks a longline permit and is then allowed to use longline gear, does the fishpot vessel using longline gear have greater capacity to land non-sablefish groundfish than the longline vessel from which the permit was removed. Fishpot vessels generally target only sablefish and have little bycatch of other species. If the longline permit is for a much smaller vessel than the fishpot vessel, the addition of the fishpot vessel to the longline fleet could expand the limited entry longline fleet capacity to take non-sablefish groundfish (Option 2c). This expansion could be limited by allowing vessels to use the gear on the stacked permit only if the size endorsement on the stacked permit is adequate for the vessel (Option 2b). However, the size capacity relationship holds only very roughly when the gear is the same. If gear varies, the relationship may be even weaker, i.e. a 50 foot fishpot vessel may not have the same capacity as a 50 foot longline vessel. The potential for expansion could be eliminated by allowing vessels to use only the gear designated on their base permits (Option 2a).

Taking sablefish with fishpot or longline gear may make little difference in the total sablefish harvest. However, other differences between the gear types may be important (e.g., differences in the size distribution of sablefish taken and the mortality rates of discards associated with highgrading sablefish).

An option not given significant consideration here would be to require that a vessel harvest each tier limit with the gear specified on the stacked permit. Thus a vessel might be able to harvest 37,000 pounds with longline gear and 37,000 pounds with pot gear. Such a requirement would be very difficult to track and enforce and would be relatively easy to circumvent by misreporting gear types on the fish ticket.

There are very few permits with endorsements for both trawl and fixed gear. However, should one of these permits be involved in a stacking situation this provision recommends waiving the requirement that trawl permits be downsized when used on a vessel more than 5 feet shorter than specified on the permit. This waiver would be recommended to encourage consolidation in the fishery and would apply only if unstacking of the permits is allowed (Options 4b and 4c). Not waiving this requirement would create a disincentive for stacking trawl-fixed gear permits as the permit owner would face a financial loss from the reduction of the size endorsement on the trawl permit.

Provision 3: Limits on Stacking.

No more than 3 permits may be stacked on a single vessel. The analysis will include discussion of other permutations such as 2 and 4 permit stacking limits.

The amount of stacking that is likely to occur will depend on the season length (Provision 5). If short seasons need to be maintained to avoid the IFQ classification, then the amount of stacking will be limited
by the short time fishers will have to take their full limits. If the season is extended to six months, it is not inconceivable that the equivalent of 5 or more Tier-1 permits would be stacked on a single vessel (given current allocations to the fixed gear fishery).

Reduction of the fleet to a relatively few vessels would risk concentration of the sablefish fleet and harvest benefits into a relatively few coastal communities and processors. In a six month season, larger capacity vessels could easily harvest over a half million pounds. Some simple calculations based on year 2000 limits show that given unlimited stacking, harvest may be consolidated on fewer than 15 vessels. This is an overestimate of the minimum number of vessels, because under an extended season limits would decline by at least 20 percent, increasing the number of permits that would need to be stacked to harvest a half million pounds and decreasing the number of vessels in the fleet.

<table>
<thead>
<tr>
<th></th>
<th>Tier 1</th>
<th>Tier 2</th>
<th>Tier 3</th>
<th>Total</th>
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</thead>
<tbody>
<tr>
<td>Number of Endorsements</td>
<td>31</td>
<td>44</td>
<td>89</td>
<td>164</td>
</tr>
<tr>
<td>Year 2000 Limits (Pounds)</td>
<td>81,000</td>
<td>37,000</td>
<td>21,000</td>
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<tr>
<td>Reduced Limits Under an Extended Season</td>
<td>64,800</td>
<td>29,600</td>
<td>16,800</td>
<td></td>
</tr>
<tr>
<td>Number of permits to be stacked to approximately reach 500,000 pounds</td>
<td>8</td>
<td>17</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>Number of 500,000 pound harvesters that could be supported given unlimited stacking</td>
<td>4</td>
<td>2.6</td>
<td>3</td>
<td>10</td>
</tr>
</tbody>
</table>

Given this potential for the consolidation of permits under the long season scenario, the Council is considering an option to limit the number of permits stacked on a single vessel to three. For analysis purposes, information is also presented on stacking with limits of 2 and 4 permits. In general, with the limits on permit stacking, there would be many vessels unable to harvest at close to their full capacity, even if they stacked three Tier-1 permits.

<table>
<thead>
<tr>
<th>Limit on Number of Permits Stacked</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum Number of Vessels (Assuming Maximum Amount of Stacking)</td>
<td>82</td>
<td>55</td>
<td>41</td>
</tr>
<tr>
<td>Maximum Harvest for a Vessel (Based on Stacking 3 Tier 1 Limits of 64,800 pounds)</td>
<td>129,600</td>
<td>194,400</td>
<td>259,200</td>
</tr>
<tr>
<td>Number of Vessels Believed Capable of Harvesting the Above Specified Maximum During a 6 month Fishery</td>
<td>Most</td>
<td>Most</td>
<td>Most</td>
</tr>
<tr>
<td>Number of Vessels Believed Capable of Harvesting 500,000 pounds in a 6 month season</td>
<td>(To be provided.)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Another alternative would be to vary the stacking depending on whether or not a Tier-1 permit was included among the stacked permits:

<table>
<thead>
<tr>
<th>Limit on Number of Permits Stacked</th>
</tr>
</thead>
<tbody>
<tr>
<td>3 if a Tier 1 is included;</td>
</tr>
<tr>
<td>4 if no Tier 1 Permit is</td>
</tr>
<tr>
<td>Stacked</td>
</tr>
<tr>
<td>3 if a Tier 1 is included;</td>
</tr>
<tr>
<td>5 if no Tier 1 Permit is</td>
</tr>
<tr>
<td>Stacked</td>
</tr>
</tbody>
</table>

Minimum Number of Vessels
(assuming maximum amount of stacking)

<table>
<thead>
<tr>
<th></th>
<th>44</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>38</td>
</tr>
</tbody>
</table>

While limits on permit stacking may increase the minimum number of vessels on which harvest will be concentrated, it does not limit concentration of ownership. In particular, those who retain the opportunity to harvest without being present on board the vessel (are exempted by the Provision 7 on grandfathering) may acquire an unlimited number of permits and fish those permits on different vessels as long as they have some share in ownership of those other vessels (under Provision 7 of the stacking proposal, the Council may wish to specify the share of vessel ownership required in order for permit owners to exercise their options under the Provision 7 “grandfather provision”).

Provision 4: Combination of Stacked Permits.

Options:

4a. **Permits May Be Unstacked.** Permits that are stacked would retain their original length, gear, fixed gear sablefish and tier endorsements and could be transferred to other vessels in the future (i.e. stacked permits would not take on the gear and length endorsement of the vessel’s designated base permit when unstacked).

4b. **Permits May Not Be Unstacked and Tier Endorsements are Not Tradeable.** When permits are stacked on a single vessel they would be reissued as a single permit that could not be redivided and endorsements remaining on the permit would confer the fishing opportunities specified in Provisions 1 and 2. The length endorsement would be the length endorsement on the permit designated as the base permit.

4c. **Permits May Not Be Unstacked and Tier Endorsements are Tradeable Among the Endorsed Fleet.** Same as Option 4b except that Tier endorsements could be transferred separate from the permit to another permit with a fixed gear sablefish endorsement. However, at least one tier endorsement must remain with the base permit. Permits would be limited to a maximum number of endorsements consistent with the maximum number of permits that can be stacked as specified in Provision 3 (a maximum of 3 endorsements per permit).

The stacking issue involves a balance between the incentive to stack and the degree to which consolidation is permanently locked in. If permits cannot be unstacked (Option 4b) individuals who stack permits would have to own the permits. As compared to freely stacking and unstacking (Option 4a), inability to unstack permits (Option 4b) would reduce future options for reorganizing business operations or liquidating some fishing privileges (i.e., impose a higher opportunity cost for stacking). While any gains from fleet consolidation would be permanently captured under a permanent stacking rule, the incentive for permit stacking would be less and hence the degree of consolidation less than if unstacking were allowed.

Some flexibility could be preserved if permits were stacked permanently but tier limits could be traded separately (Option 4c). This would make the system more like an ITQ program with sablefish trading in large blocks. The gains in capacity reduction for nonsablefish species would be locked in while flexibility in sizing the sablefish operations and expanding or contracting participation would be maintained. Additionally, the sablefish fleet could not be expanded because a minimum of one sablefish tier would have to remain with each permit. Thus a person with an unstacked permit could not sell the sablefish endorsement off the permit. Some consolidation of the sablefish harvesters would be locked in. When one permit is stacked with another, the number of sablefish endorsed permits would decline and the sablefish tier endorsements could only be traded to one of the remaining permits with sablefish endorsements.
Provision 5: Fishery Duration.

Options:

5a. The fishery would extend over a number of months (the initial recommended season is April 1 thru Oct. 31). There would be no preseason and postseason closures and vessels would be required to make their final deliveries prior to closure of the season. There would be no mop-up fishery.

5b. Current Situation: The fishery would continue to be managed as a modified derby followed by a mop-up. The current preseason and postseason closures would continue to apply and vessels would be required to cease fishing upon closure of the fishery. Permits would have to be stacked before some deadline prior to the start of the seasons in order to provide analysts and the Council sufficient time to assess and recommend appropriate cumulative limits and season durations. The steps would include (1) setting the allocation in November, (2) making a preliminary estimate of season lengths and limits and setting season opening date in March, (3) a deadline for stacking of May 15, and (4) final season duration and limits set in June. (Seasons would be continue to be set short enough that many vessels would be unable to fully take the allowed catch. In recent years the season duration has been slightly more than one week. Maintenance of this abbreviated fishery has been necessary to prevent the program from being classified as an individual quota program. Such programs are currently prohibited under the Magnuson-Stevens Act.)

Fishery duration will be one of the most important features determining the impacts of permit stacking provisions. If the current short seasons must be maintained to avoid individual quota classification (Option 5b), the amount of stacking will be less, new more complicated preseason procedures will have to be established, seasons would have to be shortened and more vessels would be pressed to harvest their limits in the allotted time, increasing safety concerns. More complicated preseason procedures would be created because the cumulative limits would be determined by the amount of stacking and season length. In order to know whether they wanted to stack permits, fishers would have to be provided with initial estimates of the cumulative limits. These initial estimates would then have to be adjusted after amount of stacking and season length is determined.

Under the longer season (Option 5a), every vessel would be assumed capable of fully taking its cumulative limit, therefore cumulative limits would not need to be adjusted to maintain overhead and avoid the IFQ classification. Moreover, the preseason openings and closures that affect all fixed gear vessels would no longer be required. For short seasons, these closures were needed to ensure that all vessels had a fair start and that the fishery could be closed at-sea (vessels cease fishing at the closure time but do not have to be in port).

If a longer season is allowed (Option 5a), there will be more stacking and consolidation in the fleet; there would be some involuntary reallocation with the decline in cumulative limits and with the elimination of the mop-up fishery (under which every vessel had an equal limit); opportunity for selective targeting or onboard highgrading of larger fish would increase; safety would improve; and preseason and post season closures would be unnecessary, simplifying the enforcement and management system (as previously mentioned). Highgrading may have positive or negative biological and economic consequences, depending on the degree of associated mortality and accurate measurement and accounting of the mortality (Section 3.2.1).

Under a longer season, permits may be transferred mid-season, unless the Council specifies otherwise. This would create a situation in which the buyer of a permit would be relying on the seller to inform him or her about the poundage already taken on the permit during the year. There is considerable delay between when fish tickets are filled out (complete with vessel information) and when those fish tickets are tied to a permit in the database. To reduce this "buyer-be-ware" situation, sellers might be required to provide buyers with true and complete copies of all fixed gear sablefish fish tickets for the period prior to the transfer. To assist in enforcement, the buyer could be required to keep these fish tickets on board, along with the receipts for all landings by the vessel to which the permit is transferred.
Provision 6: At-Sea Processing.

Note that "processing," as defined under the West Coast groundfish FMP, includes such activities as freezing but excludes heading and gutting).

Options: 
6a. At-sea processing would be prohibited in the fixed gear sablefish fishery.
6b. Current Situation: At-sea processing would be allowed in the fixed gear sablefish fishery. (Note: At-sea processing has not played a significant role in the fishery in recent years because of the short seasons in place since 1996.)

At one time there were some freezer-pot vessels and freezer-longline vessels that took sablefish off the West Coast. These vessels have not participated in the abbreviated seasons that generally characterized the fishery in the 1990s. Vessels generally deliver their catch to shoreside processors iced but not frozen. If permits can be stacked and the fishing season is extended (Option 5a), it is possible that freezer vessels may accumulate permits and return to the West Coast to take advantage of the flexible fishing opportunities. This would relocate processing jobs from smaller coastal communities to the freezer vessels and the offloading ports. Freezer vessels may draw their workers from many noncoastal and coastal communities and in the past have typically offloaded their catch in major city-ports such as Los Angeles. Prohibition of at-sea freezing would reduce the relocation of processing jobs and prevent on-shore off-shore allocation disputes from arising, such as the disputes that have occurred in the whiting fishery. However, if at-sea freezing is the most efficient way to harvest and process sablefish, the provision would also result in the loss of some economic benefit to the nation.

Provision 7: Owner-on-Board Provisions.

Options: 
7a. The permit owner would be required to be onboard the vessel during fishing operations, however there would be an exception for those owning permits as of the time the stacking program is established (Question: Does this provision apply to permits that are not stacked?)

Grandfathered Absentee Owners: Corporations, partnerships, and individuals who hold sablefish permits when stacking becomes permissible will not be required to be onboard the vessel on which the permit will be used, so long as they also own the vessel. These persons may acquire additional permits to stack with the permits they own, subject to accumulation caps, and still maintain their status under this provision. Additionally, this exemption from the permit-owner on board requirement will cease if there is any change in the identity of a corporation or partnership owning the stacked permits as follows:

A change in the identity of the corporation or partnership will be deemed to occur with a change in the corporate or partner membership, except a change caused by the death of a member providing the death did not result in any new members. Additionally, membership is not deemed to change if a member becomes legally incapacitated and a trustee is appointed to act on his behalf, nor is membership deemed to have changed if the ownership of shares among existing members changes, nor is membership deemed to have changed if a member leaves the corporation or partnership. Changes in the ownership of publicly held stock will not be deemed changes in ownership of the corporation.9

Emergency Exemption: NMFS may grant exemptions from this provision for medical and personal emergencies beyond the control of the permit owner.

7b. Current Situation: The permit owner would not be required to be on board the vessel during fishing operations.
7c. Same as 7a, except that the onboard requirement would apply only when permits are stacked.

Owner-on-board requirements were first discussed by this Council when a program was being developed for sablefish individual quotas. The intent of the owner-on-board requirements is to prevent control of the

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2/ The North Pacific Fishery Management Council language did not address corporations with publicly held stock.
fishery from falling into the hands of absentee owners that are not part of the traditional fishing communities. Concern had been voiced about income leaving fishery dependent communities. Fishers voiced concern about becoming “share croppers” instead of having the opportunity to be independent fishers. The concern was that wealthy individuals would accumulate fishing rights and not be willing to sell the rights at prices fishers could afford, given the fishers levels of wealth, liquidity, and available collateral. These concerns may be more prominent in situations such as that proposed here where access rights can only be acquired in large lumps (the tier levels associated with limited entry groundfish permits).

In developing the owner-on-board provisions the Council was concerned about disrupting existing fishing practices. Therefore, a “grandfather provision” was created to allow those already in the fishery to continue to hire skippers to fish their vessels or use their fishing rights. Initially it appeared that the “grandfather” status could be maintained indefinitely or circumvented either through leasing or by transferring ownership of the business owning a permit without registering a name transfer for the permit. Therefore, two clauses were added. The first required that in order to be exempt from the owner-on-board provision, the fishing right owner also had to own the vessel, essentially preventing leasing of the fishing rights. The second provision defined a change in ownership to occur with a change in the composition of those owning the business that owned a permit (with the exception of companies that were publicly owned). All of these provisions (owner-on-board, leasing prohibition, and definition of a change in ownership) were modeled after the North Pacific Fishery Management Council individual quota programs for sablefish and halibut.

Requiring the permit owner to be on board the vessel will make it very difficult for individuals, corporations, or partnerships not qualifying under the grandfather provision to establish any kind of absentee owner relationship to the fishery. However, any corporation, partnership, or individual with a permit when the program is put into place will be able to buy more permits and vessels, hire skippers and circumvent the owner-on-board requirement. The difficulties of getting all members of some corporations or partnerships on board a vessel would restrict the business organization opportunities for fishers that had not set themselves up in corporations or partnerships prior to the creation of the permit stacking program. The permit would have to be transferred into the name of a single individual who could always be on board and that individual would have to be at least part owner of the vessel. The option of requiring the permit owner to be on board only when permits are stacked (Option 7c) may achieve the objective of limiting the growth in absentee ownership in the fishery while maintaining business organization options for owners that do not choose to stack permits.

The option requiring a permit owner be on board the vessel would effectively create two classes of people: those grandfathered in, who would be allowed to designate skippers to use their permits either in response to temporary conditions (e.g., sickness, injury, vacations, conflicting business activities) or to become absentee owners, and those who must be on board their vessel at all times while their permit is being used, except when excused for unspecified personal emergencies by the NMFS. Traditional fishing practices have involved a certain amount of leasing and absentee interests in vessels and permits. These practices provide flexible business conditions that can facilitate gradual transitions into or out of the fishery or adjustment to other changing circumstances of the fishing business. Leases provide access to capital and, for those who lease assets out, the leasing may provide an important part of the income for their overall fishing operations. In general, regulations that reduce flexibility reduce efficiency (net benefits).

Requiring the permit owner to be on board would rule out the acquisition of sablefish harvest privileges by municipalities or other non-fishing entities for the purpose of stabilizing local economic activity.

Requiring the permit owner to be on board could lead to increased discards of sablefish if a mixed species fishery that includes some sablefish is pursued while the owner is not an board.

Provision 8: Nonsablefish Cumulative Limits.

The stacking of permits with sablefish endorsements would not allow vessels to harvest more than one cumulative limit for non-sablefish species.
The stacking proposal would allow the stacking of limits for only the most lucrative of the fixed gear groundfish species, sablefish. Sablefish management has been the primary fixed gear fleet issue occupying Council time and attention. Because sablefish is so lucrative, it is expected that permits would be stacked even if stacking does not confer the opportunity to harvest more cumulative limits for other species. The consolidation in the limited entry fixed gear fleet may result in greater per vessel cumulative limits for nonsablefish species than would have otherwise occurred.

If cumulative limits for nonsablefish species are also stacked, there may be even greater incentive to stack permits. However, stacking within the tiered system takes some account of differing production levels among vessels. Stacking where every vessel has an equal cumulative limit could result in more substantial expansion of catch rates as permits flow from less active to more active vessels. One of the consequences would be a decline of cumulative limits for vessels that do not stack permits. If stacking of nonsablefish cumulative limits is to be allowed, additional provisions would have to be developed for permits without sablefish endorsements.

**Provision 9: Vessels Without Sablefish Endorsements.**

**Options:**

9a. Current Situation: The limited entry daily-trip-limit fishery for vessels without sablefish endorsements would be closed during the primary fixed gear sablefish fishery.

9b. The limited entry daily-trip-limit fishery for vessels without sablefish endorsements would be allowed to run at the same time as the primary fixed gear sablefish fishery.

The original prohibition on harvest by fixed gear limited entry vessels during the primary fixed gear sablefish fishery was an attempt to simplify the situation for enforcement. Given the brevity of the primary fishery and that the daily-trip-limit fishery was managed with two-month cumulative limits, there was plenty of opportunity for limited entry fixed gear vessels without sablefish endorsements to make up fishing time lost during a closure for the primary fishery. The effort to simplify enforcement was not entirely successful because the open access daily-trip-limit fishery was allowed to run during the primary fishery. If the season length is extended to seven months (Option 5a), the limited entry fixed gear vessels without sablefish endorsements would be prohibited from fishing during the period when most of their catch is taken. Given this changed situation, the Council should reevaluate the balance between adverse impact to the unendorsed fleet and the additional enforcement burden and either reconfirm the current prohibition or make an adjustment such as that suggested in Option 10b.

**3.2 Biological Impacts**

The total allowable harvest will not change with stacking. Management problems with biological implications will vary depending on whether the fishery is managed under extended season (Option 5a) or as a modified derby (Option 5b).

**3.2.1 Highgrading**

**The Problem**

When there is a price-per-pound differential between different sizes of fish there may be incentive to highgrade. For sablefish, highgrading involves discarding small sablefish in order to retain larger sablefish. The degree to which this presents a biological problem is related to the discard mortality rate and the degree to which discard mortalities are not accounted for in stock assessment. If discard mortality is properly estimated and allowed harvest properly adjusted and controlled, the problem is more one of economic wastage than conservation.

When the situation is such that a vessel can take its limits with additional fishing time leftover, it is possible that the net revenue from continuing to fish and highgrade for larger fish may be greater than the net revenue from switching effort to the next best fishery. Highgrading has been reported for some fisheries.
(e.g., IFQ in New Zealand) and appears to be minimal for other fisheries (e.g. halibut and sablefish fisheries in Alaska) (NRC, 1990). An economic calculation using IPHC data from the halibut fishery indicated that highgrading the smallest halibut out of a 75,000 pound catch would increase revenues by $5,300 (3.7%). Achieving this additional $5,300 of revenue would require catching an additional 18,217 pounds of halibut to replace the 14,600 pounds of small fish discarded (NRC, 1990). This is the equivalent to extending the length of a trip and incurring related effort costs in order to harvest a fish that would bring $0.296 per pound ($5,300/18,217) at a CPUE similar to that in the halibut fishery. A similar analysis conducted for this Council in 1994 showed that highgrading sablefish would yield gross revenues similar to catching a fish that would bring between $0.20 and $0.27 per pound dockside, depending on the price differential between size categories (Council, 1994). Whether or not highgrading is worthwhile depends on the price spreads between different size categories of sablefish and the ratios in which different sized fish are caught. If time constraints and grounds crowding are relieved, fishers are better able to target on larger sablefish (reduce the proportion of small sablefish in their catch), there is an increase in the gross revenue per pound of fish caught to replace discarded fish. In the 1994 Council analysis, a one third reduction in the extra small category (from 54% to 36% of the catch) increased the expected gross revenue per additional pound caught from the $0.20 to $0.27 range to a $0.28 to $0.38 range. In order to determine whether these incentives to highgrade are significant, the question to be answered is whether once out on the grounds would fishers deploy some additional gear if there were an opportunity to harvest additional fish in the price ranges just discussed.

Fishery evidence shows that at a minimum, the average size of fish landed is substantially greater in slower paced West Coast fixed gear sablefish fisheries (Table A and following).

Assumed distribution of sablefish sizes after distribution of "unspecified grade" fish using average price for all landings of the same condition and size, based on data from the 1999 fishery.

<table>
<thead>
<tr>
<th></th>
<th>Daily-Trip-Limit Fishery</th>
<th>Three-Tiered Fishery</th>
<th>Mop-Up Fishery</th>
</tr>
</thead>
<tbody>
<tr>
<td>Large</td>
<td>22.0%</td>
<td>63.6%</td>
<td>11.0%</td>
</tr>
<tr>
<td>Medium</td>
<td>41.7%</td>
<td></td>
<td>32.0%</td>
</tr>
<tr>
<td>Small</td>
<td>30.1%</td>
<td>36.4%</td>
<td>42.0%</td>
</tr>
<tr>
<td>Extra-Small</td>
<td>6.2%</td>
<td>14.9%</td>
<td></td>
</tr>
</tbody>
</table>

Such highgrading may be achieved either through discarding from the deck/side or by targeting on larger fish that may be caught in certain geographic locations or in complexes with other species. It has also been suggested that pot vessels may highgrade by adjusting the mesh size in the panels. Fishers may have more ability to target larger size fish when there is less competition on the fishing grounds. Sablefish do not have swim bladders and anecdotal evidence from fishers suggests that discard mortality rates for sablefish taken in the fixed gear sablefish fishery are relatively low. The most important conservation issue is whether highgrading results in discard mortality and if so whether that discard mortality is properly accounted for in the management process. If highgrading for larger fish can be achieved with little or no discard mortality, the reduction of the amount of smaller fish in the harvest could increase the average annual growth rate of the sablefish biomass.

**Status Quo**

Under status quo management, some vessels are able to easily take their cumulative limit in the time allotted by the regular opening of the primary fishery and most vessels can easily take their cumulative limits in the time allotted for the mop-up fishery. For these openings and vessels, highgrading may be an issue.

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3/ This analysis used size composition reported by Washington port samplers in the early 1990s and prices from 1991-1993.
Stacking for an Extended Season (Option 5a)

In an extended season of 6 months, most vessels would likely have ample opportunity to harvest their limits within the allotted time, even for vessels that stack permits. Highgrading would be expected to increase if it is economically viable and provides more net revenue than the next best fishing opportunity.

Stacking for a Modified Derby (Option 5b)

If a short season must be maintained to avoid the IFQ classification, season length would likely be reduced as compared to status quo (see Appendix A). This would reduce the amount of excess time for any vessels that do not stack permits, reducing the opportunity for highgrading. Similarly, vessels that do stack permits would spend more time catching their limits and have less time for highgrading.

Relation to Other Aspects of the Stacking Proposal

The ability to stack pot and longline permits on a single vessel may result in a shift in the proportions of fish caught by each gear type. If one gear type is more conducive to unmeasured discard mortality from highgrading than the other gear type, there may be some effect on highgrading (either positive or negative) from allowing the two permit types to be stacked on a single vessel.

3.2.2 Unreported and Underreported Landings

Unreported or underreported landings can result in harvest in excess of target harvest levels, resulting in conservation problems for the stock.

The incentive and opportunity for cheating is greatest when a vessel has not yet fully taken its cumulative limit. In such a situation, the window of highest vulnerability to detection is relatively brief: the period of time between when the landing paperwork is completed and the fish is mixed with other landings of sablefish in a plant or shipped out of the landing area. The sablefish in a plant may include fixed gear, open access and trawl landings. For plants handling large volumes of sablefish, cheating by some vessels may be hidden as slightly higher than average recovery rates.

Status Quo

Under status quo management, many vessels have capacity far in excess of that needed to take the available cumulative limits during the season. For such vessels, advantage may be gained by underreporting the vessel’s first landing(s) so that more fish may be landed later in the season, however, the opportunity for making additional landings is very brief.

Stacking for an Extended Season (Option 5a)

Incentives and opportunities for cheating under an extended season would be similar to those available for other groundfish species under the current cumulative limit management system. The additional harvest opportunity gained by underreporting a particular landing would be available over several months. The primary difference in incentives for the fixed gear sablefish fishery as compared to other groundfish fisheries managed under cumulative limits is that the fixed gear sablefish is more valuable on a per pound basis than most other groundfish species, hence there may be a greater incentive for underreporting.

Stacking for a Modified Derby (Option 5b)

Stacking of permits would shorten the season. Both vessels that stack and do not stack permits will have less time to harvest the additional fish needed to take advantage of underreporting their landings. Thus with stacking and continued short seasons, the amount of incentive for underreporting would decline.
3.2.3 Collection of Biological Samples

An increase in at-sea dressing (heading and gutting) may make it more difficult to collect biological samples. Increased dressing at sea might be expected if the fishing season were extended, giving vessels more time to harvest their allotted limits (Option 5a). Table B shows that in 1996, landings for which condition was reported had more at-sea dressing during the daily-limit-fishery and mop-up than during the regular derby season (however, it should be noted when fish with unreported condition of landing are included in the calculation, the proportion of dressed fish increases during the derby season). Allowing the stacking of permits without relieving the individual quota constraint (Option 5b) may shorten the season, focusing more attention on completely harvesting the vessel limits than spending time dressing fish.

3.3 Social and Economic Impacts

3.3.1 Season Duration and Vessel Allocation

The stacking of permits would affect the allocation of fish among vessels and season duration. The basic stacking provision (Provision 1) would provide an opportunity for voluntary reallocation of fish among vessels.

Base Permits and Gear Usage (Provision 2)

Administratively, the easiest way to create a stacking program would be to associate the current cumulative limits with the permit rather than the vessel. However, with 132 longline permits and only 31 pot permits having sablefish endorsements (and hence sablefish tier endorsements), pot permit holders who wanted to stack would be at a considerable disadvantage in finding permits of the same gear type. Similarly, permits for large vessels are fewer in number than those for small vessels, thus owners of large vessels would be at a disadvantage compared to smaller vessels.

There is a groundfish fleet capacity reduction advantage to be gained from the stacking of permits. When permits are stacked, while usable harvest capacity in the fixed gear sablefish fishery will remain constant, limits for other groundfish species will not be combined. Thus, if three permits are stacked, where there was previously a potential for three vessels with cumulative limits for groundfish species other than sablefish, only one vessel will remain. To provide a more consistent opportunity for stacking across the fleet and to encourage stacking, Provision 2 would eliminate any length endorsement requirement for stacked permits (so long as one permit had the proper length endorsement) and provide three options for flexibility in the fixed gear to be used when permits are stacked.

Limits on Stacking (Provision 3) and Owner-on-Board Provisions (Provision 7)

Vessels would be able to increase their share of the catch by stacking up to three permits (Provision 3) except to the degree that their harvest share is constrained by season length (Option 5b). The limit on stacking permits is not an ownership limit. Therefore a single person could control and fish more than three permits. Owner-on-board requirements (Provision 7) would make fishing multiple vessels more difficult during short seasons (Option 5b), but during a longer season (Option 5a) the permit owner could move between vessels to fish multiple permits. Additionally, the owner-on-board provision would not apply to current permit holders. Therefore, current owners would be less constrained in accumulating larger shares of the harvest by leasing permits to other vessels.

Combination of Stacked Permits (Provision 4) and Nonsablefish Cumulative Limits (Provision 8)

When permits are stacked there would be some capacity reduction for nonsablefish species in that the stacked permits would confer the opportunity to harvest more sablefish but not more of other groundfish species. If stacked permits have been used by vessels to target other species there could be some reallocation of nonsablefish groundfish harvest toward other vessels. Under Option 4a, permits could be unstacked and capacity for targeting groundfish reintroduced. Preventing permits from being unstacked (Option 4b), or allowing only sablefish endorsements to be traded off stacked permits (Option 4c), would
permanently capture the reduced harvest capacity. On the other hand, the permanency of the decision to stack increases the investment risk of stacking and thus may reduce the amount of stacking which occurs. Allowing tier endorsements to be traded but requiring the permits remain stacked (Option 4c) would provide more investment flexibility than Option 4b while still capturing any gains in capacity reduction for nonsablefish groundfish.

Fishery Duration and Cumulative Limits (Provision 5)

Under Option 5a, there would be a shift of harvest toward lower capacity vessels. Under status quo, seasons are set short enough that vessels with small capacity relative to their cumulative limits are unable to take all of their cumulative limits in the allotted time. Managing to ensure cumulative limits are not a guaranteed amount of fish that vessels are able to harvest distinguishes the current management system from an individual quota system. If every vessel fully harvested its cumulative limit, harvest would exceed the amount allocated to the limited entry fixed gear primary fishery by an amount that has been termed “overhead.” The overhead has generally been set at 25% of the expected harvest. The lengthened season under Option 5a provides opportunity for every vessel to take its full cumulative limit, thus cumulative limits would have to be reduced (overhead eliminated) so that the allocation to the fishery is not exceeded. Cumulative limits would decline by about 20%. This would imply a reduction in harvest opportunity for vessels able to take close to their full cumulative limits under the short status quo seasons and an increase in harvest opportunity for vessels that harvest substantially below their cumulative limits during the status quo season.

Under Option 5b, there would be a shift toward higher capacity vessels that stack permits and away from lower capacity vessels. Tier cumulative limits would not change substantially; however, season length would decline. Example modeling for the year 2000 indicated that season length might be reduced from nine days to seven or eight days if permit stacking were allowed under the current moratorium on individual quota programs (permit stacking were allowed but season lengths had to be set to maintain overhead, Table 3 in Appendix A). The reduction in season length would adversely impact lower capacity vessels not able or just able to take their cumulative limits in a nine-day fishery.

Prohibition on At-Sea Freezing (Provision 6)

Prohibitions on at-sea freezing would prevent a shift of shore based processing operations to at-sea vessels (Option 6b). Currently, landing codes on fish tickets show no at-sea freezing is occurring.

Limits on the Number of Transfers Per Year (Provision 9)

In addition to simplifying harvest tracking and enforcement, the limit on the number of transfers per year has a capacity reduction effect such that a vessel owner must choose to forego all groundfish fishing for a year if a permit is leased. This makes it somewhat more costly for a vessel choosing to forgo the sablefish fishery in a given year in favor of an alternative fishery (e.g. tuna) to lease out its permit. Increasing the probability that a permit may remain dormant for a sablefish opening shifts allocation to active vessels. In an extended season (Option 5a), the likelihood that vessels would have to choose between the fixed gear sablefish fishery and other fisheries would be substantially reduced, reducing the capacity reduction and allocational effect of the limit on number of transfers per year.

Vessels Without Sablefish Endorsements (Provision 10)

Under status quo management, limited entry fixed gear vessels without sablefish endorsements are not allowed to harvest daily-trip-limits during openings of the primary fixed gear fishery. Because of the monthly cumulative limits that apply to the daily-trip-limit fishery, the loss of fishing time during the primary season openings is easily made up when the primary fishery is closed. If the primary season is extended to 6 months, the restriction prohibiting harvest by these unendorsed vessels during the primary fishery may severely constrain their harvest, allocating fish away from those unendorsed vessels most active during the extended primary season (proposed as April 1 through October 31, Option 5a). An alternative would be to allow fixed gear limited entry vessels without sablefish endorsements to fish their daily-trip-limits during the
primary fishery (Option 10b). The primary reason for not allowing these two segments of the fleet to operate concurrently was the additional complexity that would be added to the enforcement task. However, given that the open access fleet is allowed to continue to harvest its daily sablefish limits during the primary fishery there is likely a minimal additional detrimental impact on enforcement efforts from allowing between 70 and 80 other fixed gear permitted vessels to fish daily limits concurrently with the sablefish endorsed fleet's primary season.

3.3.2 Equity

National Standard 4 dictates that allocations be made in a fair and equitable manner. Because of the wide-ranging views in our society about what constitutes equitable allocation, there are not widely accepted standards against which an objective analysis can conclude that one allocation decision is more fair and equitable than another. There are no widely accepted measuring sticks for equity similar to those for evaluating such factors as efficiency. Therefore, analysis is limited to pointing out the major decision which would likely affect the allocation, perceived fairness and equity of a limited entry system and the rationale for those decisions. It will be up to each individual involved in the process to evaluate for him or herself whether the alternative adopted is, or would be evaluated by the general public to be, on the whole, fair and equitable.

3.3.3 Income and Employment

Effects on income and employment are discussed below in sections on groups affected. In particular the effects are discussed in sections on crew and communities. In general, a system which generates more efficient use of resources to generate the same amount of production will lead to an increase in income. Permit stacking is expected to have this effect, more so if Option 5a is selected than if Option 5b is selected. The amount of associated employment may, however, go up or down.

3.3.4 Relative Bargaining Strength

The main change in relative bargaining strength would occur if the season for fixed gear sablefish were extended (Option 5a). An extended season would give harvesters more delivery alternatives increasing the pressure on processors during price negotiations.

The owner-on-board requirement (Option 7a) would effectively prevent vertical integration into the harvesting sector by processors that do not currently own permits (assuming that the processors are not owned by a single individual willing to go to sea during sablefish harvest operations). Those processors that currently own a permit could continue to acquire additional permits and vertically integrate to secure control over a supply of sablefish.

The additional harvest flexibility and harvest certainty provided by an extended season (Option 5a) will likely increase the value of permits with tier endorsements. Those holding these permits will be made wealthier and thus will be more able to control and acquire additional permits for stacking.

(Following sections to be completed.)

3.3.x Safety

3.3.x Windfall Profits

3.3.x Fisher Job Satisfaction and Life Style

3.3.x Risk of Foreign Control

3.3.x Privatization of a Public Resource
3.3.x Entry and Exit
3.3.x Geographic Distribution
3.3.x Enforcement Costs
3.3.x Administrative Costs
3.3.x Council Workload and Process
3.3.x Benefit-Cost (Efficiency) Analysis
3.3.x Effects on Other Fisheries
3.3.x Summary of Effects on Groups

Include processors.

4.0 Other Applicable Law

4.x Small Business Impacts (Regulatory Flexibility Act)

The actions considered in this document may have significant impacts on small entities. Public comment is invited on adjustments that would reduce the impacts on small entities and on whether the analysis adequately takes impacts on small entities into account.

5.0 References

Council, 1994 (Supplemental IFQ Analysis)

NRC, 1999
TABLE A. Amounts of 1996 fixed gear sablefish catch by condition and size category for the daily-trip-limit, derby, and mop-up fishery.

<table>
<thead>
<tr>
<th></th>
<th>Daily Trip Limit</th>
<th>Derby</th>
<th>Mop-Up</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dressed Condition</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(percent of all dressed condition fish, excluding unspecified size)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Large</td>
<td>7%</td>
<td>3%</td>
<td>8%</td>
</tr>
<tr>
<td>Medium</td>
<td>27%</td>
<td>20%</td>
<td>27%</td>
</tr>
<tr>
<td>Small</td>
<td>64%</td>
<td>57%</td>
<td>54%</td>
</tr>
<tr>
<td>Extra-Small</td>
<td>3%</td>
<td>20%</td>
<td>10%</td>
</tr>
<tr>
<td>Pounds of Dressed Condition and Specified Size</td>
<td>237</td>
<td>2,077</td>
<td>244</td>
</tr>
<tr>
<td>Unspecified Size as a Percent of Total Dressed Pounds</td>
<td>4%</td>
<td>3%</td>
<td>4%</td>
</tr>
<tr>
<td><strong>Round Condition</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(percent of all round condition fish, excluding unspecified size)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Large</td>
<td>39%</td>
<td>1%</td>
<td>17%</td>
</tr>
<tr>
<td>Medium</td>
<td>26%</td>
<td>3%</td>
<td>50%</td>
</tr>
<tr>
<td>Small</td>
<td>29%</td>
<td>91%</td>
<td>33%</td>
</tr>
<tr>
<td>Extra-Small</td>
<td>6%</td>
<td>4%</td>
<td>0%</td>
</tr>
<tr>
<td>Pounds of Round Condition and Specified Size</td>
<td>31</td>
<td>143</td>
<td>18</td>
</tr>
<tr>
<td>Unspecified Size as a Percent of Total Round Pounds</td>
<td>49%</td>
<td>85%</td>
<td>68%</td>
</tr>
<tr>
<td><strong>Unspecified Condition</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(percent of all unspecified condition fish, excluding unspecified size)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Large</td>
<td>15%</td>
<td>16%</td>
<td>0%</td>
</tr>
<tr>
<td>Medium</td>
<td>54%</td>
<td>71%</td>
<td>83%</td>
</tr>
<tr>
<td>Small</td>
<td>31%</td>
<td>13%</td>
<td>17%</td>
</tr>
<tr>
<td>Pounds of Unspecified Condition and Specified Size</td>
<td>123</td>
<td>408</td>
<td>53</td>
</tr>
<tr>
<td>Unspecified Size as a Percent of Total Unspecified Condition Pounds</td>
<td>70%</td>
<td>60%</td>
<td>64%</td>
</tr>
<tr>
<td><strong>Dressed, Round, and Unspecified Combined</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pounds</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Large and Medium</td>
<td>184</td>
<td>830</td>
<td>143</td>
</tr>
<tr>
<td>Small and Extra-Small</td>
<td>190</td>
<td>1,798</td>
<td>172</td>
</tr>
<tr>
<td>Percent of Total (excluding unspecified sizes)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Large and Medium</td>
<td>49%</td>
<td>32%</td>
<td>45%</td>
</tr>
<tr>
<td>Small and Extra-Small</td>
<td>51%</td>
<td>68%</td>
<td>55%</td>
</tr>
</tbody>
</table>

a/ All poundage are expressed in round pound equivalents.
TABLE B. Amounts of 1996 limited entry fixed gear sablefish catch, by condition category for the daily-trip-limit, derby, and mop-up fishery.

<table>
<thead>
<tr>
<th>Total Pounds Landed, by Condition Category</th>
<th>Daily-Trip-Limit</th>
<th>Derby</th>
<th>Mop-Up</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dressed</td>
<td>248</td>
<td>2,150</td>
<td>254</td>
</tr>
<tr>
<td>Round</td>
<td>80</td>
<td>970</td>
<td>57</td>
</tr>
<tr>
<td>Unspecified</td>
<td>496</td>
<td>1,016</td>
<td>148</td>
</tr>
<tr>
<td>Total</td>
<td>824</td>
<td>4,136</td>
<td>459</td>
</tr>
</tbody>
</table>

Portion of **Specified Condition** Pounds Landed, by Condition Category

<table>
<thead>
<tr>
<th>Portion of Total Pounds Landed, by Condition Category</th>
<th>Portions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dressed</td>
<td>0.76</td>
</tr>
<tr>
<td>Round</td>
<td>0.24</td>
</tr>
<tr>
<td>Dressed</td>
<td>0.30</td>
</tr>
<tr>
<td>Round</td>
<td>0.10</td>
</tr>
<tr>
<td>Unspecified</td>
<td>0.60</td>
</tr>
</tbody>
</table>
PRELIMINARY EVALUATION OF THE EFFECTS OF PERMIT STACKING ON SEASON LENGTH AND LIMITS IN THE THREE-TIERED, LIMITED ENTRY, FIXED GEAR FISHERY FOR SABLEFISH

Prepared by Dr. James Hastie
of the National Marine Fisheries Service Northwest Fisheries Science Center

The draft version of the Strategic Plan presented to the Council at this meeting identifies the development of a voluntary stacking program for the three-tiered sablefish fishery as a high priority. In support of that discussion, this document summarizes the results of a modeling exercise intended to provide insight into the changes in season length and cumulative limits that would be required to maintain the desired level of "overhead" in the fishery. As such, this analysis is predicated on the assumption that the moratorium on new IQ programs remains in force.

If the moratorium were to lapse in 2000, a season length of at least two months would be anticipated in 2001. Since season length would be far less constraining under those circumstances, the number of permits that might reasonably be used for stacking would be higher and the distribution of stacked permits would be quite different than portrayed in this analysis. Without the need for overhead, cumulative limits would fall to the point where the cumulative limits times the number of endorsed permits in each tier equaled the target poundage for the fishery. Given the current target, the Tier 1 limit would be 66,510 pounds, with limits for Tiers 2 and 3 roughly 30,000 pounds and 17,000 pounds, respectively. A conservative expansion of the currently estimated permit catching capacities to reflect a 2-month season suggests that at least 62 permits could catch at least 200,000 pounds--about three Tier-1 limits--in that amount of time. Of course, this represents the ability of these 62 permits to catch the equivalent of 186 Tier-1 limits, and there are only 164 sablefish-endorsed permits, and just 27 of those are Tier 1. Given this circumstance, the ultimate disposition of stacked permits in a two-month fishery without overhead considerations would be highly uncertain.

In the modeling scenario developed for this analysis, 30 permits are assumed to be stacked in a fishery with the same target poundage as in 2000. The primary criterion used in determining which permits would add an additional permit was the poundage difference between the estimated catching capacity of the permit and the amount of its current cumulative limit. The degree to which that catching capacity has actually been utilized in recent fisheries was also considered. Determining which permits would be included in the group providing the stacked permits was more complicated. Factors included in developing a ranking permits according to their likelihood of being stacked included 1) the difference between a permit's current limit and its projected landings; 2) the difference between a permit's current limit and its recent sablefish landings; 3) the value of its sablefish limit poundage relative to recent earnings from other groundfish and non-groundfish species; and 4) ownership of multiple permits and whether any such permits are currently leased.

To simplify the modeling, no more than one permit was stacked on any other, and the original permit attached to a vessel was always retained by that vessel if it remained in the fishery. In other words, a vessel currently having a Tier-2 permit was only evaluated with regard to adding another permit, not with regard to selling it and buying two Tier-3 permits. The analysis does not evaluate how many permits would be stacked if the opportunity were available. No consideration of the cost of obtaining permits or the effects of doing so on vessel profitability was included. Permits selected to add another permit were assigned a permit from a tier having a limit poundage that was less than, or near, the estimated difference between their catching capacities and existing limit poundages.

The number of 30 stacked permits was selected, during the evaluations described above, because it did not appear that many more permits would have an ability to make full use of an additional limit, given the time constraints placed on the fishery. Therefore, 30 probably represents a reasonable estimate of the largest number of permits that would be stacked under a voluntary program subject to existing overhead
considerations. Uncertainties regarding the limit poundage that would be realized through stacking, as well as the time that would be available to catch it, could discourage some potential stackers from doing so. Additionally, market conditions might be such that the expected financial benefits from stacking would not exceed the costs of permit acquisition for many vessels that have the physical capability of landing additional limits. Because those who acquire additional permits to stack will be buying permits conveying access to a suite of groundfish species—not just sablefish—the status of rockfish allocation, fixed gear rockfish endorsements, changes in groundfish limits for 2001 (and beyond), and the ability to obtain higher rockfish limits through stacking will also affect the willingness of individuals to purchase permits for stacking. On the basis of current ownership of multiple permits and permits that have few or no landings in recent fisheries, a reasonable estimate for the minimum number of stacked permits would be in the 7-10 range.

Table 1 provides a summary of permit shifts used in this scenario. The pool of 30 stacked permits is drawn from all three tiers: three from Tier 1, nine from Tier 2, and 18 from Tier 3. This represents about 11% of the Tier-1 permits, and about 20% of the permits in each of the other tiers. The stacked Tier-1 permits were distributed to one permit in each of the three tiers. Of the 9 stacked Tier-2 permits, three went to Tier-1 permits, two to Tier-2 permits, and four to Tier-3 permits. Of the 18 stacked Tier-3 permits, three were assigned to Tier-1 permits, seven to Tier-2 permits and eight to Tier-3 permits.

Each of the two models used to provide recommendations for the 2000 fishery (Attachment D.6.a.) was used to project limit size and season length under this assumed distribution of permits. Table 2 summarizes the overhead results using these model configurations, with the addition of stacking. Also, the last row shown for each model indicates the estimated amount of overhead if this stacked fleet were provided with the season length and limits recommended for the 2000 fishery (with that model). The right-hand columns illustrate the difference in the contribution to estimated overhead between the group of permits fishing a single limit and those fishing two.

Table 3 provides a more detailed summary of limit amounts, season lengths and overhead for the two model configurations. For each case, the 2000 model results without stacking are provided first, for comparative purposes. With stacking, an 8-day fishery, under Model 1, would meet the worst-case overhead goal of exceeding 15%, however the expected overhead is slightly below the current minimum target of 25%. As a result, both models indicate that in order to meet both overhead standards, the fishery would need to be constrained to seven days. This would represent a reduction of two days from the 2000 Model-1 recommendation and one day from the Model-2 recommendation. Due to the greater reduction in length under Model 1, the limits available for a seven-day fishery with 30 stacked permits would be about 6% higher than recommended for a nine-day fishery in 2000. Because the eight-day scenario is so close to achieving the overhead objectives, reduction of another full day produces much higher overhead than necessary (41%). Projected limits for seven days under the more conservative Model 2 are lower than the Model-2 recommendations for 2000, but the estimated overhead is closer to the minimum standards.

Assuming that sufficient overhead will continue to be a concern, the difference between these results and projections for the 2000 fishery underscores the need for a management structure which will allow final parameters for the fishery to be determined after a deadline has passed marking the close of permit stacking that can be utilized during that year's fishery.
TABLE 1. Distribution of three-tiered sablefish endorsements in the hypothetical modeling of 30 stacked permits.

<table>
<thead>
<tr>
<th></th>
<th>Original tier assignment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1</td>
</tr>
<tr>
<td># of Tier 1 endorsements after stacking</td>
<td>25</td>
</tr>
<tr>
<td># of Tier 2 endorsements after stacking</td>
<td>3</td>
</tr>
<tr>
<td># of Tier 3 endorsements after stacking</td>
<td>3</td>
</tr>
<tr>
<td>Total endorsements after stacking</td>
<td>31</td>
</tr>
<tr>
<td># of stacked permits</td>
<td>3</td>
</tr>
<tr>
<td>Tier 1 only</td>
<td>17</td>
</tr>
<tr>
<td>Tier 2 only</td>
<td></td>
</tr>
<tr>
<td>Tier 3 only</td>
<td></td>
</tr>
<tr>
<td>Tier 1+1</td>
<td>1</td>
</tr>
<tr>
<td>Tier 1+2</td>
<td>3</td>
</tr>
<tr>
<td>Tier 1+3</td>
<td>3</td>
</tr>
<tr>
<td>Tier 2+2</td>
<td></td>
</tr>
<tr>
<td>Tier 2+3</td>
<td></td>
</tr>
<tr>
<td>Tier 3+3</td>
<td></td>
</tr>
</tbody>
</table>

TABLE 2. Comparison of estimated overhead for the entire fleet with values for vessels stacking permits or fishing a single permit in the hypothetical stacking scenario.

<table>
<thead>
<tr>
<th>Model 1 configuration</th>
<th>Fleet Overhead</th>
<th>Overhead among Vessels With:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Stacked Permits</td>
<td>Single Permits</td>
</tr>
<tr>
<td>8 days</td>
<td>22%</td>
<td>9%</td>
<td>33%</td>
</tr>
<tr>
<td>7 days</td>
<td>41%</td>
<td>18%</td>
<td>61%</td>
</tr>
<tr>
<td>9 days and 2000 limits</td>
<td>19%</td>
<td>8%</td>
<td>26%</td>
</tr>
<tr>
<td>Model 2 configuration</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7 days</td>
<td>30%</td>
<td>10%</td>
<td>46%</td>
</tr>
<tr>
<td>8 days and 2000 limits</td>
<td>25%</td>
<td>8%</td>
<td>38%</td>
</tr>
</tbody>
</table>
TABLE 3: Comparison of recommendations for the duration and cumulative limits for the 2000 primary fishery with projections for a fishery in which 30 underutilized permits were stacked.

<table>
<thead>
<tr>
<th></th>
<th>Tier 1</th>
<th>Tier 2</th>
<th>Tier 3</th>
<th>Total</th>
<th>Worst Case (1-day differential)</th>
</tr>
</thead>
<tbody>
<tr>
<td># of permits</td>
<td>27</td>
<td>43</td>
<td>94</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Model 1: (less conservative)
with a general landings reduction of 1% and landings reductions for permits not fishing in [1999:1998:1997] of (30%:20%:10%) and/or landings reductions for achieving less than [50%:70%] of their available 1999 limit (20%:10%)

Tier-specific capacity reductions 2% 13% 33%

Model results for the 2000 fishery

<table>
<thead>
<tr>
<th></th>
<th>Duration</th>
<th>Cumulative Limit</th>
<th>Expected landings</th>
<th>Overhead</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>9 days</td>
<td>81,278</td>
<td>36,731</td>
<td>21,101</td>
</tr>
<tr>
<td></td>
<td></td>
<td>68,009</td>
<td>29,664</td>
<td>14,774</td>
</tr>
<tr>
<td></td>
<td></td>
<td>20%</td>
<td>24%</td>
<td>43%</td>
</tr>
</tbody>
</table>

Model results with 30 stacked permits

<table>
<thead>
<tr>
<th></th>
<th>Duration</th>
<th>Cumulative Limit</th>
<th>Expected landings</th>
<th>Overhead</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>8 days</td>
<td>77,753</td>
<td>35,139</td>
<td>20,186</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4,496,899</td>
<td>4,711,315</td>
<td>22%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>20%</td>
<td>24%</td>
<td>43%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Duration</th>
<th>Cumulative Limit</th>
<th>Expected landings</th>
<th>Overhead</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>7 days</td>
<td>86,054</td>
<td>38,890</td>
<td>22,341</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4,309,769</td>
<td>4,711,315</td>
<td>41%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>32%</td>
<td>33%</td>
<td>50%</td>
</tr>
</tbody>
</table>

Model 2: (more conservative)
with a general landings reduction of 2% but smaller landings reductions for permits not fishing in [1999:1998:1997] of (20%:10%:10%)

Tier-specific capacity reductions 4% 15% 35%

Model results for the 2000 fishery

<table>
<thead>
<tr>
<th></th>
<th>Duration</th>
<th>Cumulative Limit</th>
<th>Expected landings</th>
<th>Overhead</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>8 days</td>
<td>85,712</td>
<td>38,735</td>
<td>22,252</td>
</tr>
<tr>
<td></td>
<td></td>
<td>64,706</td>
<td>29,083</td>
<td>14,817</td>
</tr>
<tr>
<td></td>
<td></td>
<td>32%</td>
<td>33%</td>
<td>50%</td>
</tr>
</tbody>
</table>

Model results with 30 stacked permits

<table>
<thead>
<tr>
<th></th>
<th>Duration</th>
<th>Cumulative Limit</th>
<th>Expected landings</th>
<th>Overhead</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>7 days</td>
<td>80,095</td>
<td>36,197</td>
<td>20,794</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4,355,905</td>
<td>4,711,315</td>
<td>30%</td>
</tr>
<tr>
<td></td>
<td></td>
<td>30%</td>
<td>20%</td>
<td></td>
</tr>
</tbody>
</table>
APPENDIX B

Needed Changes to Groundfish FMP

This appendix outlines changes to the FMP text that would be needed to implement those aspects of the stacking alternative that would require an FMP amendment (see Section 1.6). Text to be added is highlighted in bold italics and text to be deleted is struck through.

Existing FMP Language Authorizing Permit Stacking

Section 14.2.4 of the FMP authorizes the stacking of permits and reads as follows (bolded text added as part of Amendment 13):

1. Ownership Restriction and Changes in Ownership

   1. Only entities (human beings, corporations, etc.) qualified to own a U.S. fishing vessel may be issued or may hold (by ownership or otherwise) an LE permit. (Foreign ownership of LE permits should be limited to the maximum degree possible given what is allowed under the law.)

   2. Ownership of a permit will be considered to change when there is an ownership change on U.S. Coast Guard documents, however, an owner can submit documents to demonstrate that the controlling interest has not changed and therefore the change in documentation is not a change in ownership.

   3. An entity qualified to hold an LE permit may hold more than one LE permit. If the Council authorizes a LE permit stacking program, in which a vessel could use more than one permit simultaneously, each LE fishery participant would be required to hold at least one LE "base" permit. An LE base permit is the initial permit necessary to participate in the LE fishery, and subject to all of the requirements described herein for LE permit ownership qualifications, and gear and length endorsements. Requirements and additional priorities for permits "stacked" on to base permits may be authorized in a federal rulemaking.

Any Provision 2 Stacking Option Combined with Option 4a of the Stacking Alternative

Section 14.2.4 gives the Council the authority to create a permit stacking program, however, Provision 2 of the stacking alternative specifies that where a trawl endorsement is involved in permit stacking (i.e. a permit has both a trawl endorsement and at least one fixed gear endorsement), if permits can be unstacked (Option 4a), the downsizing requirement for trawl permits will be waived. The following the changes to the FMP needed to implement any Provision 2 option combined with Option 4a.

14.2.7 Size Endorsement Will Specify the Vessel Length

The LE permit will be endorsed with the length overall (as defined for purposes of U.S. Coast Guard documentation) of the vessel for which the LE permit is initially issued. The length for which the LE permit is endorsed will be changed only when LE permits are combined, as per Section 14.2.10, or, in the case of LE permits endorsed for trawl gear, when the size of the vessel used with the permit is more than five feet less than the originally endorsed length. In the latter case, the LE permit will be reissued with a size endorsement for the length of the smaller vessel. Regulations may be promulgated to waive this downsizing requirement if the permit was transferred to a smaller vessel for the purpose of stacking (See Section 14.2.4 paragraph 3). Vessels which do not have documents stating their length overall will have to be measured by a marine surveyor or the U.S. Coast Guard and certified for that length.
14.2.9 Transfer of an LE Permit to Different Owners or Vessels of the Same Owner

3. LE permits may be used with vessels greater in length than the endorsed length provided the increase does not exceed five feet of the endorsed length. Original size endorsements will change only when LE permits are combined as per Section 14.2.10, or when an LE permit with a trawl endorsement is transferred to a vessel five feet less in length than the endorsed length. In the latter case, the LE permit will be reissued with a size endorsement for the length of the smaller vessel. Regulations may be promulgated to waive this downsizing requirement if the permit was transferred to a smaller vessel for the purpose of stacking (See Section 14.2.4 paragraph 3).

Option 4c of the Stacking Alternative

Section 14.2.4 gives the Council the authority to create a permit stacking program and require that once permits are stacked they cannot be unstacked. However, tier limits are associated with the sablefish endorsement. In order to allow tier limits to be transferred separately from the sablefish endorsements, as specified in Option 4c, Section 14.2.6 paragraph 4 of the FMP would be amended to read:

4. If permits are stacked such that a single permit has multiple sablefish endorsements, sablefish endorsements and associated cumulative limits may be transferred to other sablefish endorsed permits so long as at least one sablefish endorsement and associated tier limit remains with the permit. Fixed gear sablefish endorsements may not be transferred from permits on which there is only one fixed gear sablefish endorsement. are not separable from the LE permit and therefore may not be transferred separately from the LE permit.

Options 7a and 7c of the Stacking Alternative

Section 14.2.4 gives the Council the authority to create a permit stacking program and require that permit owners be on board the vessel when permits are stacked. However, Option 7a would require all permit owners to be on board while a vessel is participating in the primary fixed gear sablefish fishery, even when permits are not stacked. Additionally, for the purpose of implementing a grandfather clause, Options 7a and 7c would create a definition of change in ownership different from that in the FMP. To implement the grandfather clause Section 14.2.4 of the FMP would need to be modified as follows.

14.2.4 Ownership Restriction and Changes in Ownership

4. For the purpose of provisions specifically identified by the Council, NMFS may promulgate regulations which define a change in ownership of a permit as a change in the identity or ownership interest of a corporation or partnership owning a permit.

To implement the owner-on-board requirement for permits that are not stacked (Option 7a), a new section (Section 14.2.12) would be added to the FMP:

14.2.12 Owner-on-board Requirements

In order to preserve the social and historic characteristics and practices in the fishery or to encourage the flow of fishery benefits into fishing communities, on the Council’s recommendation, as it deems appropriate and consistent with the goals of the groundfish FMP and National Standards, NMFS may require permit owners to be on-board a vessel during fishing operations.
Option 9b of the Stacking Alternative

Under the extended season specified in Option 5a, vessels with fixed gear limited entry permits that do not have sablefish endorsements would not be able to operate for a substantial portion of the season. If these vessels are to be provided a fixed gear sablefish opportunity during the primary fixed gear fishery, the following changes would be needed in the FMP language.

14.2.6 Fixed Gear Sablefish Endorsements

1. The permit and gear endorsement requirements of the license limitation program limit the number of vessels which may participate in the groundfish fishery, however, there is still substantial opportunity for vessels to shift between segments of the groundfish fishery. One of the segments of the limited entry fishery subject to an increase in the number of vessels participating is the limited entry fixed gear sablefish fishery. To prevent the movement of vessels from nonsablefish segments of the limited entry fixed gear groundfish fishery to the sablefish segment of the fishery, a fixed gear sablefish endorsement for limited entry permits is required for longline and fishpot gear limited entry vessels to take sablefish against the fixed gear limited entry allocation and as part of the primary fishery, the major limited entry fixed gear sablefish harvest opportunities north of 36°N latitude. Such endorsements are not required to harvest under fixed gear limited entry daily-trip-limit or other regulations intended to allow low level or incidental harvest during periods of time specified in the regulations. The general intent is to require an endorsement to take part in the major limited entry fixed gear sablefish harvest opportunities north of 36°N latitude, but not when management measures are intended to allow only small or incidental sablefish harvests.

14.2.8 An LE Permit and Necessary Gear and Sablefish Fixed Gear Endorsements Will Be Held by the Owner of Record of the Vessel

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