DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

50 CFR Part 660

[Docket No. 0809121213–81246–01]

RIN 0648–AX24

Magnuson-Stevens Act Provisions; Fisheries Off West Coast States; Pacific Coast Groundfish Fishery; 2009–2010 Biennial Specifications and Management Measures

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

ACTION: Proposed rule; request for comments.

SUMMARY: NMFS proposes a rule to set the 2009–2010 harvest specifications and management measures for groundfish taken in the U.S. exclusive economic zone (EEZ) off the coasts of Washington, Oregon, and California and to revise rebuilding plans for four of the seven overfished rockfish species, consistent with the Mangunson-Stevens Fishery Conservation and Management Act and the Pacific Coast Groundfish Fishery Management Plan. Together, the revisions to rebuilding plans and the 2007–2008 harvest specifications and management measures are intended to rebuild overfished stocks as soon as possible, taking into account the status and biology of the stocks, the needs of fishing communities, and the interaction of the overfished stocks within the marine environment.

DATES: Comments on this proposed rule must be received no later than 5 p.m., local time on January 30, 2009.

ADDRESSES: You may submit comments, identified by RIN 0648–AX24 by any one of the following methods:

- *Electronic Submissions:* Submit all electronic public comments via the Federal eRulemaking Portal *http://www.regulations.gov.*
- *Fax:* 206–526–6736, Attn: Gretchen Arentzen
- *Mail:* D. Robert Lohn, Administrator, Northwest Region, NMFS, 7600 Sand Point Way NE, Seattle, WA 98115–0070, Attn: Gretchen Arentzen.

Instructions: All comments received are a part of the public record and will generally be posted to *http://www.regulations.gov* without change. All Personal Identifying Information (for example, name, address, etc.) voluntarily submitted by the commenter may be publicly accessible. Do not submit Confidential Business Information or otherwise sensitive or protected information.

NMFS will accept anonymous comments. Attachments to electronic comments will be accepted in Microsoft Word, Excel, WordPerfect, or Adobe PDF file formats only.

FOR FURTHER INFORMATION CONTACT: Gretchen Arentzen (Northwest Region, NMFS), phone: 206–526–6147, fax: 206–526–6736 and e-mail *gretchen.arentzen@noaa.gov.*

SUPPLEMENTARY INFORMATION:

Electronic Access

This proposed rule is accessible via the Internet at the Office of the Federal Register's Web site at *http://www.gpoaccess.gov/fr/index.html.* Background information and documents are available at the Pacific Fishery Management Council's Web site at *http://www.pcouncil.org/.*

Background

The amount of each Pacific Coast groundfish species or species group that is available for harvest in a specific year is referred to as a harvest specification. Harvest specifications include acceptable biological catches (ABCs), optimum yields (OYs), and harvest guidelines (HGs). Harvest specifications may also include ''set-asides'' of harvestable amounts of fish.

The ABC is a biologically based estimate of the amount of fish that may be harvested each year without affecting the sustainability of the resource. The ABC may be modified with precautionary adjustments to account for uncertainty. An OY is a target harvest level for a species or species groups. The OYs may be set equal to the ABC for the species or species group, but are often set lower as a precautionary measure. The Council's policies on setting ABCs, OYs, and other harvest specifications are discussed later in the preamble to this proposed rule. Proposed harvest specifications for 2009–2010 are provided in Tables 1a through 2c.

Management measures being proposed for 2009–2010 work in combination with the existing regulations to create a management structure that is intended to constrain fishing so the catch of overfished groundfish species does not exceed the rebuilding-based OYs while allowing, to the extent practicable, the OYs for healthier groundfish stocks that co-occur with the overfished stocks to be achieved. In order to rebuild overfished species, allowable harvest levels of healthy species will only be achieved where such harvest will not deter rebuilding of overfished stocks. Routine management measures for the commercial fisheries include: Bycatch limits, trip and cumulative landing limits, time/area closures, size limits, and gear restrictions. Routine management measures for the recreational fisheries include bag limits, size limits, gear restrictions, fish dressing requirements, and time/area closures. Routine management measures are used to modify fishing behavior during the fishing year to allow a harvest specification to be achieved, or to prevent a harvest specification from being exceeded. The groundfish fishery is managed with a variety of other regulatory requirements that are not considered routine, and which are outside of this rulemaking and found at 50 CFR 660, subpart G. The regulations at 50 CFR 660, subpart G include, but are not limited to: Long-term harvest allocations; recordkeeping and reporting requirements; monitoring requirements; license limitation programs; and essential fish habitat (EFH) protection measures. Together the routine management measures and regulations at 50 CFR 660, subpart G are used to manage the Pacific Coast groundfish fishery to stay within the harvest specifications identified in the rulemaking.

The Pacific Coast Groundfish Fishery Management Plan (FMP) requires the Council to set harvest specifications and management measures for groundfish at least biennially. This proposed rule would set 2009–2010 harvest specifications and management measures for all of the 90 plus groundfish species or species groups managed under the Pacific Coast Groundfish FMP, except for Pacific whiting. Pacific whiting harvest specifications are proposed as a range in this action. The Council will consider final Pacific whiting specifications after new stock assessments are prepared at the beginning of each year. The final specifications for 2009 and 2010 will be announced following the March 2009 and March 2010 Council meetings, respectively.

There are seven Pacific Coast groundfish species that are currently being managed under rebuilding plans established in Amendment 16–4 to the FMP. Amendment 16–4 was developed and approved to respond to the decision in *Natural Resources Defense Council* v. *NMFS,* 421 F.3d 872 (9th Cir. 2005) [hereinafter *NRDC* v. *NMFS*]. The overfished species are: Bocaccio, canary rockfish, cowcod, darkblotched rockfish, Pacific Ocean Perch (POP), widow rockfish, and yelloweye rockfish.

This action proposes to revise rebuilding plans for four of the seven overfished groundfish species (canary rockfish, darkblotched rockfish, cowcod, and yelloweye rockfish), consistent with the approach taken in Amendment 16–4, by revising target rebuilding dates and/or harvest rates specified in Federal regulations at 50 CFR 660.365.

The focus of the preamble discussion is the Council's ABC and OY policies for 2009 and 2010, new harvest specifications, new fishery specific management measures, and other issues related to the management of the Pacific Coast groundfish fishery in 2009 and 2010. Preambles to prior proposed rules have more thoroughly discussed bycatch accounting and reduction measures (See 67 FR 1555, January 11, 2002; 68 FR 936, January 7, 2003; 69 FR 1380, January 8, 2004; 69 FR 56563, September 21, 2004 for historical information on the bycatch model). On June 27, 2006, NMFS published a proposed rule to implement Amendment 18 to the FMP on bycatch mitigation (71 FR 36506.) The preamble to the Amendment 18 proposed rule discussed NMFS and Council bycatch accounting and mitigation policies, programs, and regulations. The preamble for the 2007 and 2008 harvest specifications and management measures fully described a new approach to overfished species management that was taken by NMFS, the Council, and state and tribal partners in light of *NRDC* v. *NMFS* (71 FR 57764, September 29, 2006). The same approach has been followed in this rulemaking. Issues that were thoroughly discussed in previous rulemakings will only be briefly discussed in this preamble as they pertain to 2009–2010 fisheries. On December 2005, NMFS published a final EIS on the designation of groundfish EFH and minimization of adverse fishing effects on EFH. (*http://www.nwr.noaa.gov/Groundfish-Halibut/Groundfish-Fishery-Management/NEPA-Documents/EFH/-Final-EIS.cfm*). The final EFH EIS provides information on the interactions of groundfish species with their physical environment. Amendment 16–4 and the 2007–2008 groundfish specifications and management measures expand upon the EFH EIS's analysis to analyze the interactions of groundfish species with each other and with other marine species within the California Current ecosystem.

Consistent with the FMP, the socio-economic effects of this action on communities were analyzed to provide guidance on the effects of the action on fishing communities. Fishing communities need a sustainable fishery that is safe, well managed, and profitable, that provides jobs and incomes, that contributes to the local social fabric, culture, and image of the community, and helps market the community and its services and products. In its 2007–2008 recommendations for overfished species rebuilding plans and groundfish specifications and management measures, the Council was clear that it did not expect fishing community needs could be met. The Council took the needs of communities into account as it analyzed different rebuilding plans and management measures alternatives. As a result, the rebuilding plans, groundfish specifications and management measures recommended by the Council and adopted for 2007–2008 were expected to allow fishing businesses and communities to operate at a level that would provide for the continued existence of those fishing businesses and communities and would only allow opportunities for economic growth or profit if they were consistent with the adopted rebuilding policies. In many instances the harvests of healthy stocks were curtailed by the projected effects on overfished species. The Council used this same approach in the development of the 2009 and 2010 specifications and management measures.

Further discussion on how the needs of fishing communities were taken into account can be found in the preamble to the proposed rule for the 2007–2008 specifications and management measures (71 FR 57765, September 29, 2006). The supporting DEIS for this action assesses, through the analysis of several rebuilding alternatives, the needs of groundfish fishing communities, the dependence of fishing communities on overfished species, and the vulnerability of fishing communities to further near-term reductions in groundfish harvest.

Management Measure Approach

In considering the effects of the action on fishing communities, the effects of inseason fishery management changes on fishing communities were considered. At the start of each biennial management cycle, NMFS and the Council establish fishery management measures that are expected to allow fishers to harvest as much of the healthy species OYs as possible without exceeding allowable harvest levels for co-occurring overfished species. These management measures are set using the best scientific information available at the time. However, as catch data and new scientific information may become available during the fishing year, NMFS and the Council's knowledge may change. Catch data vary in quality and abundance both before and during the season, and catch of the most constraining overfished species may also occur in fisheries not managed under the Pacific Coast groundfish FMP. Managing a coastwide fishery to ensure that OYs of overfished species are not exceeded is particularly difficult because of the low OY levels. If new information received during the season reveals that landings are occurring at a faster pace than were initially anticipated, management action would be needed to keep the harvest of healthy stocks and the incidental catch of overfished species at or below their specified OYs. If these inseason adjustments to management measures are dramatic, such as an early closure of a fishery, then the effects of management actions on the fishing communities can be severe.

To prevent major inseason fluctuations in available harvest, the 2009–2010 harvest levels account for uncertainty in order to minimize the potential need for dramatic inseason measures. In other words, currently available scientific information is used to design management measures that are projected to result in overfished species harvest levels that are somewhat lower than their OYs. This practice provides a buffer to account for both scientific uncertainty and unexpected occurrences. In general, a buffer helps prevent OYs from being exceeded. Even with these safeguards, information that becomes available during the 2009–2010 fishing year may reveal that previously set management measures need to be revised inseason. If that is the case, management measures will be appropriately adjusted inseason to keep harvest from exceeding OYs.

Specification and Management Measure Development Process

The process for setting biennial specifications begins with stock assessments to evaluate the status of the groundfish stocks or stock complexes. After being prepared by a stock assessment scientist, each stock assessment is reviewed by the Council's stock assessment review (STAR) team as well as the Council's Scientific and Statistical Committee (SSC). The SSC reviews the stock assessments and provides guidance to the Council relative to the stock assessment's suitability for use in groundfish fishery management decision making. The SSC also endorses the assessments and identifies if they are the ''best available science'' on the stock's status. During

the review process for the 2009–2010 stock assessments, the SSC indicated that the current stock assessments were more thorough and of a higher quality than those used in the previous management cycles. At its June, September and November 2007 meetings, the Council reviewed the new stock assessments, stock assessment updates and rebuilding analyses, and made recommendations regarding the use of the various stock assessments for setting the 2009–2010 specifications. No new species were identified as overfished or approaching an overfished condition.

At its November 2007 meeting, the Council adopted initial fishery specifications based on the new assessments and rebuilding analyses. These recommendations included preliminary ABCs and ranges of OYs for most groundfish species, and where possible, preferred OYs. As a result of the new stock assessments, the SSC recommended that the Council consider revisions to three overfished species rebuilding plans: Canary rockfish; darkblotched rockfish; and cowcod. At this same meeting, the Council provided a variety of potential management measures to be considered for the 2009–2010 fisheries. Over winter, the Council's advisory bodies met to discuss and analyze the Council's preliminary fishery specifications and potential management measures based on the initial specifications.

At its April 2008 meeting, the Council identified its preferred final 2009 and 2010 ABCs for all groundfish species and species complexes; identified preliminary preferred OYs for most managed groundfish species and species complexes; adopted revised rebuilding plans for canary rockfish, cowcod, and darkblotched rockfish; and recommended a range of 2009–2010 groundfish management measure alternatives for analysis that were designed to keep catch levels within the final preferred OYs. The newly adopted rebuilding analyses were used to develop ranges of OY alternatives for canary rockfish, cowcod, and darkblotched rockfish, while the previously adopted rebuilding plans were used for the remaining overfished species. For each individual overfished species a range of OY alternatives was described by the target year to rebuild (T_{TARGET}), median time to rebuild, a spawning potential ratio (SPR = the ratio of the equilibrium spawning output per recruit under fished conditions to the spawning output per recruit under no fishing), the maximum time to rebuild (T_{MAX}), and probability of rebuilding by T_{MAX} (P_{MAX}). An OY alternative that eliminated fishing-related mortality beginning in 2009 ($T_{F=0}$) was considered for each overfished species. By developing individual overfished species OY, the tradeoffs between the amount of allowable harvest, alternative rebuilding periods, and fishing constraints relative to a particular overfished species could be identified.

Prior to 2007, the Council was provided with analyses on preferred OYs for each overfished species in isolation from other species rather than considering how different overfished species OYs might affect or constrain other overfished species. Beginning with Amendment 16–4 and the 2007 and 2008 specifications and management measures and continued for 2009 and 2010, individual overfished species OYs were integrated into rebuilding OYs that more explicitly took the interaction of the overfished species within the marine ecosystem into consideration. The interrelated nature of Pacific Coast groundfish stocks makes this consideration necessary. The degree of interaction between overfished species and other stocks is such that ''rebuilding as quickly as possible while taking into account the needs of fishing communities'' is not possible based solely on a species-by-species approach. To consider the needs of the fishing communities and the status and biology of the stocks, the 2009 and 2010 specifications for overfished species were considered in an integrated manner as was done in 2007 and 2008.

To build integrated rebuilding OY alternatives, the individual overfished species OYs were arranged in strategic combinations that could be analyzed to assess how changes in harvest availability of the various overfished species would constrain fishing opportunities by sector, north and south of 40°10′ N. lat. (N. lat.), and on the continental shelf and slope. The rebuilding OY alternatives were arranged to show how fishing opportunities may be constrained by sector (or gear type) and region along the West Coast, depending on the amount of allowable harvest of each species. By adopting a suite of OYs for overfished species in April 2008, the Council was provided the opportunity to take a realistic look at minimal harvest levels that would rebuild as quickly as possible taking into account the status and biology of the stocks and extractive scientific take of overfished stocks. The rebuilding OY ranges recommended by the Council at its April 2008 meeting provided a starting point for more detailed analysis which was presented to the Council at its June 2008 meeting. Final recommendations on the rebuilding OYs and the management measures needed to keep fishery harvests within the OYs were presented at the Council's June 2008 meeting. The rebuilding alternatives that were considered and Council recommendations are further discussed in the OY Policies and Rebuilding Parameters for Overfished Species section of this preamble.

In summary, when making its final recommendations for rebuilding optimum yields (OYs) for 2009–2010, the Council took into account the status and biology of the stocks by looking for the shortest possible rebuilding periods within a suite of management measures that provided the greatest reduction in catch of the most sensitive and lowest productivity species. The Council took the needs of fishing communities into account by providing fishing opportunities where such opportunities would have a minimal effect on rebuilding periods for stocks with higher productivity, and by recommending restrictive management measures focused on stocks with the lowest productivity levels.

ABC Policy

The Council develops annual estimates of the ABC for major groundfish stocks. When setting the 2009 and 2010 ABCs, three categories of species were identified. The first were those species for which quantitative stock assessments can be conducted because there is adequate data. Stock assessments (a biological evaluation of the condition of a stock or stock complex) are used to estimate the population status of each assessed stock relative to its unfished biomass level. Stock assessments were used to estimate the current level of the abundance, changes in abundance over time, depletion levels relative to an unfished state, fishing mortality, mortality from other causes, and how changes in harvest levels are likely to affect the stock's abundance. The second category included species for which some biological indicators are available, but are not sufficient to support a quantitative analysis. The third category included minor species which are caught, but where the only available information is on the landed biomass.

For 2009 and 2010, the Council maintained a policy of using a default harvest rate as a proxy for the fishing mortality rate that is expected to achieve the maximum sustainable yield (F_{MSY}). A proxy is used because there is insufficient information for most Pacific Coast groundfish stocks. In 2009 and 2010, the following default harvest rate

proxies, based on the Council's SSC recommendations, were used: $F_{40\%}$ for flatfish and Pacific Whiting, $F_{50\%}$ for rockfish (including thornyheads), and $F_{45\%}$ for other groundfish such as sablefish and lingcod. The ABCs for groundfish species or species groups are derived by solving for the fishery removals resulting in an SPR equal to the harvest rate proxy.

A rate of $F_{40\%}$ can be explained as that which reduces the SPR to 40 percent and is therefore a more aggressive rate than $F_{45\%}$ or $F_{50\%}$. The FMP allows default harvest rate proxies to be modified as scientific knowledge improves for a particular species. A fishing mortality or harvest rate will mean different things for different stocks, depending on the productivity of a particular species. For highly productive species (those with individuals that grow and mature quickly and produce many young that survive to an age where they are caught in the fishery) a higher fishing mortality rate may be used, such as $F_{40\%}$. Fishing mortality rate policies must account for several complicating factors, including the capacity of mature individuals to produce young over time and the optimal stock size necessary for the highest level of productivity within that stock.

For some groundfish species, there is little or no detailed biological data available on which to base ABCs, and therefore only rudimentary stock assessments have been prepared; for other species, no stock assessments have been prepared and the ABC levels were based on historical landings. Since 2000, the Council has applied a more precautionary policy when setting ABCs for species with only rudimentary or no stock assessments. The ABC policy prior to 2000 had been to assume that fishing mortality was equal to natural mortality (F=M); the current policy is to assume that fishing mortality is 75 percent of natural mortality (F=0.75M).

2009–2010 Groundfish ABCs

A biennial management cycle for setting harvest specifications and management measures was implemented in 2004 and biennial specification were first established for the 2005 and 2006 management cycle. During the first year in a biennial cycle, new stock assessments are prepared and the results of the new assessments are reviewed by the Council and adopted for use. In some cases, a stock assessment needs to be refined and the final assessment may not be reviewed by the Council and adopted for use until later in the first year or early in the second year of the biennial cycle.

To estimate stock abundance and population trends, each stock assessment relies on various types and sources of information with the principal information coming from the commercial and recreational fisheries themselves. For example, basic fishery dependent data for stock assessments includes the amount of fish caught, the individual sizes of the fish and their biological characteristics (*e.g.*, age, maturity, sex), and the ratio of fish caught to the time spent fishing (catch-per-unit-of-effort). In addition to fishery dependent data, fishery independent data for stock assessments are collected during scientific research surveys. In addition, Pacific Coast groundfish stock assessments identify areas of uncertainty and modeling difficulties. When data are lacking for a particular species, it can result in uncertainty and modeling problems for the stock assessment scientists.

In preparation for setting new ABC values for 2009 and 2010, 15 stock assessments were prepared. Full stock assessments, those that consider the appropriateness of the assessment model and that revise the model as necessary, were prepared for the following stocks: Sablefish; longnose skate; cowcod south of 36°00′ N. lat. (Conception area); blue rockfish south of 42°00′ N. lat.; black rockfish north of Cape Falcon (46°16′ N. lat.); black rockfish south of 46°16′ N. lat.; canary rockfish; chilipepper rockfish off California and Oregon; darkblotched rockfish north of 36°00′ N. lat.; and arrowtooth flounder. Stock assessment updates, those that run new data through an existing model without changing the model, were prepared for: English sole; widow rockfish; bocaccio south of 40°30′ N. lat. (Cape Mendocino); POP north of 40°30′ N. lat.; and yelloweye. In addition to the 15 stock assessments, an academic exercise was conducted that investigated fluctuations in the shortbelly rockfish biomass through the use of a population model based on standard methodology and a variety of both traditional and untraditional data.

Each new stock assessment includes a base model which is accepted by the reviewers. Because it is essential that uncertainty in the analysis be captured and transmitted to decision makers, alternative models are developed from the base model by bracketing the dominant dimension of uncertainty (*e.g.*, stock-recruitment steepness or R_0, natural mortality rate, survey catchability, recent year-class strength, weights on conflicting CPUE series, etc.) Alternative models show the contrast in management implications. Once a base model has been bracketed on either side by alternative model scenarios, which capture the overall degree of uncertainty in the assessment, a 2-way decision table analysis (states-of-nature versus management action) is used to present the repercussions of uncertainty. The SSC makes recommendations to the Council on the appropriateness of using the different stock assessments for management purposes, after which the Council considers adoption of the stock assessments, use of the stock assessment for the development of rebuilding analysis, and the ABCs resulting from the base model runs of the stock assessments.

Species that had ABCs in 2007 and 2008 continue to have ABCs in 2009 and 2010. Blue rockfish and longnose skate had been part of species complexes because they were less rigorously assessed. These two stocks have now had more quantitative stock assessments prepared. As a result of the new assessment, longnose skate is being removed from the other species complex and assigned species specific ABC values for the 2009 and 2010 management cycle. However, blue rockfish will remain within the minor rockfish species group and its ABC contribution will revise the ABC values specified for the complex.

For species that did not have new stock assessments prepared, the Council considered a single ABC derived from the base model of the most recent stock assessment or continued to use the results of rudimentary stock assessments, or the historical landings data. Species or species complexes without new stock assessments include: Lingcod; Pacific cod; cabezon; Dover sole; petrale sole; starry flounder; splitnose rockfish; yellowtail; shortspine thornyhead; longspine thornyhead; California scorpionfish; minor rockfish north of 40°10′ N. lat. minor rockfish south of 40°10′ N. lat.; ''other flatfish; and ''other fish''. Specific information on species without any new stock assessment information are provided in the footnotes to Table 1a and Table 2a in the proposed regulations. The stock assessment cycle and the process for adoption of a final ABC for Pacific whiting are detailed below.

Species that are not overfished and had new stock assessments or stock assessment updates prepared and adopted for use in setting harvest specifications by the Council include: Sablefish; arrowtooth flounder; English sole; chilipepper rockfish; black rockfish north of 46°16′ N. lat. (Cape Falcon); black Rockfish south of 46°16′ N. lat.; longnose skate; and blue

rockfish. Specific information on the ABCs for species that are not overfished and have new stock assessments or assessment updates are provided in the footnotes to Table 1a and Table 2a.

New assessments were prepared for each of the seven overfished species. The following stock assessment summaries pertain to species that have been declared overfished with either new stock assessments or stock assessment updates. In addition, the academic analysis of shortbelly rockfish is summarized in this section.

Bocaccio (Sebastes Paucispinis)

A stock assessment update and a rebuilding analysis were prepared in 2007 for the bocaccio stock in the southern and central California area (the stock south of Cape Mendocino, CA). The last full assessment for bocaccio rockfish was conducted in 2003 and used the original Stock Synthesis I model. A stock assessment update followed in 2005. Like the 2005 stock assessment update, the new stock assessment update followed the methodology and assumptions of the 2003 bocaccio assessment as closely as possible. Updated information on fishery landings, length compositions, and the California Cooperative Oceanic Fisheries Investigations (CalCoFI) juvenile survey were used to update the assessment. Although the three model approaches from the 2003 assessment were included in the update (the three models are further described in the 2004–2005 proposed rule (69 FR 56550, September 21, 2004)), the STATc model was again considered as the base model and was the focus of the update, with limited consideration given to the STARb1 and STARb2 models.

The results of the stock assessment update indicated that the bocaccio stock biomass has continued to increase. The 1999 year class is still a driving factor, and a larger than average 2003 year class appears to be evident based on updated length composition data from the southern California recreational fishery. The bocaccio stock was estimated to be at 12.7 percent of its unfished biomass in 2007.

The SSC recognized that unresolved problems and major uncertainties identified in the 2003 assessment still remain, but endorsed the updated bocaccio stock assessment as being the best available science for the Council's management recommendations. The bocaccio ABC of 793 metric tons (mt) for 2009 and 2010 was based on the STATc base model with an $F_{50\%}$ F_{MSY} proxy.

Canary Rockfish (Sebastes Pinniger)

A new coastwide stock assessment was completed in 2007 for canary rockfish. The stock assessment, which used the stock synthesis II model (currently the standard model for west coast groundfish), included a number of major changes to the data and modeling approach. New data used in the model included fishery dependent age structure data from the port and on-board observer sampling programs; and, fishery independent data derived from the NMFS triennial bottom trawl survey, the Northwest Fisheries Science Center's trawl survey relative biomass indices and biological sampling, and the Southwest Fisheries Science Center/ Northwest Fisheries Science Center/ Pacific Whiting Conservation Cooperative coastwide prerecruit survey. Although the new data were not highly influential, they did address previously identified issues.

In this assessment and in previous assessments, fishery selectivity (the probability that a fish of a certain length or age will be captured by a given gear) was modeled in multi-year time blocks with changes in selectivity allowed between blocks. In the new assessment, the time blocks for fishery selectivity were simplified. In contrast to the previous assessment, where blocks were defined arbitrarily to improve model fit, the current assessment defined selectivity blocks according to major management actions and known changes in fishing practices (*e.g.*, the change to ''high-rise'' rockfish trawls in the late 1970s). The new approach was considered to be a more objective and rigorous approach to defining selectivity blocks. The results of the new assessment estimate the canary rockfish spawning biomass to be at 32.4 percent of its unfished biomass in 2007. This is in contrast to the previous assessment which estimated the spawning biomass to be at 9.4 percent in 2005. Fishing mortality rates have been less than 1 percent since 2001, indicating that overfishing has not occurred since then. The rate of increase in the biomass is highly dependent on the level of productivity (the value used to define the stock-recruitment steepness has a major influence on stock productivity estimates). After a period of above average recruitment in the late 1980s and early 1990s, recent stock recruitment has generally been low. The only estimates of higher recruitments were in 1999 and 2001. There is little information other than the pre-recruitment index to inform the assessment model about recruitment after 2002. As the larger recruitments from the late 1980s and early 1990s move through the population, the rate at which the biomass increases and the stock recovers may slow. In previous assessments, the stock-recruitment steepness was precisely estimated at a low value. Given the changes in the model structure, the stock-recruitment steepness could not be reliably estimated within the model. Therefore a less precise approach of using a higher valued ''prior'' distribution that was developed from a meta-analysis of U.S. west coast rockfishes was used in the base model.

The SSC endorsed the base model and decision table, which included ''high'' and ''low'' states of nature, as the best available science for Council decision-making. The SSC indicated that the ''low'' and ''high'' states of nature should be considered to be equally likely and half as likely as the base-model. The canary rockfish ABC of 937 mt for 2009 and 940 mt for 2010 are derived from the base model with an $F_{50\%}$ F_{MSY} proxy.

Cowcod (Sebastes levis)

Cowcod in the Conception area was assessed in 2007. The 2007 assessment was originally scheduled to be an update. However, a number of technical issues were raised and it was determined that a full assessment was most appropriate. An age-structured production model was used for the new assessment. The new stock assessment included substantial changes to both data and model structure.

Gear selectivity, which had been mis-specified in the 2005 assessment, was corrected and revised. The growth curve for cowcod was re-estimated based on corrected data. The commercial and recreational sectors were modeled as separate fisheries. The commercial landings from 1900 to 1968 were revised. The California Commercial Cooperative Groundfish Program (1969–1985) revised landings estimates were incorporated into the assessment. In addition, significant changes were made to the spatial stratification and the model used to develop the Commercial Passenger Fishing Vessel Logbook indices. The value used for the stock-recruitment steepness was changed.

The estimated depletion of cowcod was strongly affected by the correction of technical errors. As a result of the model changes, the cowcod spawning biomass in 2005 was believed to be between 3.8 and 24.4 percent of its unfished spawning biomass with the base model estimating the stock to be at 4.0 percent of its unfished biomass, rather than between 14 and 21 percent of its unfished spawning biomass as was

previously estimated in the 2005 assessment. The new assessment estimated the cowcod spawning biomass to be between 4.1 percent and 27.3 percent of its unfished spawning biomass in 2007, with the base model estimate being 4.6 percent. The spawning biomass is estimated to be slowly increasing (by about 0.3 percent per year). An unresolved problem for the stock assessment was the lack of data on stock productivity and recent biomass trends. Indications of recent stock increases are inferred from the model but have not been confirmed by observations.

The SSC endorsed the base model and the decision table based on the ''low'' and ''high'' states of nature for Council decision making. The cowcod ABC of 13 mt for 2009 and 14 mt for 2010 ABC were based on the results of the stock assessment which was based on the STATc base model with an $F_{50\%}$ F_{MSY} proxy1.

Darkblotched Rockfish (Sebastes Crameri)

In 2007, a new stock assessment was prepared for darkblotched rockfish in the combined U.S. Vancouver, Columbia, Eureka and Monterey areas. The stock synthesis model II was used for the stock assessment. The SSC indicated that changes to the darkblotched rockfish stock assessment model represented a substantial advancement. Changes to the stock assessment included: New and updated catch data; new and updated discard rate estimates; new data from the Northwest Fishery Science Center slope and shelf trawl surveys; conditional age-at-length data developed using consistent aging criteria; and data from a new generalized linear mixed model (GLMM) that allows the data for the various survey vessels to be combined into a single continuous time-series of biomass indices. In addition, a full range of length compositions were used for discarded catch, rather than the average size, of discards. The new assessment eliminated Alaska Fishery Science Center slope trawl survey data from the ''super years'' (consisting of combined data from multiple years of partial coastal coverage), the 1977 triennial shelf survey data, and the POP survey data from 1975–1985. These data were removed because the data were unlikely to produce realistic selectivities and were relatively insignificant given all the other data available.

The new stock assessment estimated the darkbloched rockfish stock to be at 22 percent of its unfished spawning biomass level in 2007. In comparison, the last assessment estimated the darkbloched rockfish stock to be 16 percent of its unfished spawning biomass in 2005. In recent years the stock has been rebuilding, with spawning output having increased by 68 percent over the last five years primarily due to strong 1999 and 2000 year-classes (fish in a stock born in the same year). The darkblotched rockfish spawning biomass appears to have increased steadily over the past 5 or 6 years. Since 2001, overfishing occurred only once, with estimated catch exceeding the ABC by 14 mt (5.8 percent) in 2004.

The estimates of natural mortality (deaths in a fish stock caused by predation, pollution, senility, etc., but not fishing) were a major source of uncertainty in the stock assessment. The value used for natural mortality was not changed from the previous assessment. However, the decision tables presented in the analysis bracketed alternative states of nature for natural mortality. The largest change in modeling assumptions between the 2005 and 2007 stock assessments was the value of spawner-recruitment steepness (a parameter that has a major influence on stock productivity). During the review process, a disagreement occurred regarding the use of a fixed parameter at the median value of a ''prior'' distribution developed from a meta-analysis of U.S. west coast rockfishes and an estimate of steepness from within the assessment model using the prior distribution. The SSC recommended using a spawner-recruitment steepness value estimated within the stock assessment model because it incorporates what appears to be meaningful information from the current stock assessment into the productivity estimate.

The SSC endorsed the darkblotched rockfish stock assessment as the best available science for setting 2009 and 2010 harvest specifications. The darkblotched rockfish ABC of 437 mt for 2009 and 440 mt for 2010 are derived from the base model with an $F_{50\%}$ F_{MSY} proxy.

POP (Sebastes alutus)

In 2007, a stock assessment update was prepared for POP (Pacific ocean perch) in the U.S. Vancouver and Columbia areas which used the same model as in the 2003 and 2005 assessments, a forward projection age-structured model. New information used in the stock assessment update included: Updated and new catch data for 2003–2006; updated and new fishery age composition data from 1999–2006; recalculated Northwest Fishery Science Center slope survey biomass indices and age compositions for 1999–2004; and new 2006 Northwest Fishery Science Center slope survey biomass indices and age compositions.

The results of the stock assessment update estimated that the POP spawning biomass was at 27.5 percent of its unfished spawning biomass at the start of 2007. The POP biomass shows an increasing trend with indications of a strong 1999 year class in both the survey and fishery age composition data over several years. Assessment results are highly consistent with the previous assessment, except that a stronger 1999 year class is estimated. The current assessment indicates that the 1999 year class is the strongest since the 1960s.

A number of sources of uncertainty are explicitly included in the stock assessment. For example, allowance is made for uncertainty in natural mortality, the parameters of the stock-recruitment relationship, and the survey catchability coefficients. Sensitivity analyses based upon alternative model structures and data set choices conducted during the 2003 and 2005 stock assessment process suggest that the overall uncertainty may be greater than that predicted by a single model specification. Other sources of uncertainty that are not included in the current model include: The degree of connection between the U.S. west coast and Canadian stock; the effect of climatic variables on recruitment, growth, and survival of POP; gender differences in growth and survival; a possible nonlinear relationship between individual spawner biomass and effective spawning output; and a more complicated relationship between age and maturity.

The SSC determined that the Pacific Ocean perch assessment update complied with the terms of reference for updates and endorsed its use for Council decision-making. The POP ABC of 1,160 mt for 2009 and 1,173 mt for 2010 are derived from the base model with an $F_{50\%}$ F_{MSY} proxy.

Widow Rockfish (Sebastes Entomelas)

In 2007, a stock assessment update was conducted for widow rockfish in U.S. Vancouver, Columbia, Eureka, Monterey, and Conception areas. The widow rockfish stock in these areas is assumed to be a single mixed stock. The age-based population model used in 2005 was updated with new catch data, age compositions data, and catch-per-unit-of-effort time series data from 2005 and 2006.

Since 2001, the widow rockfish biomass has shown an increasing trend with the results of the new stock

assessment estimating the spawning biomass to be at 35.5 percent of its unfished spawning biomass in 2007. This is in contrast to steady declines in the widow rockfish biomass that occurred between 1977 and 2001. Like the 2005 stock assessment, the stock assessment update shows that the stock biomass may not have declined below the overfished species threshold of 25 percent of its unfished spawning biomass, as was estimated in previous assessments. Fishing mortality rates have been less than 6 percent since 2001, indicating that overfishing has not occurred since then.

As with the previous stock assessment, a major source of uncertainty within the current stock assessment is the lack of a reliable abundance index (information obtained from samples or observations and used as a measure of the weight or number of fish which make up a stock) for widow rockfish. The primary source of information on trends in abundance of widow rockfish was fishery dependent information derived from the Oregon bottom trawl logbook data. Because the catch rates have been very low due to catch restrictions, no Oregon bottom trawl logbook data after 1999 can be used in the assessment. Based on the recommendation of the 2003 STAR panel, fishery independent data derived from the National Marine Fisheries Service triennial bottom trawl survey were used to develop an additional abundance index. Additional areas of uncertainty include: The estimated value used for natural mortality; estimates of stock recruitment relationships; the use of Santa Cruz juvenile survey data; and the relationship of the Canadian stock to the U.S. stock.

The SSC endorsed the use of the assessment results by the Council in support of management decisions. The widow rockfish ABC of 7,728 mt for 2009 and 6,937 mt for 2010 are derived from the base model with an $F_{50\%}$ F_{MSY} proxy.

Yelloweye Rockfish (Sebastes Ruberrimus)

A stock assessment update was prepared for yelloweye rockfish in 2007 using the stock Synthesis II model. New catch data were added for 2006, based on the Groundfish Management Team's bycatch scorecard. The catch histories for all fleets were updated for the period 1983–2005.

In the process of updating data for use in the stock assessment update, several errors were identified in the data and input files used for the previous assessment. The errors included: A technical error in the definition of age and length classes, and the inclusion of Washington trawl-caught age compositions included in the age-composition inputs for the Washington hook-and-line fishery. These problems were corrected in developing the 2007 base model. In addition, the natural mortality rate was revised upwards. The changes to the stock assessment model led to downward revisions in the amount of spawning biomass and the level of depletion, relative to the 2006 assessment.

The long-term biomass trajectory from the new stock assessment is very similar to that in the 2006 assessment. Spawning biomass declined steadily and rather rapidly, beginning in the early-1970s, with no indication of increase until roughly 2001. The amount of spawning biomass in all years is lower in the current base model than in the previous assessment, due to the correction of data/input errors discussed above. As a result of the new assessment, yelloweye rockfish was estimated to be at 14.5 percent of its unfished spawning biomass in 2007.

As in the previous assessments, the sparseness of the size and age composition data and the lack of a relevant fishery-independent survey has limited the ability to assess the status of the yelloweye rockfish resource. Further, due to catch restrictions since 2002, catch-per-unit-effort data no longer reflect the real changes in population abundance, and discard estimates are highly uncertain. The current version of Stock Synthesis II model does not allow for the considerable uncertainty in estimated landings. This makes it difficult to evaluate the true uncertainty of model results. Internal estimates of standard error on depletion estimates were on the order of 2–2.5 percent and are likely to underestimate uncertainty.

Overall, the update is consistent with the previous assessment and the SSC endorsed the update model with the revised natural mortality rate for use in status determination and management of the stock. The yelloweye rockfish ABC of 31 mt for 2009 and 32 mt for 2010 are derived from the base model with an $F_{50\%}$ F_{MSY} proxy.

Shortbelly Rockfish (Sebastes jordani)

To understand the potential environmental determinants of fluctuations in the recruitment and abundance of an unexploited rockfish population in the California Current ecosystem, an academic assessment was conducted for shortbelly rockfish in 2007. The analysis, which was conducted by NMFS outside the Council process, was peer reviewed using a structure similar to the Council's stock assessment review process (external reviewers, including a Center for Independent Experts reviewer) and using the Council's terms of reference for groundfish stock assessments. Although the assessment does not fully satisfy the Council's terms of reference for groundfish stock assessments, the SSC indicated that it represented improved knowledge about shortbelly rockfish and might be suitable for management purposes in place of the previously used inferences from the hydroacoustic surveys conducted during 1977 and 1980. The SSC also noted that the assessment of shortbelly rockfish does improve knowledge about one of the non-commercial species included in the Pacific Coast Groundfish FMP and hence provides information relevant to further understanding the ecosystem impacts on the fish populations managed by the Council, as well as the implications of the choice between static and dynamic unfished biomass. The shortbelly rockfish ABC of 6,950 mt for 2009 and 2010 is 50 percent of the status quo ABC. Given the results of the academic assessment, an ABC of 6,950 mt is an amount at which the stock is projected to remain in a state of equilibrium.

OY-Setting Policies

The Council recommends annual harvest levels, which are OYs, for the species or species groups that it manages. The Magnuson-Stevens Act requires the FMP to prevent overfishing while achieving, on a continuing basis, the OY from each fishery. Overfishing is defined in the National Standard Guidelines (50 CFR part 600, subpart D) as exceeding the fishing mortality rate (F) needed to produce MSY on a continuing basis.

A biennial management cycle, adopted under Amendment 17 to the FMP, is being used to establish the 2009 and 2010 harvest specifications and management measures. At the beginning of the biennial management cycle, two one-year ABCs and OYs will be adopted for each species or species complex the Council proposes to manage. The annual OYs will be applied in the same manner as has been done in previous years. If an OY is not achieved or is exceeded in the first year, the underage or overage will not be transferred to the following year, as such a transfer could result in too much fishing or other management problems in the second year. Overages or underages are accounted for in subsequent stock assessments, which are populated with

historical total catch and other relevant data.

The 2009 and 2010 OYs for species other than those managed with overfished species rebuilding plans are set at levels that are expected to prevent overfishing, equal to or less than their ABCs. For overfished species, the OYs are set at levels that allow the overfished species to rebuild as quickly as possible, taking into account the status and biology of the stock, the needs of fishing communities, and the interaction of the stock within the marine ecosystem. The specific OYs being adopted for overfished species are described below in ''OY Policies and Rebuilding Parameters for Overfished Species.''

The ''40–10'' harvest policy is used to set OYs for species that are not managed under overfished species rebuilding plans. The 40–10 harvest policy is designed to prevent stocks from becoming overfished. If a stock's spawning biomass is larger than the biomass needed to produce MSY (B_{MSY}), the OY may be set equal to or less than ABC. The Council uses 40 percent as a default proxy for B_{MSY}, also referred to as $B_{40\%}$. A stock with a current spawning biomass between 25 percent of the unfished level and B_{MSY} (also referred to as the precautionary threshold) is said to be in the ''precautionary zone.'' The 40–10 harvest policy reduces the fishing mortality rate when a stock's biomass is at or below the precautionary threshold. The further the stock biomass is below the precautionary threshold, the greater the reduction in OY relative to the ABC. The slope of the line reduces the OY below $B_{40\%}$ to zero at $B_{10\%}$. This is, in effect, a default rebuilding policy that is intended to foster a quicker return to the B_{MSY} level than would occur with fishing at the ABC level. The OYs for stocks that have been declared overfished (where the stock biomass was below $B_{25\%}$, and where the stock has not yet rebuild to $B_{40\neq}$ or greater) are set in accordance with species-specific rebuilding plans that are designed to meet the rebuilding requirements of the Magnuson-Stevens Act. For further information on the 40–10 harvest policy see Section 5.3 of the Pacific Coast Groundfish FMP.

After considering appropriate analysis, the Council may recommend setting the OY higher than what the default OY harvest policy specifies as long as the OY does not exceed the ABC (which is set at F_{MSY}); complies with the requirements of the Magnuson-Stevens Act; and is consistent with the National Standard Guidelines. On a case-by-case basis, additional precautionary adjustments may be made to an OY if it is necessary to address uncertainty in the data or to reduce the risk of a stock or a co-occurring species from being overfished.

If a stock falls below 25 percent of its unfished spawning biomass ($B_{25\%}$) and is declared overfished, the revised Magnuson-Stevens Act requires the Council to develop and implement a rebuilding plan within two years from the declaration date. In addition, the Council has the discretion to make additional OY adjustments for stocks with only rudimentary stock assessments. For such stocks, the Council's policy is to set the OY at 75 percent of the ABC. For stocks that have not been quantitatively assessed and where the ABC is based on historical data, the OY policy is to set the OY at 50 percent of the ABC. For further information on precautionary adjustments for stocks that have not been quantitatively assessed, see the preamble discussion of the Annual Specification and Management Measures published on January 11, 2001 (66 FR 2338).

2009 and 2010 OYs for Healthy and Precautionary Zone Species

Species that had OYs in 2007 and 2008 continue to have OYs in 2009 and 2010. As stated above, the FMP provides guidance on setting harvest specifications based on a stock's estimated biomass level. For each species or species group where there was no new stock assessment or for those species where the FMP provided clear guidance on the harvest strategy, the Council considered a single combination of ABC/OY harvest levels for 2009 and 2010. These species included: Pacific cod; splitnose rockfish south; yellowtail rockfish north; shortspine thornyhead; longspine thornyhead; black rockfish north; Dover sole; petrale sole; starry flounder; English sole; and other flatfish. The Council recommended final adoption of the ABC/OYs values for these species at its April 2008 meeting. Further information on the OYs for these species can be found in the footnotes to Table 1a. and Table 2a. The Council considered alternative OYs for the following non-overfished species: Lingcod south of 42° N. lat.; sablefish; shortbelly rockfish; chilipepper rockfish; black rockfish south of 42° N. lat.; minor rockfish north and south of 40°10′ N. lat.; California scorpionfish; cabezon; arrowtooth flounder; longnose skate (a species within the other fish complex); and Pacific whiting.

Lingcod

The latest lingcod stock assessment was prepared in 2005 and estimated the coastwide stock to be above 40 percent of unfished spawning biomass. Lingcod is therefore considered to be a healthy stock. When a stock is above 40 percent of its unfished spawning biomass, the FMP harvest policy allows the OY to be set equal to the ABC. Under Alternative 1, coastwide OYs of 5,205 mt in 2009 and 4,785 in 2010 were derived by combining the 612 mt southern area (south of 43° N. lat.) status quo OY with the northern area (north of 43° N. lat.) OYs of 4,593 mt in 2009 and 4,173 mt in 2010. The northern area OYs were derived from the 2005 assessment for the northern substock with the OYs set equal to the ABCs. The southern area status quo OY of 612 mt was the 2006 OY which had been used in 2007 and 2008 as a precautionary measure to allow the southern portion of the stock to continue to increase in biomass. The Council recommended OY is OY Alternative 2 (5,278 mt in 2009 and 4,829 mt in 2010) which is based on the 2005 assessment with the coastwide OY that was set equal to the ABC. The Council recommended the coastwide OY under Alternative 2 as lingcod is considered to be a healthy stock coastwide.

Sablefish

Under the Pacific coast groundfish FMP, sablefish is considered to be a precautionary zone stock because the most recent stock assessment estimated the stock to be at 38.3 percent of its unfished biomass coastwide. At its April 2008 meeting, the Council considered three alternative approaches for setting coastwide, northern and southern subarea (north and south of 36° N. lat.) OYs for sablefish. Sablefish allocations are defined by the FMP and apply to the subareas north and south of 36° N. lat. Therefore, the coastwide OY is proportioned to the subareas and used to define the subarea OYs.

At its April 2008 meeting the Council considered three OY alternatives for sablefish. Alternative 1 was based on the ABC from the 2007 sablefish stock assessment base model with the application of the 40–10 harvest policy which resulted in a coastwide OY of 9,795 mt in 2009 (9,452 mt north of 36° N. lat., and 343 mt south of 36° N. lat.) and 8,988 mt in 2010 (8,673 mt north of 36° N. lat. and 315 mt south of 36° N. lat.) Apportionment of the OY to the northern and southern subareas was done by applying the average proportion of 2000–2001 landings of sablefish north of 36° N. lat. (96.5 percent) and south

of 36° N. lat. (3.5 percent) to the coastwide OY value. Alternative 2 was based on the ABC from the 2007 sablefish stock assessment base model with the application of the 40–10 harvest policy. The coastwide projected yield from the 2007 assessment was apportioned to the area north of 36° N. lat. (72 percent) and the Conception area south of 36° N. lat. (28 percent) using the average 2003–2006 proportions estimated from the Northwest Fishery Science Center's shelf-slope trawl survey. The Conception area OY was then adjusted to 50 percent to account for greater assessment and survey uncertainty south of 36° N. lat. To derive the coastwide OYs, the northern and southern area OYs were summed. The resulting coastwide OYs were 8,423 mt in 2009 (7,052 mt north of 36° N. lat., and 1,371 mt south of 36° N. lat.) and 7,729 mt in 2010 (6,471 mt north of 36° N. lat. and 1,258 mt south of 36° N. lat.) The third OY alternative considered by the Council (Alternative 3) was based on the ABC from the 2007 sablefish stock assessment's low abundance model with the application of the 40–10 harvest policy. The subarea apportionment methodology used to derive OY Alternative 2 specifications was used under Alternative 3. The resulting coastwide OY for 2009 was 6,250 mt (5,233 mt north of 36° N. lat., and 1,018 mt south of 36° N. lat.) and for 2010 it was 5,777 mt (4,837 mt north of 36° N. lat., and 941 mt south of 36° N. lat.)

The Council recommended that the coastwide and northern and southern subarea OY under Alternative 2 be adopted. The precautionary reduction in the southern OY results in a large OY for the Conception Area relative to recent catches. The Cowcod Conservation Area (CCA) closes a significant amount of the Conception Area to fishing and the area-swept biomass estimates for the Conception area are based on the assumption that catch rates outside of the CCAs are comparable to those inside (the survey does not sample within the CCAs). A precautionary reduction of 50 percent was used in the southern area to account for the uncertainty inherent in using a short time-series of relative abundance for setting the OY. The apportionment of biomass using the trawl survey data (Alternatives 2 and 3) incorporates the best available information on the sablefish stock distribution.

Shortbelly Rockfish

In 2007 an academic assessment conducted for shortbelly rockfish indicated the shortbelly stock was healthy and estimated the spawning stock biomass to be at 67 percent of its unfished spawning biomass in 2006. Based on the advice of the SSC, the Council used the academic assessment to develop two alternative approaches for establishing OYs for shortbelly rockfish. Under the first approach (Alternative 1) the status quo OY was reduced to 25 percent resulting in an OY of 3,475 mt in 2009 and 2010. The shortbelly rockfish stock would be expected to increase in abundance under the Alternative 1 harvest rate. Under the second approach (Alternative 2), the status quo OY was reduced to 50 percent resulting in an OY of 6,950 mt in 2009 and 2010. The stock would be expected to remain in its current equilibrium under the Alternative 2 harvest rate. The Council recommended adoption of Alternative 2.

Chilipepper Rockfish

The latest chilipepper stock assessment was prepared in 2007 and indicated that the stock was healthy. At its April 2008 meeting the Council considered 3 alternative approaches to setting OYs for chilipepper rockfish. Under the first approach (Alternative 1) the OY of 2,000 mt in 2009 and 2010, is less than the ABC and is a precautionary OY intended to reduce the potential catch of bocaccio which co-occur with chilipepper rockfish. The second alternative, Alternative 2 had OYs (2,099 mt in 2009 and 2010) based on the estimated MSY at an $F_{50\%}$ SPR harvest rate as estimated in the 2007 assessment. The third approach, Alternative 3, had OYs (3,037 mt in 2009 and 2,576 mt in 2010) that were set equal to the ABC for each year as projected by the base model in the 2007 assessment. The Council recommended Alternative 2 which reduces the risk of overfishing chilipepper. Although chilipepper catch has been constrained because they co-occur with overfished species, particularly bocaccio rockfish, increases in canary, bocaccio or widow rockfish OYs may allow for greater chilipepper rockfish targeting opportunities.

Black Rockfish South of 42° N. lat.

A new stock assessment for Black rockfish south of Cape Falcon (46°16′ N. lat.), estimated the stock to be at 70 percent of its unfished spawning biomass in 2007. At its April 2008 meeting, the Council considered three alternative OYs for the area south of 42° N. lat. Alternative 1 was the sum of the OY set equal to the ABC as derived from the 2007 low productivity stock assessment model, and three percent of the yield from the northern area stock assessment base model where the OY was set equal to the ABC. The resulting OYs were 920 mt in 2009 and 831 mt in 2010. Alternative 2 was based on a constant catch scenario using 1,000 mt for the southern area. OY Alternative 3 was based on the sum of the OY set equal to the ABC for that portion of the stock south of 46°16' N. lat. as derived from the 2007 medium productivity stock assessment model and three percent of the yield from the northern area stock assessment base model where the OY was set equal to the ABC. The resulting OYs were 1,469 mt in 2009 and 1,317 mt in 2010.

The Council recommended the OY Alternative 2. Uncertainties in the 2007 southern black rockfish assessment, implications for management, and comments from the SSC indicating that the decision table, coupled with the probabilities assigned to the various states of nature, provides a large contrast in possible outcomes, which implies a highly uncertain assessment (relative to other rockfish assessments). If productivity is actually low, the stock biomass under Alternative 2 is projected to be at 34.7 percent of its unfished spawning biomass in 2016 and not as close to the overfished level as Alternative 3, which projects the spawning biomass to be at 29 percent of its unfished spawning biomass in 2016.

California Scorpionfish

A 2005 stock assessment on California scorpionfish indicated the stock was healthy, with an estimated spawning stock biomass of 79.8 percent of its unfished spawning biomass in 2005. The California scorpionfish assessment used a recreational catch data stream based upon Commercial Passenger Fishing Vessel (CPFV) logbook data expanded to total recreational catch using a proportion of CPFV to total recreational catch (based upon Marine Recreational Fisheries Statistics Survey catch history). The Council's SSC approved this assessment, with the caveat that the ABC/OY from this assessment could only be related to recreational catch calculated in the same manner as this catch stream. Consequently, an alternative ABC/OY was generated by modifying the original ABC/OY from the assessment so that it could be compared and tracked using California Recreational Fisheries Survey (CRFS) catch estimates.

Because the stock is above $B_{40\%}$ coastwide, the OY could be set equal to the ABC. Both the original stock assessment and the modified stock assessment were used to develop 2 California scorpionfish OY alternatives. The Alternative 1 OY (111 mt in 2009 and 99 mt in 2010) is based on the

results of the 2005 stock assessment as modified to incorporate CRFS estimates. Alternative 2 (175 mt in 2009 and 155 mt in 2010) was a value that was intermediate to the 2007–2008 OY of 137 mt from the 2007–2008 OY from the base model with the CPFV modification, and the 2007–2008 OY of 219 mt from the base model without the CPFV modification. The Council recommended the higher Alternative 2 OYs because the stock is considered to be healthy and recent harvests have been relatively low.

Cabezon

The Council considered OY alternatives based on the most recent cabezon assessment, which was done for the portion of the stock occurring in waters off California in 2005. In 2005, the Cabezon stock was estimated to be at 40.1 percent of its unfished spawning biomass north of 34°27′ N. lat. and 28.3 percent of its unfished biomass south of 34°27′ N. lat. Since the two substocks collectively have an estimated spawning output less than $B_{40\%}$, cabezon in waters off California were considered a precautionary zone stock.

OY Alternative 1 (69 mt in 2009 and 2010) was the status quo OY from 2007–2008 and is based on a constant harvest level that is consistent with a 60–20 harvest policy adjustment as specified in the California Nearshore Management Plan. The 60–20 adjustment is analogous to the Council's default 40–10 rule, where, the OY equals the ABC at spawning biomasses ≥60 percent of initial biomass and linearly reduced from the ABC until, at 20 percent of initial biomass, the OY is set to zero. The OY Alternative 2 (74 mt in 2009 and 2010) is an average OY for 2009 and 2010 based on the projected values from the 2005 assessment using an $F_{50\%}$ harvest rate with the 60–20 harvest policy adjustment. The third OY alternative (Alternative 3) is similar to Alternative 2 in that the projected values are from the 2005 assessment using an $F_{50\%}$ harvest rate with the 60–20 harvest policy adjustment. However, under Alternative 3, the OYs were not averaged across the two years. The resulting OYs considered under Alternative 3 were 69 mt in 2009 and 79 mt in 2010. The Council recommended the Alternative 3 OYs which allow for more efficient state management of Cabezon.

Arrowtooth Flounder

Alternative OYs for arrowtooth flounder are based on a new stock assessment conducted in 2007 which indicated that the stock was healthy with a spawning biomass estimated at 79 percent of its unfished spawning biomass in 2007. OY Alternative 1 (5,245 mt in 2009 and in 2010) for arrowtooth flounder is based on the MSY at an $F_{40\%}$ harvest rate as estimated in the 2007 assessment. The Alternative 2 OYs (11,267 in 2009 and 10,112 mt in 2010), were based on the OY being set equal to the ABC for the stock. These alternative OYs compare to the status quo ABC/OY of 5,800 mt from 2007 and 2008. The Council recommended Alternative 2 which is the OY being set equal to the estimated ABC for the stock. Increases to the arrowtooth flounder OY raised concerns about potential impacts on overfished species, particularly canary.

Longnose Skate

The council considered three longnose skate alternative OYs based on a 2007 stock assessment which estimated the stock to be at 66 percent of its unfished spawning biomass in 2007. At its June 2008 meeting the Council recommended that the 2007 assessment be used to establish 2009 and 2010 harvest specifications for longnose skate. In doing this, longnose skate would be removed from the ''other fish'' complex.

The Council considered OY alternatives were: Alternative 1 (901 mt in 2009 and 902 mt in 2010) was based on the projected OYs from the 2007 base model using the current estimated exploitation rate (0.0125); Alternative 2 (1,349 mt in 2009 and 2010); which was the average landings and discard mortality from 2004–2006, increased by 50 percent; OY Alternative 3 (3,428 mt in 2009 and 3,269 mt in 2010) was the OY set equal to the ABC from the 2007 base model with a harvest rate proxy of $F_{45\%}$ (corresponds to an exploitation rate of 0.043).

At its June 2008 meeting, the Council discussed the removal of longnose skate from the ''other fish'' complex. During discussions, concerns were raised about the removal of longnose skate from the complex. Adjustments to the other fish complex that included longnose skate were considered. However, for more accurate catch accounting the Council recommended removing longnose skate from the other fish complex and establishing species-specific specifications and managing it with its own OY of 1,349 mt in 2009 and 2010 (Alternative 2). An ABC of 11,200 mt and an OY of 5,600 mt would then be specified for the Other Fish complex.

Minor Rockfish North and South of 40°10′ N. lat.

The first blue rockfish assessment on the West Coast was conducted in 2007 for the portion of the stock occurring in waters off California north of Point Conception (34°27′ N. lat.). The blue rockfish stock was estimated to be at 29.7 percent of its unfished spawning biomass in 2007; therefore, the stock is considered in the precautionary zone. Blue rockfish is currently managed under the minor rockfish complex; however the Council considered removing blue rockfish from the minor rockfish complex and setting a species-specific OY. In addition, the Council considered setting a harvest guideline for blue rockfish within the minor rockfish north and minor rockfish south OY, rather than setting a species-specific OY.

Because the blue rockfish stock off California (that portion south of 42° N. lat.) is under both the minor nearshore rockfish north and the minor nearshore rockfish south complexes, alternative OYs were considered for each minor rockfish complex (minor rockfish south Alternatives 1–3 and minor rockfish north Alternatives 1–3). In addition, two OY alternatives that specifically considered species-specific harvest specifications (blue rockfish OY Alternatives 3 and 4) were considered by the Council. For minor rockfish south, the blue rockfish status quo (2007–2008) OY contribution was 232 mt, and for minor rockfish north the OY contribution was 30 mt. When considering new OYs for species managed within complexes, the status quo OY contributions are removed and replaced with the newly adopted values, then the OYs for all other species in the complex are summed to derive the complex OY value.

The two minor rockfish south alternatives that maintained blue rockfish within the complex were Alternatives 1 and 2. Alternative 3 removed blue rockfish from the complex. Under the minor rockfish south, Alternative 1, the OY was determined by replacing the old OY contribution of 116 mt for blue rockfish with the new contribution of 182 mt, based on the 2007 assessment base case model, given a medium productivity. The resulting OYs were 1,970 mt for 2009 and 2010. Alternative 2 for minor rockfish south considered a new blue rockfish OY contribution of 202 mt based on the projected OY from 2007 stock assessment base model, given a high productivity as limited by the base model ABC. The resulting OYs under Alternative 2 were 1,990 mt in 2009 and 2010. OY Alternative 3 (1,788 mt in 2009 and 2010) removed the status quo OY contribution for blue rockfish from the minor nearshore rockfish south

complex and considered managing blue rockfish under its own specifications.

The Council also considered two minor rockfish north alternatives that maintained blue rockfish within the complex (Alternatives 1 and 2) and one alternative that removed blue rockfish from the complex (Alternative 3). Under OY Alternative 1 (2,280 mt in 2009 and 2010) the old blue rockfish OY contribution of 15 mt was removed and the results from the 2007 assessment base model with medium productivity (25 mt in 2009 and 2010) were added back in to derive a 2,280 mt OY. Under OY Alternative 2 (2,283 mt in 2009 and 2010), the old blue rockfish OY contribution of 15 mt was removed and the results from the 2007 assessment with high productivity, as capped by the base model ABC (28 mt in 2009 and 2010), were added back in to derive a 2,283 mt OY.

OY Alternative 3 (2,255 mt in 2009 and 2010) contemplates removing blue rockfish from the northern minor rockfish complex and managing blue rockfish under its own harvest specifications. To establish species-specific specifications for blue rockfish, two OY alternatives were considered. OY Alternative 3 (207 mt in 2009 and 2010) was the sum of the 198 mt OY based on the ABC from the base model with the 40–10 harvest rate for the assessed portion of the California stock north of Pt. Conception at 34°27′ N. lat., plus 9 mt for the contribution to the OY south of Point Conception. OY Alternative 4 (230 mt in 2009 and 2010) was the sum of the 221 mt OY base on the OY being set equal to the ABC from the 2007 stock assessment base model, given high productivity model, plus 9 mt for the contribution to the OY south of Point Conception. The 9 mt contribution for the area south of Point Conception is a 50 percent adjustment of the original ABC contribution of blue rockfish from the southern minor nearshore rockfish complex (18 mt), which represents the average 1994–99 harvest of blue rockfish in those waters.

In making this determination about removing blue rockfish from the minor rockfish complex, the Council considered the stock biology, available management strategies, and current catch levels. When blue rockfish occur offshore they can be targeted separately from other nearshore rockfish, but those that occur inshore mix with other nearshore rockfish stocks. Blue rockfish will continue to be managed as part of the minor rockfish complex. However, the state of California will take the necessary action to reduce the catch of blue rockfish and to monitor it closely to reduce the risk of exceeding the OY.

Pacific Whiting

Consistent with the U.S.-Canada agreement for Pacific whiting, the Council recommended a range of OYs for Pacific whiting for 2009 and 2010, and delayed adoption of final 2009 and 2010 ABCs and OYs until its March 2009 and 2010 meetings, respectively. The final ABC and OY values recommended in March will be based on stock assessments which include the most recent scientific information and that are completed each year, just prior to the Council's March meeting. The DEIS for the 2009 and 2010 management measures considers a range for OYs and the resulting impacts. The range of alternatives considered in the DEIS for the U.S. OY are as follows: OY Alternative 1 (134,773 mt) which is half the OY specified in 2008, OY Alternative 2 (269,545 mt) which is the status quo 2008 OY, and OY Alternative 3 (404,318 mt) which is 150 percent of the status quo OY. Given the results of recent assessments, the recommended range of OYs is expected to accommodate the projected results of the new assessments. Revisions to the Pacific Coast treaty Indian tribes Pacific whiting allocations are being proposed with this rulemaking. Further discussion of the proposed allocation scheme is described below in the tribal section.

OY Policies and Rebuilding Parameters for Overfished Species

Under the Magnuson-Stevens Act, overfished species rebuilding periods must be as short as possible, taking into account the status and biology of any overfished stocks of fish, the needs of fishing communities, and the interaction of the overfished stock of fish within the marine ecosystem. National Standard 8 of the Magnuson-Stevens Act, 16 U.S.C. 1851(a)(8), also requires consideration of fishing communities consistent with the conservation requirements of the Act: ''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.'' (1851(a)(8)). Both National Standard 8 and the rebuilding provisions address the difficult and often conflicting short term and long term socioeconomic and biological considerations in fisheries management, which require sustaining the long term productivity of the marine resources and fishing communities. Under the FMP, when a stock assessment estimates that a stock is below 25 percent of estimated unfished spawning biomass ($B_{UNFISHED}$) it is declared overfished. The Magnuson-Stevens Act requires that overfished stocks be rebuilt to B_{MSY}, which is the biomass level at which a stock is estimated to be able to maintain its maximum sustainable yield (MSY) over time. The FMP sets a proxy B_{MSY} level for all groundfish species at 40 percent of a stock's unfished spawning biomass level ($B_{40\%}$). When a stock has been declared overfished a rebuilding plan must be developed and the stock must then be managed in accordance with the rebuilding plan. An overfished groundfish stock is considered rebuilt once its spawning biomass reaches $B_{40\%}$.

When a stock's spawning biomass is estimated to be below $B_{25\%}$, a rebuilding analysis is prepared. Life history characteristics (*e.g.*, age of reproductive maturity, relative productivity at different ages and sizes, etc.) and the effects of environmental conditions on its abundance (*e.g.*, relative productivity under inter-annual and inter-decadal climate variability, availability of suitable feed and habitat for different life stages, etc.) are taken into account in the stock assessment and the rebuilding analysis. A rebuilding analysis for an overfished species uses the information in its stock assessment to determine T_{MIN}, the minimum time to rebuild to $B_{40\neq}$ in the absence of fishing. For each stock, its T_{MIN} is dependent on a variety of physical and biological factors. The rebuilding analyses are used to predict T_{MIN} for each overfished species and, in doing so, answer the question of what is ''as quickly as possible'' for each of the overfished species. It must be noted that rebuilding by the T_{MIN} date would require elimination of human-induced fishing mortality on a stock. Because of the interrelationships of the various stocks in the groundfish fishery, zero fishing mortality on an overfished stock would require a complete or near complete prohibition on all groundfish fishing. The complete absence of targeted fishing mortality on the stock does not necessarily result in the complete absence of human-induced mortality on the stock.

No new species were declared overfished from the 16 groundfish assessments conducted in 2007. However, new stock assessments and rebuilding analyses for all of the seven overfished groundfish species were developed and adopted in 2007. For

2009–2010, the Council reviewed rebuilding plans for the seven species and reconsidered those plans in response to the results of new assessments and rebuilding analyses. For four of the overfished species (POP, bocaccio, widow rockfish, and yelloweye rockfish), the rebuilding progress was considered adequate by the SSC, and the new assessments and rebuilding analyses did not change the fundamental understanding of the stocks. However, for three stocks, canary rockfish, darkblotched rockfish, and cowcod, the new stock assessments resulted in fundamental changes in the understanding of the biology of the stocks, therefore those rebuilding plans are being revised in a manner that is consistent with Amendment 16–4. These revisions are discussed further below. Canary rockfish is very much ahead of schedule, while darkblotched rockfish and cowcod are substantially behind schedule. For canary rockfish and darkblotched rockfish, the changes are due primarily to changes in the understanding of stock productivity and depletion. In the case of cowcod, there was a departure from the expected rebuilding trajectory due to the correction of a technical flaw in the 2005 assessment. The Council also recommended modifications to the yelloweye rockfish rebuilding plan.

The Council continued to use an integrated rebuilding strategy that moves fishing effort off of the more sensitive rebuilding species and on to the less sensitive rebuilding species (*i.e.*, off of species with longer rebuilding times and onto species able to rebuild quicker). This concept was determined to be the best way of taking into account the biology of the stocks and the needs of fishing communities in a programmatic fashion that simultaneously considered all rebuilding species and groundfish sectors. Earlier, this notice discussed the Council's decision-making process and how that process focused the Council's decision on a suite of inter-related OYs for overfished species. As discussed above, the overfished species OYs constrain fishing for all co-occurring groundfish species and for some non-groundfish species as well, making the suite of overfished species OYs the cornerstone of the entire groundfish harvest specifications and management measures package. As also discussed above, recommending a suite of interrelated overfished species OYs allowed the Council to consider a management package that best takes into account the status and biology of those stocks and the needs of fishing communities, by emphasizing catch reductions for the species most sensitive to changes in OY harvest rates and consideration of communities most vulnerable to shifts in groundfish fishing income.

At its April 2008 meeting, the Council considered seven rebuilding alternatives that packaged overfished species OYs with management measures intended to constrain fishing to those OYs. Rebuilding Alternative 1 was designed to allow more fishing opportunities on the continental shelf north and south of 40°10′ N. lat. by specifying relatively higher OYs for bocaccio, canary rockfish, cowcod, widow rockfish and yelloweye rockfish, while allowing fewer fishing opportunities on the slope by specifying relatively lower OYs for darkblotched rockfish and POP. Rebuilding Alternative 2 was conversely designed to allow fewer fishing opportunities on the shelf north and south of 40°10′ N. lat. by specifying relatively lower OYs for the shelf species (bocaccio, canary, cowcod, widow, and yelloweye), and higher fishing opportunities on the slope by specifying relatively higher OYs for the slope species (darkblotched and POP). Rebuilding Alternative 3 was the most restrictive alternative coastwide because it was constructed with relatively low OYs for all the overfished species. Rebuilding Alternative 4 was the most liberal alternative coastwide since it was constructed with relatively high OYs for all the overfished species. Rebuilding Alternatives 5a and 5b allowed mixed fishing opportunities by sector north and south of 40°10′ N. lat. and in shallow and deeper waters and are designed to show further trade-offs between rebuilding OYs that may not be captured by rebuilding Alternatives 1 through 4. The preferred suite of overfished species OYs identified by the Council in April 2008 included: 105 mt for canary in 2009 and 2010; 17 mt for yelloweye in 2009 and 14 mt in 2010; 288 mt for bocaccio in 2009 and 2010; 3 mt for cowcod in 2009 and 2010; 189 mt for POP in 2009 and 200 mt in 2010; 300 mt for darkblotched in 2009 and 306 in 2010; and 475 mt for widow rockfish in 2009 and 2010.

At its June 2008 meeting, the Council made final recommendations on: 2009–2010 OYs; rebuilding plan revisions; bycatch limits for the proposed 2009 exempted fishing permits (EFPs); and groundfish management measures designed to keep catch levels within the final preferred OYs. The final preferred suite of overfished species OYs recommended by the Council included: 105 mt for canary in 2009 and 2010; 17 mt for yelloweye in 2009 and in 2010; 288 mt for bocaccio in 2009 and 2010; 4 mt for cowcod in 2009 and 2010; 189 mt for POP in 2009 and 200 mt in 2010; 285 mt for darkblotched in 2009 and 291 in 2010; and for widow rockfish 522 mt in 2009 and 509 in 2010.

Under the Council's recommended suite of rebuilding OYs, POP, widow rockfish, canary rockfish and bocaccio OYs increase from 2008 levels, easing constraints on target species that co-occur with the overfished species. However, rebuilding OYs for darkblotched rockfish and yelloweye rockfish decline from 2008 levels under the Council-recommended suite of alternatives. Reductions in the darkblotched rockfish and yelloweye rockfish OYs would require more restrictive management measures to reduce the catch of these two species. The impacts to the non-whiting limited entry trawl sector under the final Council-preferred alternative are largely driven by the OYs for canary rockfish, bocaccio rockfish, darkblotched rockfish, cowcod, and POP. Under the final Council-preferred alternative, the limited entry bottom trawl sector is predicted to generate approximately $2.8–3 million more exvessel revenue than in 2007 (Status Quo). This increase is largely driven by increases in the abundance of sablefish, English sole and arrowtooth flounder, as opposed to changes in rebuilding species OYs.

Fishing opportunity and economic impacts to the nearshore groundfish sector are largely driven by the need to reduce the catch of canary and yelloweye rockfish. In areas south of 40°10′ N. lat., observer data has not shown an interaction with yelloweye rockfish, so canary rockfish is the driving constraint in this area. The impacts to recreational sectors are driven by the OYs for yelloweye rockfish, canary rockfish, and to a lesser extent, bocaccio and widow rockfish.

The OY alternatives for yelloweye rockfish are based on the 2007 assessment, which is an update of the 2006 assessment, and the 2007 rebuilding analysis which is based on the 2007 updated assessment. The 2007 updated assessment did not significantly change the understanding of stock productivity, although the median time to rebuild under the status quo harvest rate ramp-down strategy is now predicted to be 2082 instead of 2084, largely due to a higher assumed natural mortality rate. Yelloweye rockfish have a life history that illustrates the classic challenge of rebuilding overfished rockfish stocks; they are slow to mature, have low productivity, and can live in excess of 100 years. Given their low productivity,

small changes in yelloweye rockfish long-term harvest rates can result in large changes in the time to rebuild. According to the rebuilding analysis, in the absence of fishing beginning in 2009 (TF = 0), the stock would be rebuilt in 2049. Continuing the ramp-down strategy, adopted in Amendment 16–4, of 17 mt 2009 and 14 mt in 2010, with the SPR going to 0.719 beginning in 2011 produces a median year to rebuild of 2082. In contrast, applying the SPR of 0.719 beginning in 2009 (which would produce an OY of 13.3 mt in 2009 and 13.6 mt in 2010) produces the same median year to rebuild. Therefore, slight changes in the OY at the beginning of the rebuilding schedule make little to no difference in the time needed to rebuild.

When setting the 2007 and 2008 harvest specifications and management measures, the Council recognized the need to restrict the fisheries based on the new yelloweye rockfish assessment, but also took into account the potentially widespread negative effects of an immediate reduction in OY and recommended an OY ramp-down strategy over a 5-year period. The ramp-down strategy provides time to collect much needed additional data that could better inform new management measures for greater yelloweye rockfish catch reduction, and reduces the immediate adverse impacts to fishing communities while altering the rebuilding period by less than one year. The ramped down OY adopted for yelloweye rockfish during the 2007 and 2008 management cycle began with an OY of 23 mt in 2007 and 20 mt in 2008. The OY was to be reduced each year until ultimately reaching 14 mt in 2011. Under this approach the yelloweye rockfish rebuilding plan would revert to a constant harvest rate of F = 0.0101 percent through the rebuilt date of 2084. The yelloweye rockfish OY ramp-down strategy was a departure from the practice of setting constant harvest rates that are intended to carry through time to the rebuilt dates. The 2009–2010 OY alternatives developed for yelloweye rockfish were based on the 2007 stock assessment update and the 2007 rebuilding analysis. The stock assessment update and rebuilding analysis did not significantly change the understanding of stock productivity, although the median time to rebuild the stock under the status quo harvest rate ramp-down strategy was projected to be 2082 instead of 2084 as previously estimated. The change in median rebuilding time was largely due to a higher assumed natural mortality rate. All of the yelloweye rockfish OYs considered by the Council were expected to cause severe impacts to fisheries and communities. The Council expressed strong concern about the severity of the impact on communities resulting from ramp-down strategy as the OY drops below 17 mt. The Council also expressed concern that the current stock assessment for yelloweye rockfish was data-poor, but was hopeful that the next assessment (a full assessment with additional data) would be more optimistic.

The Council initially identified a preference for maintaining the 2007–2008 ramp-down strategy, which reduced the yelloweye rockfish OY to 17 mt in 2009 and 14 mt in 2010. The median time to rebuild the stock under the status quo was 2082. Although yelloweye rockfish was the most constraining species to the fishery, the Council considered it to be prudent to stick with the ramp-down approach as higher OYs could result in a greatly extended rebuilding period, or make reductions after 2010 even more difficult on the fishery. At its April 2008 meeting, the Council requested analysis of an alternative ramp-down approach that would specify both the 2009 and 2010 OYs as 17 mt ($F_{66.3\%}$), before ramping down to the status quo SPR harvest rate of $F_{71.9\%}$ in 2011. After consideration of the new information available at the Council's June 2008 meeting, the Council chose to recommend a yelloweye rockfish OY of 17 mt in both 2009 and 2010 and to maintain the target rebuilding year of 2084 in the status quo yelloweye rebuilding plan. Although the original ramp-down analysis was done assuming an OY of 14 mt in 2010, as noted above, an OY of 17 mt in 2010 does not significantly alter the rebuilding schedule.

A 17 mt OY in 2010 would require a more abrupt adjustment by management and industry as the fishery transitions to the constant harvest rate in 2011. However, maintaining a slightly higher OY in 2010 would allow both management and industry to learn how to manage to the highly restrictive harvest levels needed to rebuild yelloweye. Scientific data collection may be allowed with the slightly higher OY. Scientific data are needed to improve stock assessments and to help understand how to make fishery catch reductions. The Council did not recommend revising the target rebuilding year or the harvest control rule for 2011 and beyond. This constant harvest rate beginning in 2011 is a key feature of the yelloweye rebuilding plan and represents the Council's primary decision on how to rebuild the stock in as short a time as possible, taking into account the status and biology of any overfished stock of fish and the needs of fishing communities.

At their April 2008 meeting, the Council requested an analysis of the associated impacts of yelloweye rockfish catch sharing between directed groundfish sectors and state recreational fisheries. The alternative catch sharing was to be based on the 2005 and 2007 projections of catch documented by the Groundfish Management Team in the final bycatch scorecards. This is the first management cycle where all three states have been constrained by yelloweye rockfish. In prior management cycles, the California fisheries were more constrained by the availability of canary rockfish than yelloweye rockfish. Potential harvest guidelines for yelloweye rockfish that would be available for the different groundfish fisheries were provided for each OY alternative. At its June 2008 meeting, the Council recommended adoption of an alternative catch sharing arrangement for yelloweye rockfish that restructured the catch sharing based on the 2005 bycatch scorecard: Limited entry non-whiting trawl 0.6 mt; limited entry whiting 0.0 mt; limited entry fixed gear 1.4 mt; directed open access 1.1 mt; Washington recreational 2.7 mt; Oregon recreational 2.4 mt; California recreational 2.7 mt; and 0.3 for exempted fishing.

For cowcod, the SSC recommended revising the cowcod rebuilding plan based on the new 2007 stock assessment because of technical errors in the 2005 assessment that led to a flawed understanding of the status and biology of the stock. The Council initially recommended an OY of 3 mt in 2009 and 2010 based on a higher SPR harvest rate ($F_{83.6\%}$) at its April 2008 meeting. The 2007 and 2008 status quo OY was 4 mt. Because a 3-mt alternative was not analyzed in the original 2007 cowcod rebuilding analysis, the Council deferred their decision on revised cowcod rebuilding plan parameters until June 2008. Cowcod is an unproductive stock that is more depleted than previously thought. Although cowcod impacts have been minimized by prohibiting retention and area closures in California waters, there have been instances when 3 mt has been estimated to have been incidentally taken.

The majority of incidental catch of cowcod has occurred in the recreational and trawl fisheries. With the increased sablefish OY the trawl fishery could be curtailed if the 3 mt cowcod OY were specified. The Council indicated that there were few remaining restrictions available under the groundfish FMP that

would further reduce the take of cowcod. The Council made the recommendation for 4 mt on the belief that additional large scale closures of fisheries to further reduce cowcod take would be devastating to California fishing communities.

The departure from the expected rebuilding trajectory, due to correction of the technical flaw that existed in the 2005 assessment, resulted in a longer time to rebuild the cowcod stock than was originally estimated because of a lower estimated depletion level. Given this was a fundamental revision in the understanding of the biology of cowcod, the SSC indicated that a revision in T_{TARGET} was warranted. The Council recommended formally revising the target rebuilding year in the cowcod rebuilding plan from 2039 to 2072 and the SPR harvest rate from $F_{90.0\%}$ to $F_{82.1\%}$.

The SSC recommended maintaining the status quo bocaccio rebuilding plan adopted under Amendment 16–4 since the new assessment did not appreciably change the understanding of the stock's status from the previous assessment. The Council elected to maintain the status quo target rebuilding year of 2026 and SPR harvest rate ($F_{77.7\%}$) in the current bocaccio rebuilding plan with a corresponding OY of 288 mt in both 2009 and 2010. The SSC concluded that bocaccio was showing adequate progress towards rebuilding.

The new assessment and rebuilding analysis confirmed that widow rockfish stock is on track for recovery by the next assessment cycle. Widow rockfish is incidentally taken in the Pacific whiting fishery, where the catch of widow rockfish is constrained under bycatch limits. Constraining widow rockfish incidental catch inseason has resulted in the Pacific whiting fishery having to shift their fishing areas to better avoid widow rockfish, and early closure in 2007 when the widow rockfish bycatch limit was reached. However, as discussed above, efforts to reduce widow bycatch have resulted in increased darkblotched rockfish bycatch. Widow rockfish also occurs, but less frequently, in fixed gear and recreational fisheries.

At its April 2008 meeting the Council recommended a preliminary preferred OY for widow rockfish of 475 mt in 2009 and 2010. Although widow rockfish is projected to be rebuilt after the next assessment, the Council recognized that the stock is not yet rebuilt and will need to be fully assessed before the next biennial management period. A recommendation of 475 mt is lower than required by the rebuilding plan, but was considered to provide a reasonable probability of harvesting the available whiting harvest allocation if similar to 2008. At its June 2008 meeting, and for the reasons discussed above regarding the relationship between darkblotched rockfish catch and widow rockfish catch in the Pacific whiting fishery, the Council made a final OY recommendation for widow rockfish of 522 mt in 2009 and 509 mt in 2010. The Council's recommended OYs are based on the status quo SPR harvest rate of $F_{95.0\%}$. The Council elected to maintain the target rebuilding year (2015) and the harvest control rule ($F_{95.0\%}$) in the widow rockfish rebuilding plan.

The SSC recommended revising the status quo darkblotched rockfish rebuilding plan adopted under Amendment 16–4 since the new assessment fundamentally changed the understanding of stock productivity. It was determined that the status quo target rebuilding year of 2011 in the current darkblotched rebuilding plan cannot be achieved even under a zero harvest rebuilding strategy $T_{F=0}$. Reductions in the darkblotched rockfish OYs are highly limiting to the trawl fisheries because darkblotched rockfish co-occurs with the most economically important species in the fishery such as petrale sole, sablefish, and whiting. Darkblotched appears to restrict exvessel revenues in the trawl fisheries more than other species such as canary. Although the relationship between widow rockfish and darkblotched rockfish incidentally taken in the Pacific whiting fishery is uncertain, attempts to avoid darkblotched rockfish have resulted in increased widow rockfish catch and vice versa. The Council considered reducing the darkblotched OY below the preferred OYs of 475 in 2009 and 2010 that had been preliminarily recommended in April and increasing the widow rockfish to 522 mt in 2009 and 509 mt in 2010. By increasing the widow rockfish OY, the whiting fishery would be encouraged to adjust their fishing strategy to further reduce their bycatch of darkblotched rockfish, and the needs of fishing communities would continue to be taken into account. The lower OY for darkblotched rockfish would result in faster rebuilding of that stock while the time to rebuild widow rockfish would remain unchanged. Therefore, the darkblotched rockfish recommendation was reduced from the 300 in 2009 and 306 in 2010, recommended in April 2008, to 285 mt in 2009 and 291 mt in 2010, recommended in June 2008. Because of the new stock assessment, the Council recommends revising the current darkblotched rebuilding plan by specifying a target rebuilding year of 2028 and a harvest control rule of $F_{62.1\%}$. This is a more conservative harvest rate, but a longer time to rebuild.

For canary, the SSC recommended revising the status quo canary rockfish (*Sebastes pinniger*) rebuilding plan adopted under Amendment 16–4 since the new assessment fundamentally changed the understanding of stock productivity. The Council recommended an OY of 105 mt for both 2009 and 2010, an increase from 2007–2008 OY of 44 mt, but consistent with the existing rebuilding plan. The Council also recommended revising the target rebuilding year from 2063 to 2021, which is two years longer than F=0 and maintaining the SPR harvest rate of $F_{88.7\%}$ defined in the current canary rebuilding plan. Given the new understanding of the condition of the stock and the revised rebuilding plan, the Council indicated that setting the canary OY to 105 mt was a prudent approach while still precautionary and consistent with the Magnuson-Stevens Act requirements. The fishing communities have endured substantial hardship with the 44 mt canary OY in 2007 and 2008 because substantial harvest of other healthy species was foregone, regardless of best efforts to reduce incidental catch.

At their April 2008 meeting, the Council requested an analysis of the associated impacts of canary rockfish catch sharing between directed groundfish sectors and state recreational fisheries. The alternative catch sharing was to be based on the 2005 and 2007 projections of catch, documented by the Groundfish Management Team in the final bycatch scorecards. Potential harvest guidelines for canary rockfish were provided for each OY alternative. At its June 2008 meeting, the Council recommended adoption of an alternative catch sharing arrangement for canary rockfish based on the initial 2005 scorecard. The following recommended alternative would provide flexibility for some fisheries: Limited entry non-whiting trawl 19.7 mt; limited entry whiting 18.0 mt; limited entry fixed gear 2.5 mt; directed open access 2.2 mt; Washington recreational 4.9 mt; Oregon recreational 16.0 mt; and California recreational 22.9 mt.

Information on the status and biology of POP and their effects on fishing communities has remained relatively unchanged since the analysis of the 2007 and 2008 harvest specifications and Amendment 16–4. Therefore, the Council recommended an OY of 189 mt in 2009 and 200 mt in 2010. The

Council elected to maintain the status quo target rebuilding year of 2017 and the SPR harvest rate $F_{86.4\%}$ specified in the current POP rebuilding plan.

For each approved overfished species rebuilding plan, the following parameters are specified in the FMP: Estimates of unfished biomass (B0) and target biomass (B_{MSY}); the year the stock would be rebuilt in the absence of fishing (T_{MIN}); the year the stock would be rebuilt if all fishing mortality were to cease beginning in 2007 ($T_{F=0}$); the year the stock would be rebuilt if the maximum time period permissible under National Standard Guidelines were applied (T_{MAX}); the target year in which the stock would be rebuilt under the adopted rebuilding plan (T_{TARGET} also referred to as the median time to rebuild); the spawning potential ratio (SPR = the ratio of the equilibrium spawning output per recruit under fished conditions to the spawning output per recruit under no fishing); and/or, the harvest control rule (F). Other relevant rebuilding information is also included in the FMP. The estimated rebuilding parameters serve as management benchmarks in the FMP and the FMPs are not amended when the values change after new stock assessments are completed, as is likely to happen.

Rebuilding parameters being codified in regulation (50 CFR 660.365) are the harvest control rule and the target time to rebuild. If, after a new stock assessment, the Council and NMFS conclude that the parameters defined in regulation should be revised, the revision will be implemented through the Federal rulemaking process with public notice and opportunity for comment. Any changes to the values in regulation will be supported by a corresponding analysis. Approved rebuilding plans are implemented through setting OYs and establishing management measures necessary to maintain the fishing mortality within the OYs to achieve objectives related to rebuilding requirements. The rebuilding OYs and management measures being implemented through Federal regulations are summarized below. Management measures adopted for 2009 and 2010 are expected to keep the incidental catch of overfished species within the adopted OYs. Management measures designed to rebuild overfished species, or to prevent species from becoming overfished, may restrict the harvest of relatively healthy stocks that are harvested with overfished species. As a result of the constraining management measures imposed to rebuild overfished species, a number of the OYs for healthy stocks may not be achieved.

The OY alternatives analyzed in the DEIS were based on harvest rates estimated from the rebuilding simulation program and were calculated using a Spawning Potential Ratio or SPR (the ratio of the equilibrium spawning output per recruit under fished conditions to the spawning output per recruit under no fishing) which may be converted to an instantaneous rate of fishing mortality (F). Given fishery selectivity patterns and basic life history parameters, there is an inverse relationship between the harvest control rule (F) and SPR harvest rate. When there is no fishing, each new female recruit is expected to achieve 100 percent of its spawning potential (SPR=100%, F=0). As fishing intensity increases, expected lifetime reproduction declines due to this added source of mortality. Calculation of the harvest control rule SPR has the benefit of standardizing for differences in growth, maturity, fecundity, natural mortality, and fishery selectivity patterns and, as a consequence, the SSC recommended that the SPR harvest rate be used routinely. The SPR harvest rate for each species is being provided so that fishing intensity can be more easily compared and to standardize the basis of rebuilding calculations. If the rebuilding SPR target is revised upward (a reduction in fishing mortality) in the rebuilding plan without changing the target rebuilding year the new rate is set for the duration of the rebuilding period.

Bocaccio

Date declared overfished: March 3, 1999.

Areas affected: Monterey and Conception.

Status of stock: In 2007 it was at 12.7 percent of its unfished spawning biomass:

B0: 13,554 Billion eggs.

B_{MSY}: 5,421 Billion eggs.

T_{MIN}: 2019.

$T_{F=0}$: 2020.

T_{MAX}: 2033.

Target year to rebuild: 2026.

Median year to rebuild: 2023.

SPR target fishing intensity: 77.7 percent.

ABC: 793 mt in 2009 and 2010.

OY: 288 mt in 2009 and 2010.

Biology of the stock: Bocaccio are historically most abundant in waters off central and southern California. Juveniles settle in nearshore waters after a several month pelagic stage. Adults range from depths of 6.5–261 fm (12–478 m). Most adults are caught off the middle and lower shelf at depths between 27 fm and 137 fm (50 and 250 m). Larger fish tend to be found deeper. Bocaccio are found in a wide variety of habitats, often on or near bottom features but sometimes over muddy bottoms. Bocaccio are usually found near the bottom, however, they may also occur as much as 16.4 fm (30 m) off the bottom. Tagging studies have shown that young fish move up to 148 km (92 miles). Maximum age of bocaccio was determined to be at least 40 and perhaps more than 50 years.

Management measures for 2009 and 2010: Bocaccio have historically been taken by commercial trawl and fixed gear vessels and in the recreational fisheries. Adult bocaccio are often caught with Chilipepper rockfish and have been observed schooling with speckled, vermilion, widow, and yellowtail rockfish. South of 40°10′ N. lat. the bottom trawl, limited entry fixed gear, and open access fishing opportunities, in the depths where bocaccio are most commonly encountered, have been reduced through the use of RCAs. To accommodate incidental catch of shelf species, very small limits are allowed to be retained with large footrope and midwater trawl gear, but harvest of bocaccio is prohibited with small footrope trawl gear. Chilipepper rockfish limits for limited entry large footrope and mid water trawl gear are available for the area south of 40°10′ N. lat. and may be reduced inseason if incidental catch of bocaccio is greater than pre-season projections. The Chilipepper rockfish limits are conservative and not expected to result in the bocaccio OY being exceeded. Pink shrimp trawl vessels fishing in waters off the State of California will continue to be required to have and use fin fish excluder devices that are intended to reduce the catch of overfished species including bocaccio. Bocaccio are vulnerable to commercial non trawl gears and to recreational fishing gear. To accommodate incidental catch of bocaccio in commercial fixed gear fisheries, very small limits are allowed to be retained. California recreational fisheries will constrain incidental bocaccio catch with recreational fishery bag limits.

Canary Rockfish

Date declared overfished: January 4, 2000 (65 FR 221).

Affected area: Coastwide.

Status of the stock: In 2007 it was at 32.4 percent of its unfished spawning biomass.

B0: 32,561 mt.

B_{MSY}: 13,024 mt.

T_{MIN}: 2019.

$T_{F=0}$: 2019.
T_{MAX}: 2041.
Target year to rebuild: 2021.
Median year to rebuild: 2020.
SPR target fishing intensity: 88.7 percent.
ABC: 937 mt in 2009, 940 mt in 2010.
OY: 105 in 2009 and 2010.
Biology of the stock: Canary rockfish are a continental shelf (shelf) species. Juveniles settle in nearshore waters after a several month pelagic stage. Adults range from depths of 25–475 fm (46–868 m). Most adults are caught off the middle and lower shelf at depths between 44 fm and 109 fm (80 and 200 m). Larger fish tend to be found in deeper waters. Canary rockfish are usually associated with areas of high relief such as pinnacles, but also occur over flat rock or mud and boulder bottoms. They are usually found near the bottom and are occasionally found off the bottom or in soft-bottom habitats that are atypical for rockfish. A tagging study showed that canary rockfish can migrate up to 700 km (435 miles). The maximum age of canary rockfish is 84 years.

Management measures in 2009 and 2010: Unavoidable incidental catches of canary rockfish occur in trawl, fixed gear, open access, and recreational fisheries targeting groundfish, as well as commercial and recreational fisheries targeting species other than groundfish. Adult canary rockfish are often caught with bocaccio, sharpchin rockfish, yelloweye rockfish, yellowtail rockfishes, and lingcod. Researchers have also observed canary rockfish associated with silvergray and widow rockfish. Management measures intended to limit bycatch of canary rockfish include RCAs, cumulative trip limits to constrain the fishery coastwide, and bycatch limits in the whiting fishery. Canary's wide geographic distribution and catchability in all fisheries makes it more difficult to manage with species specific RCAs, like yelloweye rockfish and cowcod.

Bottom trawling is prohibited in the trawl RCA, which covers depths where canary rockfish have been most frequently caught. Cumulative limits are structured to discourage targeting of shelf species while allowing very low levels of incidental take to be landed. Because vessels fishing with trawl gear shoreward of the trawl RCA are more likely to encounter canary rockfish than those fishing seaward of the RCA, differential trip limits have been used for large footrope, small footrope and selective flatfish trawl gear. To reduce incidental take of canary rockfish in the area north of 40°10′ N. lat., vessels fishing shoreward of the RCAs are required to use selective flatfish trawl gear. By allowing higher limits for large and small footrope gear in areas seaward of the RCAs and prohibiting its use in nearshore areas, there is an incentive for vessels to fish in deeper waters, beyond the range of canary rockfish.

Incidental catch of canary rockfish during the primary season for whiting will be constrained by sector-specific bycatch limits that require closure of the commercial whiting fisheries when reached. For 2009 and 2010 the canary rockfish bycatch limits are: 6.1 mt for the catcher/processor sector, 4.3 for the mothership sector, and 7.6 mt for the shore-based sector. A final 2009 and 2010 whiting ABC and OY will be adopted at the Council's March meeting and the bycatch limits may be reconsidered at that time and adjusted inseason. The non-trawl limited entry fisheries will be constrained by RCAs coastwide that are intended to reduce the catch of canary rockfish. Pink shrimp trawl vessels fishing in waters off the states of Washington, Oregon and California will continue to be required by the states to have and use fin fish excluder devices that are intended to reduce the catch of overfished species including canary rockfish.

Recreational fisheries are managed through bag limits, size limits and seasons. Seasons are shorter than they were in the past in order to reduce catch of canary rockfish. As necessary, seasons can be shortened more and bag limits reduced to stay within the OYs. The retention of canary rockfish is prohibited in the recreational fisheries.

Cowcod

Date declared overfished: January 4, 2000.
Areas affected: Point Conception (34°27′ N. lat.) to the U.S. Mexico boundary.
Status of stock: In 2007 it was at 4.6 percent of unfished spawning biomass.
B0: 2,494 mt.
B_{MSY}: 997 mt.
T_{MIN}: 2060.
$T_{F=0}$: 2061.
T_{MAX}: 2098.
Target (median) year to rebuild: 2072.
SPR target fishing intensity: 82.1 percent.
ABC: 13 mt in 2009 and 14 mt in 2010.
OY: 4 mt in 2009 and 2010.
Biology of the stock: Cowcod are found at depths of 11–200 fm (75–366 m). Cowcod range from central Oregon to central Baja California and Guadalupe Island. However, they are rare off Oregon and Northern California. It has long been argued that smaller cowcod are found at the shallow end of the depth range. Recent submersible work, however, indicates that cowcod size distribution may be more associated with sea floor structure than depth. In Monterey Bay, juvenile cowcod recruit to fine sand and clay sediments at depths of 22–56 fm (40–100 m) during the months of March–September. Adults are found at depths of 50–280 fm (90–500 m) usually on high relief rocky bottom. Adult cowcod are believed to be less abundant in depths greater than 175 fm (323 m).

Management measures in 2009 and 2010: All directed cowcod fishing has been prohibited since 2001. Retention of cowcod will continue to be prohibited for all commercial and recreational fisheries. To prevent incidental cowcod harvest, two Cowcod Conservation Areas (CCAs) (the Eastern CCA and the Western CCA) in the Southern California Bight were delineated to encompass key cowcod habitat areas and known areas of high catches. The CCAs were codified into regulation on November 4, 2003 (68 FR 62374). Fishing for groundfish is prohibited within the CCAs, except that minor nearshore rockfish, California scorpionfish, cabezon, lingcod, and greenling may be taken from waters where the bottom depth is less than 20 fm (36.9 m).

Darkblotched Rockfish

Date declared overfished: January 11, 2001 (66 FR 2338).
Areas affected: Coastwide.
Status of the stock: In 2007 it was at 22.4 percent of its unfished spawning biomass level.
SB0: 30,640 mt.
SB_{MSY}: 12,256 mt.
T_{MIN}: 2015.
$T_{F=0}$: 2018.
T_{MAX}: 2040.
ABC: 437 mt in 2009, 440 mt in 2010.
OY: 285 mt in 2009, 291 mt in 2010.
Target (median) year to rebuild: 2028.
SPR target fishing intensity: 62.1 percent for 2009 and 2010.
Biology of the stock: Darkblotched rockfish are most abundant on the outer continental shelf and slope, mainly north of Point Reyes (38° N. lat.). Most adult darkblotched rockfish are associated with hard substrates on the lower shelf and upper slope at depths between 77 and 200 fm (140 and 365 m). Darkblotched rockfish migrate to deeper waters with increasing size and age. Diurnal migration, rising off bottom at night, is also a likely behavior of darkblotched rockfish. Fish landed in California generally had smaller size at age than fish landed in the two northern states (Oregon and Washington). Size at age in the 2003 and 2004 survey data

did not, however, change significantly with latitude.

Management measures in 2009 and 2010: Because of their deeper distribution, darkblotched rockfish are caught almost exclusively by commercial vessels. Most landings have been made by bottom trawl vessels targeting flatfish on the shelf, and rockfish and the DTS species on the slope. Even once the darkblotched rockfish population is rebuilt to B_{MSY}, its population size will still be small relative to the larger complex of slope rockfish species. Since 2001, darkblotched rockfish have had species specific ABCs and OYs, and were removed from the minor slope rockfish complex. In continued recognition of its status as a minor, but increasingly healthy, stock within a larger stock complex, darkblotched rockfish continues to be managed within the minor slope rockfish trip limits. Management measures intended to limit bycatch of darkblotched rockfish and maintain fishing mortality within the OY specified for 2004 include (1) RCAs and (2) cumulative trip limits.

The boundaries of the RCAs vary by season and fishing sector and may be modified in response to new information about geographical and seasonal distribution of bycatch. The seaward boundary of the trawl RCA was set at a depth that was likely to keep fishing effort in deeper waters and away from areas where the bycatch of darkblotched rockfish was highest. During the winter months, modifications to the line allow for the harvest of flatfish while minimizing the impacts on darkblotched rockfish.

Cumulative limits for slope rockfish north of 40°10′ N. lat. are intended to accommodate incidental take of darkblotched rockfish. These slope rockfish limits are intended to allow vessels to retain slope rockfish taken as bycatch in the DTS (Dover sole, thornyhead, sablefish) fishery. Cumulative limits for splitnose rockfish, a co-occurring species between 40°10′ N. lat. and 38° N. lat., are constrained to reduce the catch of darkblotched rockfish. As needed, trip limits for other co-occurring species are adjusted to reduce darkblotched rockfish bycatch.

Incidental catch of darkblotched rockfish during the primary season for whiting will be constrained by sector-specific bycatch limits that require closure of the commercial whiting fisheries when reached. For 2009 and 2010, the darkblotched rockfish bycatch limits for the commercial whiting fisheries are: 8.5 mt for the catcher/processor fishery; 6.0 mt for the mothership fishery; and 10.5 mt for the shoreside fishery. A final 2009 and 2010 whiting ABC and OY will be adopted at the Council's March meetings in those years, and the bycatch limits may be reconsidered at that time and adjusted inseason.

POP

Date declared overfished: March 3, 1999.

Areas affected: Vancouver and Columbia.

Status of stock: Following the 2007 stock assessment, the stock in 2007 was believed to be at 27.5 percent of unfished spawning biomass level.

SB0: 36,983 units of spawning output.

SB_{MSY}: 14,793 units of spawning output.

T_{MIN}: 2009.

$T_{F=0}$: 2010.

T_{MAX}: 2042.

Target year to rebuild: 2017.

Median year to rebuild: 2011.

SPR target fishing intensity: 86.4 percent.

ABC: 1,160 mt in 2009 and 1,173 mt in 2010.

OY: 189 mt in 2009 and 200 mt 2010.

Biology of the stock: The POP population off the northern U.S. west coast (Columbia and U.S.-Vancouver areas) is at the southern extreme of the stock's range. POP are found on the upper continental slope (slope), 109–150 fm (200–275 m) during the summer and somewhat deeper, 164–246 fm (300–450 m), during the winter. Adults sometimes aggregate up to 16 fm (29 m) above hard bottom features and may then disperse and rise into the water column at night. The maximum age of POP has been determined to be 70 to 90 years. The mean generation time is 28 years. POP recruitment into the spawning population occurs at 3 years of age. Age of maturity and size varies with locality. POP reach 90 percent of their maximum size by age 20 years.

Management measures for 2009 and 2010: POP tend to occur in similar depths as darkblotched rockfish, although they have a more northern geographic distribution. Adult POP are often caught with other upper slope groundfish such as Dover sole, thornyheads, sablefish, and darkblotched, rougheye, and sharpchin rockfish. North of 40°10′ N. lat., POP are caught in similar fisheries as darkblotched rockfish. POP are rarely caught in the recreational fisheries. Management measures for 2009 and 2010 that are intended to limit the bycatch of POP and keep fishing mortality within the OY include (1) RCAs to restrict fishing in areas where POP are found and (2) cumulative trip limits.

Because POP co-occur with darkblotched rockfish, measures to reduce the incidental catch of darkblotched rockfish benefit POP. These measures include seaward trawl RCA boundaries that are established to keep fishing effort in deeper water where POP are less abundant, and cumulative limits for POP and minor slope rockfish that are intended to discourage targeting while allowing low levels of incidental catch to be landed. As needed, trip limits for other co-occurring species may be adjusted to reduce POP bycatch.

Widow Rockfish

Date declared overfished: January 11, 2001.

Areas affected: Coastwide.

Status of stock: In 2007 it was at 35.5 percent of its unfished spawning biomass.

B0: 50,746 million eggs.

B_{MSY}: 20,298 million eggs.

T_{MIN}: 2009.

$T_{F=0}$: 2009.

T_{MAX}: 2023.

Target year to rebuild: 2015.

Median year to rebuild: 2009.

SPR target fishing intensity: 95.0 percent.

ABC: 7,728 mt in 2009, 6,937 mt in 2010.

OY: 522 in 2009 and 509 in 2010.

Biology of the stock: Widow rockfish are most abundant off northern Oregon and southern Washington and are one of the most abundant West Coast rockfish. Young of the year recruit to shallow nearshore waters after spending up to 5 months as pelagic larvae and juveniles in offshore waters. Adults range from bottom depths of 13 fm to 300 fm (24 m to 549 m). Most adults occur near the shelf break at bottom depths between 77 fm to 115 fm (140 m to 210 m). Adults are semi pelagic with their behavior being dynamic. Large concentrations of widow rockfish form at night and disperse at dawn, an atypical pattern for rockfish. Widow rockfish tend to be more easily caught in higher abundance during El Niño (anomalously warm and dry) years. Maximum age of widow rockfish is 59 years.

Management measures in 2009 and 2010: Historically, widow rockfish were caught with yellowtail rockfish in waters off Washington. In the California and Oregon fisheries large pure catches of widow rockfish were taken from midwater schools. Current commercial limits for widow rockfish are intended to accommodate incidental catch and do not provide an incentive for directed fishing. Therefore, the midwater trawl fisheries for yellowtail rockfish, a co-occurring species with widow rockfish,

are also being constrained. Because bottom trawl opportunities for more constraining shelf rockfish species continue to be extremely limited, RCA management measures to restrict fishing on the shelf is expected to be beneficial to the recovery of widow rockfish. Non trawl fisheries have little incidental catch of widow rockfish.

Incidental catch of widow rockfish during the primary season for whiting, will continue to be constrained by sector-specific bycatch limits that require closure of the commercial fisheries when reached. For 2009 and 2010 the widow rockfish bycatch limits are: 153 mt for the catcher/processor sector; 108 mt for the mothership sector; and 189 mt for the shore-based sector. Final 2009 and 2010 Whiting ABCs and OYs will be adopted at the Council's March meeting and the bycatch limits may be reconsidered at that time and adjusted inseason.

Yelloweye Rockfish

Date declared overfished: January 11, 2002.

Areas affected: Coastwide.

Status of stock: In 2007 it was believed to be at 14.5 percent of its unfished spawning biomass.

B0: 3,062 mt.

B_{MSY}: 1,225 mt.

T_{MIN}: 2046.

$T_{F=0}$: 2049.

T_{MAX}: 2090.

Target (median) year to rebuild: 2084.

SPR target fishing intensity: 66.3 percent in 2009 and 2010, 71.9 for 2011 and beyond.

ABC: 31 mt in 2009, 32 mt in 2010.

OY: 17 in each of 2009 and 2010.

Biology of the stock: Yelloweye rockfish juveniles have been found at depths greater than 8 fm (15 m) in areas of high bottom relief. Adults range to depths of 300 fm (549 m). Most adults are caught off the middle and lower shelf at depths between 50 fm and 98 fm (91 m and 180 m). Adult yelloweye rockfish tend to be solitary and are usually associated with areas of high relief with refuges such as caves and crevices, but also occur on mud adjacent to rock structures. They are usually found on or near the bottom. Maximum age of yelloweye rockfish is 115 years. Researchers have observed adult yelloweye rockfish associated with bocaccio, cowcod, greenspotted, and tiger rockfish.

Management measures in 2009 and 2010: Yelloweye rockfish inhabit areas typically inaccessible to trawl gear. In the coastal trawl fishery, incidental catch occurs during the harvest of other target fisheries operating at the fringes of yelloweye rockfish habitat. Yelloweye rockfish is particularly vulnerable to hook and line gear. Currently, only incidental harvest of yelloweye rockfish is allowed in tribal and non tribal hook and line fisheries, and in recreational fisheries.

Under the Council's recommended alternative a 20 fm depth restriction between 40°10′ N. lat. and 42°50.00′ N. lat. (Cape Blanco) would be required for the open access nearshore fishery. Limited entry fixed gear fisheries would have a seaward RCA boundary of 100 fm north of 46°53.30′ N. lat. (Point Chehalis) and a 125 fm seaward RCA boundary between Cape Blanco and 45°03.83 N. lat. (Cascade Head). However, a 100-fm seaward RCA boundary line would be in place for all non-trawl fixed gear fisheries on days when the commercial halibut fishery is open. Yelloweye Rockfish Conservation Areas (YRCAs) will continue to be used to reduce yelloweye rockfish catch in the commercial fixed gear, open access, and recreational fisheries. Six new YRCAs are proposed, five of which are applicable to both commercial non-trawl sectors and the recreational fishery off California, and may be implemented through inseason action if additional management measures are necessary to keep impacts on yelloweye rockfish below their rebuilding OY. The other new YRCA applies to the recreational fishery off Washington, and is designated as an area to be avoided by commercial fishers. YRCAs off the Coasts of Washington, Oregon, and California are defined at § 660.390. Restrictions for all of the status quo YRCAs are unchanged via this action.

Overfishing

The Magnuson-Stevens Act defines ''overfishing'' as ''a rate or level of fishing mortality that jeopardizes the capacity of a fishery to produce the maximum sustainable yield on a continuing basis.'' Under the FMP, ABCs for all species are set at the F_{MSY} level, the level that, for a particular year, is intended to produce maximum sustainable yield for that species on a continuing basis. None of the 2009 or 2010 ABCs would be set higher than F_{MSY} or its proxy, none of the OYs would set higher than the corresponding ABCs, and the management measures in this proposed rule are designed to keep harvest levels within specified OYs.

When evaluating whether overfishing has occurred for any species under the FMP, NMFS compares that species' estimated total catch (landed catch + discard) in a particular year to its ABC for that year. Overfishing is difficult to detect inseason for many groundfish, particularly for minor rockfish species, because most species are not individually identified on landing. Species compositions, based on proportions encountered in samples of landings and extrapolated observer data, are applied during the year. However, final results are not available until after the end of the year.

In the preamble to the proposed rule for the 2007–2008 groundfish specifications and management measures, NMFS discussed overfishing that had occurred in 2004. This proposed rule discusses overfishing estimated to have occurred in 2005 and 2006 and preliminary indicators of whether overfishing occurred on any species in 2007. When new data are available, NMFS updates estimates of whether overfishing has occurred as part of the agency's report to Congress on the Status of U.S. Fisheries (*http://www.nmfs.noaa.gov/sfa/statusoffisheries/SOSmain.htm*).

NMFS estimates that overfishing occurred on petrale sole during the 2005 fishing season, since the total catch of petrale sole exceeded its ABC of 2,762 mt by 4 mt (100.1 percent of the ABC). In 2005, the Dover sole OY of 7,476 mt was exceeded by 31 mt (100.4 percent of the OY), the cabezon OY of 69 mt was exceeded by 11 mt (116 percent of the OY), and the canary rockfish OY of 46.8 mt was exceeded by 1.9 mt (104 percent of the OY). Although the level of catch exceeded the OYs for Dover sole, cabezon and canary rockfish, overfishing did not occur because total catch was below the ABCs of 8,522 mt for Dover sole, 103 mt for Cabezon and 270 mt for canary rockfish. For all remaining groundfish species or species groups, NMFS estimates that total catch was below both ABCs and OYs in 2005.

NMFS estimates that no overfishing occurred during the 2006 fishing season, since no ABCs were exceeded. In 2006, the Dover sole OY of 7,564 mt was exceeded by 166 mt (102.2 percent of the OY), the canary rockfish OY of 47.1 mt was exceeded by 9.9 mt (121 percent of the OY), and the minor rockfish south OY for the nearshore species of 615 mt was exceeded by 96 mt (116 percent of the OY). Although, the level of catch exceeded the OY for these species, overfishing did not occur because total catch was below the ABCs of 8,589 mt for Dover sole, 270 mt for canary rockfish, or 3,412 mt for minor rockfish south. For all remaining groundfish species or species groups, NMFS estimates that total catch was below both ABCs and OYs. NMFS has taken action to prevent the fisheries from exceeding the ABCs and OYs for these species and does not expect that harvest exceedances in 2005 or 2006 will

jeopardize the rebuilding progress for either species.

Preliminary data from the 2007 fisheries show that no ABCs were exceeded in 2007. NMFS will not have complete observer data on the 2007 fisheries until late 2008, at which time NMFS will be better able to analyze total groundfish catch to determine whether overfishing occurred on any other species.

2009–2010 Fishery Management Measures

As discussed earlier in this document, groundfish fishery management measures for 2009–2010 are intended to rebuild overfished species as quickly as possible, taking into account the status and biology of the stocks and the needs of fishing communities. Within the constraints of protecting overfished species, the Council's management measure recommendations are intended to allow fishery participants as much access to healthy stocks as possible. In 2009 and beyond, fishing communities will have to forego much of the available harvestable surplus of healthy groundfish stocks that co-occur with overfished species so that overfished species may be rebuilt as quickly as possible. Management measures intended to address the rebuilding needs of specific overfished species are discussed earlier in this document, in the species-specific sections of ''OY Policies and Rebuilding Parameters for Overfished Species''.

The types of management measures in this proposed rule do not vary significantly from those used in recent years to reduce the incidental catch of overfished species while allowing some harvest of co-occurring healthy stocks. Management measures are intended to allow overfished species to rebuild by reducing their catch in times and areas where they most frequently occur, to minimize bycatch with gear and fishing area restrictions, and to distribute groundfish harvest throughout the year as much as possible to maintain groundfish fishing opportunities and markets. The fisheries management regime tends to be most constrained by protective measures for yelloweye and canary rockfish coastwide. Trawl fisheries are additionally constrained by measures to prevent bycatch of POP, darkblotched, and widow rockfish.

Groundfish management measures that will continue to be used in 2009–2010 include: Trip and bag limits, size limits, differential trip limits by gear type, season openings and closures, large-scale area closures such as the RCAs, gear restrictions, and bycatch limits. In addition to the fishery-specific management measures addressed below, the Council recommended revisions to RCA boundary lines needed to ensure that the lines better approximate the depth contours they are intended to represent and the lines that approximate each depth contour do not intersect or cross over each other. New RCA lines proposed via this action include a new 25-fm (46-m) boundary line approximation off the coast of southern Washington, between 47°31.70′ N. lat. (Queets River) and 46°38.17′ N. lat. (Leadbetter Point). This new modified management line would be available, if necessary, to expand the recreational RCA shoreward as an inseason action to reduce impacts on canary and yelloweye rockfish in this area. In Washington Marine area 4, between 48°02.35′ N. lat. and 47°59.50′ N. lat., the boundary line approximating the 100-fm (183-fm) depth contour, which is generally used as the seaward boundary line for the non-trawl RCA, is expanded seaward to encompass and eliminate fishing effort in an area of known canary and yelloweye rockfish impacts.

Changes to the RCA lines in waters offshore of the state of California are proposed to better approximate depth contours and correct errors. There are sixteen changes to boundary lines that approximate depth contours, used to define the trawl and non-trawl RCAs, proposed in this proposed rule. The Council also recommended new discrete conservation areas off the coasts of Washington and California to reduce fishery impacts to overfished species. As explained in past actions to implement groundfish specifications and management measures, area closures and other fishing restrictions to protect overfished species have been designed to best minimize overfished species bycatch using the mechanisms most appropriate to the fishery managed. As a result, the fishery management regime for recreational fisheries is different than that implemented for commercial fisheries. Yelloweye rockfish are not commonly caught in trawl fisheries; therefore, management measures to minimize incidental catch of yelloweye focus most strongly on constraining the recreational and non-trawl commercial fisheries. Off the coast of Washington, a new recreational closed area is proposed, and would also be designated as an area to be voluntarily avoided for the commercial sectors, called the Westport Offshore YRCA. Off the coast of California, five discrete yelloweye rockfish conservation areas (YRCAs), which include both state and Federal waters, were documented as areas of high yelloweye encounter rates in hook and line fisheries and the Council recommended that these areas could be used as inseason closures, implemented by NMFS and the State, if additional reductions in yelloweye rockfish catch in the California recreational fishery or the commercial non-trawl fishery are necessary during the biennium. These areas include the general areas of Point St. George, South Reef, Reading Rock, and Point Delgada (North and South). This proposed rule would make changes to the groundfish conservation area and RCA boundary line regulations at 50 CFR 660.390 through 660.394, implementing area closures off Washington and defining areas off California, making them available for potential inseason closure, as part of routine recreational management measures.

The management measures proposed in this rule are only part of the overall management strategy for West Coast groundfish. NMFS will continue to require vessels to carry and operate VMS units to monitor fishing locations, and to carry observers when requested by NMFS. NMFS and the states will again be conducting stock assessments over the next two years, which will inform the 2011–2012 specifications and management measures process and provide a gauge for rebuilding progress.

Federal regulations for the West Coast groundfish fishery are found in 50 CFR, subpart G, §§ 660.301 through 660.399. Definitions for terms used in groundfish regulations are at § 660.302. Prohibitions are at § 660.306. Routine and automatic fishery management measures, as identified at § 660.370 and implemented in §§ 660.370 through 660.385 and in Tables 3–5 of subpart G, will continue to be available for revision through the inseason management process. Management measures for the non-trawl sablefish fisheries are found at § 660.372, although daily/weekly sablefish limits are found in Tables 4 and 5 (North) and Tables 4 and 5 (South) of subpart G. Management measures for the primary Pacific whiting season are found at § 660.373, although trip limits for vessels operating outside of the primary season are found in Tables 3 (North) and (South) of subpart G. Coordinates for all of the closed areas affecting the groundfish fisheries, including the EFH conservation areas, are found in §§ 660.390 through 660.399.

Limited Entry Trawl Fishery Management Measures

The types of management measures proposed for the limited entry trawl fishery in 2009–2010 are similar to

those implemented for 2007–2008. The specific closed areas and cumulative landings limits are slightly different than in the past biennium. When compared to management measures at the start of the 2007–2008 biennium, the seaward and shoreward boundaries of the trawl RCA are divided on a finer spatial scale North of 40°10.00′ N. lat. When compared to management measures at the start of the 2007–2008 biennium, landing limits for some species and gear types are more liberal in response to increased harvest specifications resulting from new or updated stock assessments for canary rockfish, sablefish, bocaccio, pacific ocean perch, and widow rockfish. Section ''2009–2010 Groundfish ABCs'' of this proposed rule describes the new stock assessments used in deciding the 2009–2010 harvest specifications. More liberal management measures for certain species and gear types at different times of the year are intended to allow increased harvest of healthy stocks, in times and areas that have lower impacts on overfished groundfish species. More restrictive management measures are intended to respond to the need to rebuild overfished species as quickly as possible, taking into account various factors, and also to implement harvest reductions resulting from a new darkblotched rockfish stock assessment. NMFS's bycatch model for the limited entry trawl fishery does not differ significantly from that used in setting the 2007–2008 fishery management measures, except that new and more recent observer data has been incorporated into that model.

As in past years, trawl fisheries continue to be managed with differing RCAs and cumulative trip limits north and south of 40°10.00′ N. lat. North of 40°10.00′ N. lat., the shoreward boundary of the trawl RCA is set primarily based on the need to reduce canary rockfish bycatch, although its location is also expected to reduce incidental take of other, northern overfished shelf species such as widow and yelloweye rockfish. Most adult canary rockfish are caught off the middle and lower continental shelf, therefore vessels operating shoreward of the RCA are more likely to encounter canary rockfish than those operating seaward of the RCA. At their March 2007 meeting, the Council recommended finer scale spatial management North of 40°10.00′ N. lat. in response to higher than expected canary rockfish bycatch rates from 2005 observer data. On April 17, 2007, NMFS implemented seaward and shoreward boundaries for the northern trawl RCA divided at commonly used geographic coordinates, listed at § 660.302 under ''North-South management area'', in addition to the division at 40°10.00′ N. lat. These routine adjustments to the RCA boundaries and the rationale for setting seaward and shoreward boundaries were discussed in detail in the inseason action that published in the **Federal Register** on April 18, 2007 (72 FR 19390). This proposed rule would continue to use the finer scale spatial management used in 2007 and 2008 and the seaward and shoreward trawl RCA boundaries which will be divided at specific latitudes to reduce impacts to canary rockfish, while allowing harvest opportunities for healthy co-occurring stocks. This approach is primarily based on the need to reduce canary rockfish bycatch, and it is also expected to reduce incidental take of widow and yelloweye rockfish. The Council recommended implementing a shoreward boundary line approximating the 75-fm (137-m) depth contour for the trawl RCA throughout the year, except in the area North of Cape Alava (48°10.00′ N. lat.). Between Cape Alava and the U.S./Canada border, where the highest canary rockfish impacts occurred in 2005, the RCA will extend to the shore, closing the fishing area shoreward of the RCA for the entire year. To reduce incidental take of canary rockfish shoreward of the RCA, vessels operating shoreward of the RCA in the area north of 40°10.00′ N. lat. are required to use selective flatfish trawl gear. The Council considered moving the shoreward boundary of the RCA even closer to the shore than 75-fm (137-m). However, the Council determined that moving trawl operations farther inshore could disturb sensitive Dungeness crab habitat. In addition to the concern about crab habitat, information in 2007 and 2008 indicated that effort decreased more than anticipated when the shoreward boundary of the RCA was brought shoreward of the boundary line approximating the 75-fm (137-m) depth contour. Therefore the shoreward boundary of the trawl RCA is not proposed to be shoreward of the boundary line approximating the 75-fm (137-m) depth contour in the 2009–2010 biennium.

The seaward boundary proposed for the trawl RCA north of 40°10.00′ N. lat. is primarily designed to reduce bycatch of northern slope overfished species, POP and darkblotched rockfish. In 2007 and 2008, the seaward boundaries of the RCA were liberalized by moving them shoreward, with the intent of shifting some of the nearshore effort seaward of the RCA to reduce impacts to canary rockfish. Projected impacts on darkblotched rockfish were within the 2007 and 2008 OYs. Harvestable concentrations of darkblotched rockfish are sometimes found as far south as 38° N. lat., which necessitates a more conservative seaward trawl RCA boundary line for the area between 40°10.00′ and 38° N. lat. than for south of 38° N. lat. North of 40°10.00′ N. lat., the seaward boundary of the Trawl RCA is at a line that approximates 250-fm (458-m) in January–April and November–December (modified for petrale sole fishing in winter months) and at a line that approximates 200-fm (366-m) in May–October.

South of 40°10.00′ N. lat., the trawl RCA boundaries are most affected by the need to reduce incidental catch of bocaccio and canary rockfish, both of which are shelf species. The focus on shelf protection in the south means that the southern trawl RCA is narrower than in the north, which covers both shelf and slope habitat. South of 40°10.00′ N. lat., the trawl RCA is primarily proposed to be between 100-fm (183-m) and 150-fm (274-m) with an extension of the seaward trawl RCA boundary to a petrale-modified 200-fm (368.6-m) line in winter months (January–February and November–December) between 38° and 40°10.00′ N. lat. South of 34°27.00′ N. lat., the trawl RCA around islands is proposed to be between the shoreline and 150-fm (274-m).

Modifications to cumulative trip limits in the non-whiting trawl fishery used in conjunction with closed area management are intended to control catch of target species and to reduce impacts on co-occurring overfished stocks. For the 2009–2010 biennium, cumulative trip limits are adjusted from status quo in response to: Changes in specifications that may increase or decrease allowable catch of target species; changes in specifications or rebuilding plans that may increase or decrease allowable catch of co-occurring overfished species; and the most recently available fishery information from ongoing 2008 fisheries.

Coastwide adjustments in cumulative trip limits are proposed for Dover sole, longspine and shortspine thornyheads, and sablefish (DTS complex) based on the landings information in the 2008 fishery, and new 2009–2010 specifications. Lower than anticipated landings of sablefish early in the 2008 fishery indicate that cumulative limits can be raised in January through April of the 2009–2010 biennium, to provide additional fishing opportunity early in the calendar year and reduce the seasonal increases, that were made

through inseason adjustments in 2008, resulting in a more constant availability of fishing opportunity throughout the calendar year. Generally, longspine and shortspine thornyhead cumulative limits are reduced coastwide in response to reduced 2009–2010 specifications, relative to status quo.

North of 40°10.00′ N. lat., cumulative limits for vessels using selective flatfish trawl gear to target various flatfish species are generally increased due to additional availability of co-occurring canary rockfish in the nearshore area where selective flatfish trawl gear is primarily used.

South of 40°10.00′ N. lat., cumulative limits for splitnose rockfish, sablefish, Dover sole and chilipepper rockfish are increased due to lower than expected catches of these species in 2008. Cumulative limits for minor slope rockfish and darkblotched rockfish are reduced between 40°10.00′ and 38° N. lat. to reduce impacts on overfished darkblotched rockfish, and to keep total mortality within the 2009–2010 darkblotched rockfish OYs.

The tables that further describe species specific cumulative trip limits in the limited entry trawl fishery can be found in tables 3 (North) and 3 (South) of subpart G.

Limited Entry Whiting Trawl Fishery

The Council recommended an assortment of management measures for the Pacific whiting fishery, including: Sector-specific bycatch limits, closing the whiting fishery upon projected attainment of a bycatch limit, mandatory monitoring of Pacific whiting deliveries for fish ticket verification, maximized retention requirements for catcher vessels delivering to mothership processors, exceptions to some regulations for Pacific whiting shoreside vessels that are 75 feet in length or less, new observer coverage requirements for Pacific whiting shoreside vessels that sort catch at sea, and provisions to allow inseason depth-based closures.

Sector-Specific Bycatch Limits

To allow the Pacific whiting industry to have the opportunity to harvest higher OYs, the Council has used bycatch limits to restrict the catch of certain overfished species. With bycatch limits, the industry has the opportunity to harvest a larger amount of whiting, if they can do so while keeping the incidental catch of overfished species within adopted bycatch limits. In recent years, bycatch limits have been used for the most constraining overfished species; darkblotched, canary and widow rockfish. Since 2005, a single bycatch limit for each species has been used for all commercial sectors of the fishery.

Concern that bycatch in one sector would result in the closure of a different sector of the fishery led the Council to recommend sector-specific bycatch limits rather than a single bycatch limit for all commercial sectors. The bycatch limits will be divided among sectors in the same percentages as the whiting is allocated. Therefore, this proposed rule specifies sector-specific bycatch limits for each of the commercial sectors of the Pacific whiting fishery. If a sector-specific bycatch limit is reached or is projected to be reached, the Pacific whiting fishery for that sector would be closed. When a sector is closed because a bycatch limit has been reached or was projected to be reached, unused amounts of the bycatch limit species would be rolled-over to the remaining sectors of the non-tribal Pacific whiting fishery. If a sector reaches its whiting allocation, unused amounts of bycatch limit species would be shifted to those sectors of the non-tribal Pacific whiting fishery that remain open. The following bycatch limits are proposed for 2009 and 2010: for catcher/processors 6.1 mt of canary rockfish, 153.0 mt of widow rockfish; and 8.5 mt of darkblotched rockfish; for motherships 4.3 mt of canary rockfish, 108.0 mt of widow rockfish; and 6.0 mt of darkblotched rockfish; and for shore-based 7.6 mt of canary rockfish, 189.0 mt of widow rockfish; and 10.5 mt of darkblotched rockfish.

When the Council sets final 2009 and 2010 Pacific whiting harvest levels the bycatch limits may be reevaluated, and the Council may make recommendations to revise the limits. It must be noted that bycatch limits are not allocations, but instead are a management tool used to control the potential impacts of the non-tribal Pacific whiting fisheries on other groundfish fisheries. Canary rockfish is the only bycatch limit species for which a harvest guideline is being established specifically for the whiting fishery.

The Council also recommended that NMFS implement regulatory provisions that allow each sector of the whiting fishery to be closed through an automatic action when NMFS projects the attainment of a bycatch limit. Closing on the projected attainment was recommended as a measure to reduce the risk of exceeding a specified bycatch limit and possibly an overfished species OY. The Council recognized that closing upon projected attainment may inadvertently result in a bycatch limit being exceeded or result in the actual catch being well under the bycatch limit, due to imprecise projections. If a sector is closed before actually attaining the bycatch limit, a portion of a sector's Pacific whiting allocation could remain unharvested. However, the Council indicated that closing upon actual attainment, as is currently done, includes too much of a risk of exceeding the bycatch limit and potentially resulting in the OY for a bycatch limit species being exceeded.

At its June 2007 meeting, the Council recommended that NMFS implement Federal regulations for a maximized retention and monitoring program in the Pacific whiting shoreside fishery. The recommended rulemaking would require vessels participating in the Pacific whiting shoreside fishery to procure and pay for video-based electronic monitor system (EMS) services, and for Pacific whiting shoreside first receivers to procure and pay for the services of one independent catch monitor. Catch monitors are individuals who are primarily responsible for collecting catch data that is used for fish ticket verification. NMFS is in the process of implementing the maximized retention program for the shoreside whiting fishery recommended by the Council in June 2007, and anticipates that a final rule will be in place soon after the effective date of the 2009–2010 harvest specifications and management measures proposed by this action.

To ensure the integrity of the shoreside whiting monitoring program, including the increased requirements of sector-specific bycatch limits, the Council recommended that NMFS increase the catch monitor coverage requirements from what had been recommended in June 2007 (one catch monitor per facility) to full coverage in which all Pacific whiting deliveries are monitored by catch monitors (the number of individual catch monitors per facility would vary depending on the hours of operation and the number of Pacific whiting deliveries received each day). The catch monitor coverage requirements recommended by the Council are not being implemented by this action because an analysis of the impacts must first be completed. NMFS intends to implement the catch monitoring provisions in a subsequent rulemaking that implements all of the provisions of the Pacific whiting shoreside fisheries maximized retention and monitoring program. It is anticipated that the proposed maximized retention and monitoring program action will include the following provisions: Catch monitor coverage specifications, requirements to procure catch monitors from NMFS

certified catch monitor providers, and defined responsibilities of first receivers relative to the acceptance of unsorted catch and catch monitoring.

The mothership sector of the whiting fishery is composed of catcher vessels that harvest Pacific whiting and mothership vessels that process, but do not harvest Pacific whiting. Regulations at 50 CFR 660.314(c) and 660.314(e) require mothership processors to pay for and carry two observers. Observers sample catch received from the catcher vessels and provide data used to estimate total catch by species. The catcher vessels are currently unmonitored. In recent years the Council has raised concern about increased incentives to discard bycatch limit species to prevent the fishery from being closed.

To ensure the integrity of the whiting monitoring program, including the increased requirements of sector-specific bycatch limits in the Pacific whiting fishery, the Council recommended that NMFS require catcher vessels delivering to motherships to pay for and use EMS monitoring at all times to insure that catch is being retained. EMS units consist of two or more closed circuit television cameras, global positioning systems (GPS), hydraulic and winch sensors, and on-board data storage. NMFS has determined that EMS is a suitable tool for monitoring full or maximized retention in the whiting fishery. The EMS requirements for catcher vessels in the mothership sector recommended by the Council are not being implemented by this action. Because the infrastructure necessary to support EMS monitoring is not currently in regulation and was not analyzed in the DEIS, NMFS intends to implement the requirements in a subsequent rulemaking. To assure that only qualified businesses provide EMS services, the Federal regulations for a maximized retention and monitoring program for the Pacific whiting shoreside fishery as recommended by the Council in June 2007 includes EMS system specifications and performance standards as well as EMS provider certification requirements. NMFS intends to certify providers through an application and review process in which businesses provide information regarding their ability to provide adequate services to support the EMS monitoring, data storage and data processing needs. NMFS anticipates that the subsequent rulemaking will require the owners of catcher vessels participating in the Pacific whiting mothership fishery to procure EMS services from a NMFS EMS certified service provider and pay all associated costs.

The Council also recommended that NMFS prohibit discarding by catcher vessels in the mothership sector. Because current regulations do not contain language that specifically prohibits catcher vessels in the mothership sector from dumping catch at sea, a prohibition is being added to clarify the intent of the existing regulations. Regulations at § 660.306(i)(2) currently prohibit vessels from interfering with or biasing the sampling employed by an observer by mechanically or physically sorting or discarding catch before sampling. This language was intended to include the dumping of catch at sea by catcher vessels.

Current groundfish regulations at 50 CFR 660.302 define shore-based processing as an activity that occurs at a facility that is permanently fixed to land and involves the preparation or packaging of groundfish for human consumption, retail sale, industrial uses or long-term storage, including, but not limited to, cooking, canning, smoking, salting, drying, filleting, freezing, or rendering into meal or oil. It does not mean heading and gutting unless additional preparation is done. In addition to allowing heading and gutting, the Council recommended that an exemption be provided for the shore-based sector that would allow Pacific whiting shoreside vessels 75 feet in length or less, to remove the tails of whiting and to allow the catch to be frozen to increase the value. The Pacific whiting allocation taken by these vessels would continue to be attributed to the shore-based allocation.

In 2006 and 2007, a single vessel headed and gutted Pacific whiting at sea. The vessel used a smaller net and shorter tows to maintain product quality. Head and gut machines were used at sea and the product was immediately placed in thick slurry of ice. As a result, the vessel was able to significantly increase its at-sea production and ex-vessel price of Pacific whiting. Because the Pacific whiting were only headed and gutted (*i.e.*, the tails were left on) and not frozen, the vessel's activities did not result in the vessel being considered an at-sea processor. Allowing the Pacific whiting to be tailed and frozen would further increase the value of the catch.

Under current regulation, unmonitored Pacific whiting shoreside vessels that sort at sea are allowed to fish within the RCAs. The integrity of the RCAs as well as the ability to monitor bycatch limits was identified as an issue when Pacific whiting shoreside vessels that sort at sea are unmonitored. The Council recommended that NMFS require Pacific whiting shoreside vessels that sort their catch at sea to procure and pay for the services of NMFS-certified observers in the same manner as the at sea processors. Allowing fishers to land value-added Pacific whiting catch is expected to increase exvessel revenues and offset the added overhead cost of observers.

The Council recommended that NMFS implement regulations that allow depth-based closures for the whiting fishery as an inseason management measure when NMFS projects that a sector of the non-tribal Pacific whiting fishery will reach a bycatch limit before the Pacific whiting allocation for the sector is projected to be reached. Regulatory provisions would allow for depth-specific closures using the specified depth-based management lines of 75 fm (137 m), 100 fm (183 m) or 150 fm (274 m) to be used to restrict the fishery by sector. Although bycatch rate estimates vary by depth and sector, the analysis suggests that fishing deeper that 150 fm (274 m) results in reduced canary and yelloweye rockfish rates, while deeper fishing is more likely to result in increased catch of darkblotched and widow rockfish. Maintaining the ability to restrict the Pacific whiting fishery to depths to reduce the catch of bycatch limit species provides the fishery participants with flexibility to avoid overfished species, but maintains a mechanism for further reducing the incidental take if necessary. Taking this flexible approach allows the conditions in the fishery as well as the tradeoffs between the three depleted rockfish species and Chinook salmon to be taken into consideration.

Limited Entry Fixed Gear and Open Access Non-trawl Fishery Management Measures

Management measures for the limited entry fixed gear and open access non-trawl fisheries tend to be similar because the majority of participants in both fisheries use hook-and-line gear. These fisheries will be most constrained by management measures to decrease impacts on yelloweye rockfish. The non-trawl RCA boundaries proposed for 2009–2010 are the same as those implemented for the non-trawl fisheries in 2007–2008, except for the following proposed changes. The seaward and shoreward boundaries of the non-trawl RCA vary along the coast, and are divided at commonly used geographic coordinates, defined in § 660.306, including the status quo division at the north-south management line at 40°10.00′ N. lat. in Northern California.

New divisions of the RCA boundaries are established based on recently available fishery information, indicating that some areas where the non-trawl fishery occurs have higher yelloweye rockfish impacts than others, and the RCA boundaries are adjusted to reduce impacts to yelloweye rockfish in these areas. The seaward boundary between 45°03.83′ N. lat. (Cascade Head) and 42°50.00′ N. lat. (Cape Blanco) is proposed to be moved from the boundary line approximating the 100-fm (183-m) depth contour to the boundary line approximating the 125-fm (229-m) depth contour, except on days when the directed halibut fishery is open, the seaward boundary remains at the line approximating the 100-fm (183-m) depth contour. This change in the seaward boundary is designed to reduce impacts on yelloweye in the limited entry fixed gear sablefish fishery. Also, the shoreward RCA boundary from 42°50.00′ N. lat. to 40°10.00′ N. lat. is proposed to be moved from the boundary line approximating the 30-fm (55-m) depth contour to the boundary line approximating the 20-fm (37-m) depth contour. This change is proposed because WCGOP data has shown higher yelloweye bycatch rates in this area, and this change would attempt to reduce bycatch rates in this specific area. The non-trawl RCA boundaries from North to South are proposed to be as follows: From the U.S./Canada Border and 45°03.83′ N. lat. the non-trawl RCA is proposed to be between the shoreline and a boundary line approximating the 100-fm (183-m) depth contour. Between 45°03.83′ N. lat. and 42°50.00′ N. lat. the non-trawl RCA is proposed to be between the boundary lines approximating the 30-fm (55-m) and the 125-fm (229-m) depth contours. Between 42°50.00′ N. lat. and 40°10.00′ N. lat. the non-trawl RCA is proposed to be between boundary lines approximating 20-fm (37-m) and 100-fm (183-m) depth contours. Between 40°10.00′ N. lat. and 34°27.00′ N. lat. the non-trawl RCA is proposed to be between boundary lines approximating the 30-fm (55-m) and 150-fm (274-m) depth contours. Between 34°27.00′ N. lat. and the U.S. border with Mexico, including waters around islands, the non-trawl RCA is proposed to be between boundary lines approximating the 60-fm (110-m) and 150-fm (274-m) depth contours. The Council also adopted new YRCAs off northern California defined in this proposed rule for later implementation through inseason action if necessary. The boundary lines vary along the coast because of the different abundances of overfished species along the coast.

The Salmon Troll YRCA is found in groundfish regulation at § 660.383 and § 660.390, and in the Pacific Coast salmon regulations at § 660.405.

Like trawl fishery participants, non-trawl vessels are also subject to several groundfish closed areas other than those within the RCA boundary lines and those intended for EFH conservation. The following closed areas apply to all non-trawl vessels, including both open access and limited entry fixed gear vessels, and have not been proposed for modification in 2009 and beyond (§ 660.390): A Cordell Banks Closed Area; closed areas around the Farallon Islands off San Francisco and San Mateo Counties, CA; the Eastern CCA.

The non-trawl fisheries have little to no incidental catch of POP, darkblotched, or widow rockfish. The effects of these fisheries on bocaccio, canary, cowcod, and yelloweye rockfish are constrained as much as possible by the non-trawl RCA, described above, and by the YRCAs and CCAs. Trip limits proposed for the non-trawl fisheries in 2009–2010 are similar to those that applied to these fisheries in 2007–2008. The open access sablefish limit is more conservative than the limited entry limit, recognizing that the open access fleet can expand to an unknown number of participants. Tier limits for the limited entry sablefish-endorsed fleet are higher than in 2007–2008, reflecting the higher sablefish OY for 2009–2010 sablefish harvest specifications: In 2009, Tier 1, 61,296 lb (27,803 kg); Tier 2, 27,862 lb (12,638 kg); Tier 3, 15,921 lb (7,221 kg). For 2010 the limits are as follows, Tier 1, 56,081 lb (25,437 kg); Tier 2, 25,492 lb (11,562 kg); Tier 3, 14,567 lb (6,648 kg).

Similar to the limited entry trawl fishery, landings of spiny dogfish and Pacific cod taken in the non-trawl fisheries will be subject to trip limits throughout the 2009–2010 management cycle. In addition, trip limits for sablefish south of 36° N. lat. were increased above 2007–2008 levels. These limits are increased due to higher specifications for sablefish in this area for 2009–2010 and prohibitions against fishing within the non-trawl RCA limit the effects of these fisheries on overfished species.

Salmon trollers will be allowed to keep incidentally caught lingcod with a ratio limit of 1 lingcod per 15 Chinook, plus 1 lingcod up to a trip limit of 10 lingcod, up to a maximum limit of 400 lbs per month.

The Council recommended mandatory logbooks for the limited entry and open access fixed gear fishing fleets. Development and implementation of a federal logbook system would take more time than is available for this rulemaking. Therefore, it is under consideration for implementation in the future.

Management measures for the limited entry fixed gear fishery, including gear requirements, are found at § 660.382, with management measures specific to the primary sablefish season found at § 660.372. Limited entry fixed gear trip limits are found in Table 4 (North) and Table 4 (South) of subpart G of part 660. Management measures for the open access fishery, including gear requirements, are found at § 660.383. Open access trip limits are found in Table 5 (North) and Table 5 (South) of subpart G of part 660.

Open Access Non-Groundfish Trawl Gear Fisheries Management Measures

Open access non-groundfish trawl gear (used to harvest ridgeback prawns, California halibut, sea cucumbers, and pink shrimp) is managed with ''per trip'' limits, cumulative trip limits, and area closures. Trip limits in 2009–2010 are similar to those in 2007–2008. The species-specific open access limits apply; in addition vessels may not exceed overall groundfish limits. As in past years, the pink shrimp fishery is subject to species-specific limits that are different from other open access limits for lingcod and sablefish. Also, as in past years, thornyheads may not be taken and retained in the open access fisheries north of 34°27.00′ N. lat.

Trawling with open access non-groundfish gear for pink shrimp will be permitted within the trawl RCA; however, the states require pink shrimp trawlers to use finfish excluder devices to reduce their groundfish bycatch, particularly to prevent bycatch mortality for canary and other rockfishes. Trawling for ridgeback prawns, California halibut, and sea cucumber is subject to the same RCA area closures as the limited entry trawl fishery, except that ridgeback prawn trawling will be permitted out to a boundary line approximating the 100-fm (183-m) depth contour if and when the inshore boundary line of the limited entry trawl RCA is moved shallower than 100-fm (183-m). RCA restrictions off California are particularly intended to reduce bycatch and bycatch mortality for southern and coastwide overfished species such as bocaccio, cowcod, and canary rockfish. The CCA boundaries are not proposed to be changed for open access non-groundfish trawl vessels. Management measures for the open access fisheries, including gear requirements, are found at § 660.383.

Trip limits are found in Table 5 (North) and Table 5 (South) of subpart G of part 660.

Recreational Fisheries Management Measures

Recreational fisheries management measures are designed to limit catch of overfished and nearshore species to sustainable levels while also allowing viable fishing seasons. Overfished species that are taken in recreational fisheries are bocaccio, cowcod, canary, and yelloweye rockfish. Because sport fisheries are more concentrated in nearshore waters, the 2009–2010 recreational fishery management measures are also intended to constrain catch of nearshore species such as black rockfish and cabezon. These protections are particularly important for fisheries off California, where the bulk of West Coast recreational fishing occurs. Washington, Oregon, and California each proposed, and the Council recommended, different combinations of seasons, bag limits, area closures, and size limits to best fit the requirements to rebuild overfished species found in their regions, and the needs and constraints of their particular recreational fisheries.

Recreational fisheries in northern California and Washington are constrained by the need to reduce yelloweye impacts. In order to reduce yelloweye impacts the Council adopted a new yelloweye RCA (YRCA) off Westport, Washington which would prohibit fishing for, and retention and possession of groundfish and halibut. The Council also adopted new YRCAs off northern California defined in this proposed rule for later implementation through inseason action as necessary. The status quo catch sharing plan for southern black rockfish OY of 42:58 between California and Oregon is proposed in this rule.

Off Washington, recreational fishing for groundfish and halibut will continue to be prohibited inside the North Coast Recreational YRCA, a C-shaped closed area off the northern Washington coast, and the South Coast Recreational YRCA. In addition, a new Recreational YRCA is established, called the Westport Offshore YRCA. Coordinates for all of these YRCAs are defined at 50 CFR 660.390. The RCA for recreational fishing off Washington will be the same as in 2008. The groundfish bag limit off Washington will remain the same as in 2007–2008: 15 aggregate bottomfish bag limit; 10 rockfish sub-limit with no retention of canary or yelloweye rockfish; 2 lingcod sub-limit, with the lingcod minimum size of 22 inches (56 cm). The lingcod seasons in 2009 and 2010 will be similar to those in 2007–2008, beginning in mid-March and ending in mid-October, although the season north of 48°10.00′ N. lat. (Cape Alava) will not begin until mid-April. South of Leadbetter Point off the state of Washington, when halibut are onboard the vessel from May through September, there will be no retention of groundfish, except sablefish and Pacific cod.

Off Oregon, recreational fishing for groundfish will be closed offshore of a boundary line approximating the 40-fm (73-m) depth contour from April through September. Recreational fisheries participation is heaviest during these months and this closure is intended to move the groundfish fisheries inshore of the continental shelf to reduce incidental catch of canary and yelloweye rockfish. The Stonewall Bank YRCA currently in place for the recreational Pacific halibut fishery off Oregon (71 FR 10850, March 3, 2006) will remain the same as in 2007–2008. In addition, EFH Conservation Areas, listed at § 660.306, also apply to recreational fisheries using bottom contact gear off Oregon. The Oregon recreational fishery marine fish bag limit will be increased from 8 to 10 fish in aggregate. As in waters off Washington, retention of yelloweye and canary rockfish continues to be prohibited. The lingcod bag limit will increase from 2 fish to 3 fish per day, and the size limit will remain 22 inches (56 cm), as in Washington. The flatfish daily bag limit will remain 25 fish in aggregate (excluding Pacific halibut).

For 2009–2010, recreational fisheries off California are proposed to be managed as six separate areas, up from four in 2007–2008, to allow more precision and flexibility in minimizing impacts on overfished stocks: The Northern area is defined as the area from the Oregon/California border to 40°10.00′ N. lat.; the North-Central North of Pt. Arena area is defined as the area from 40°10.00′ N. lat. to 38°57.00′ N. lat.; the North-Central South of Pt. Arena area is defined as the area from 38°57.00′ N. lat. to 37°11.00′ N. lat.; the South-Central Monterey area is defined as the area from 37°11.00′ N. lat. to 36° N. lat.; the South-Central Morro Bay area is defined as the area from 36° N. lat. to 34°27.00′ N. lat. and the South area is defined as the area from 34°27.00′ N. lat. to the U.S./Mexico border. California updated its recreational fisheries catch model with data from the California Recreational Fisheries Survey (CRFS) to make recommendations to the Council for the 2009–2010 fisheries. Season and area closures differ between California regions to better prevent incidental catch of overfished species according to where those species occur and where fishing effort is strongest. The California-wide combined bag limit for the Rockfish-Cabezon-Greenling (RCG) complex would continue to be 10 fish per day when the season is open. RCG sub-bag limits will also remain the same, except that the cabezon limit statewide will increase from one fish to two fish per day and the bocaccio limit will increase south of 40°10.00′ from one fish to two fish per day, making the bag limit consistent for the entire state of California. Fishing for lingcod will be closed in the winter months to prevent catch of lingcod during its spawning and nesting season. This rule proposes to remove the gear restriction regarding maximum hook size, number of hooks, and weight for sanddabs and ''other flatfish''. The efficacy of this gear restriction was analyzed using the CRFS database and was shown to have a minimal reduction on impact rates of overfished species.

Between the Oregon/California border to 40°10.00′ N. lat. the recreational fishery will be open May 15 through September 15 (April–November for lingcod) in waters shallower than the 20-fm (37-m) depth contour. Between 40°10.00′ N. lat. and 38°57.00′ N. lat. the recreational fishery will be open May 15–August 15 in waters shallower than the 20-fm (37-m) depth contour. Between 38°57.00′ N. lat. and 37°11.00′ N. lat. the recreational fishery will be open June 13–October 31 in waters shallower than a boundary line approximating the 30-fm (55-m) depth contour. Between 37°11.00′ N. lat. and 36° N. lat. the recreational fishery will be open May 1–November 15 in waters shallower than a boundary line approximating the 40-fm (73-m) depth contour. Between 36° N. lat. and 34°27.00′ N. lat. the recreational fishery will be open May 1–November 15 in waters shallower than a boundary line approximating the 40-fm (73-m) depth contour. Between 34°27.00′ N. lat. and the U.S./Mexico border, the recreational fishery will be open from March–December in waters shallower than a boundary like approximating the 60-fm (110-m) depth contour. These time and area closures are primarily intended to reduce catch of yelloweye rockfish, as well as other co-occurring overfished rockfish species such as bocaccio and canary rockfish. Cowcod catch in the area south of 34°27.00′ N. lat. continues to be constrained by the CCAs, which are closed throughout the year to recreational fishing for groundfish. This proposed rule does not propose to modify the fishing restrictions within

the CCAs for the recreational fisheries. In addition, EFH Conservation Areas, listed at § 660.306, apply to recreational fisheries using bottom contact gear off California.

Management measures for recreational fisheries off all three West Coast states are found at § 660.384.

Washington Coastal Tribal Fisheries Management Measures

In 1994, the United States formally recognized that the four Washington coastal treaty Indian tribes (Makah, Quileute, Hoh, and Quinault) have treaty rights to fish for groundfish in the Pacific Ocean, and concluded that, in general terms, the quantification of those rights is 50 percent of the harvestable surplus of groundfish that pass through the tribes' usual and accustomed fishing areas (described at 50 CFR 660.324).

For those species with tribal allocations, the tribal allocation is subtracted from the species OY before limited entry and open access allocations are derived. The tribal fisheries for sablefish, black rockfish, and whiting are separate fisheries and are not governed by the limited entry or open access regulations or allocations. The tribes regulate these fisheries so as to not exceed their allocations.

The tribal harvest guideline for black rockfish is 9.1 mt (20,000 lbs) for the management area between the U.S./Canada border and Cape Alava (48°10.00′ N. lat.) and is 4.5 mt (10,000 lbs) for the management area between Destruction Island and Leadbetter Point (46°38.17′ N. lat.). Similar to past years, the tribal sablefish set aside is 10 percent of the OY north of 36° N. lat., less 1.6 percent for estimated discard mortality. For both 2009 and 2010, the tribal sablefish set aside is 694 mt.

The regulations at 50 CFR 660.324(d) establish the process by which the tribes with treaty fishing rights in the area covered by the Pacific Coast Groundfish Fishery Management Plan (FMP) request new allocations or regulations specific to the tribes, in writing, before the first of the two meetings at which the Council considers groundfish management measures. The regulations further state ''the Secretary will develop tribal allocations and regulations under this paragraph in consultation with the affected tribe(s) and, insofar as possible, with tribal consensus.'' These procedures employed by NOAA in implementing tribal treaty rights under the FMP, in place since May 31, 1996, were designed to provide a framework process by which NOAA Fisheries can accommodate tribal treaty rights by setting aside appropriate amounts of fish in conjunction with the Council process for determining harvest specifications and management measures. The Council's groundfish fisheries require a high degree of coordination among the tribal, state, and federal co-managers in order to rebuild overfished species and prevent overfishing, while allowing fishermen opportunities to sustainably harvest over 90 species of groundfish managed under the FMP. The management approach for whiting has been developed following these procedures.

Since 1996, only the Makah Tribe has prosecuted the tribal fishery for Pacific whiting. However, for the 2009–2010 harvest specification cycle, three of the four coastal tribes indicated their intent to participate at some point during this two-year period. The Quinault Nation indicated their intent to start fishing in 2010, and both the Quileute and Makah Tribes indicated they intended to fish in both 2009 and 2010. All three tribes notified NOAA Fisheries during the November 2007 Council meeting and subsequently followed up with written proposals prior to the March 8–14, 2008 Council meeting as anticipated in the applicable regulations.

After the initial tribal requests were received, several meetings and discussions occurred between the tribal, state, and federal co-managers. These meetings resulted in an understanding by NOAA and the State of Washington that a tribal allocation of 50,000 mt. in 2009 would satisfy the needs expressed by the Quileute and the Makah. This was based on the separate requests of the Quileute for up to 8,000 mt. in 2009 and the Makah for up to 42,000 mt. in 2009, for a total of 50,000 mt.

Based on the requests received from the Tribes during the schedule specified in 50 CFR § 660.324, the Pacific Fisheries Management Council recommended a tribal set-aside of 50,000 metric tons (mt.) for 2009 only, with the Makah Tribe to manage 42,000 mt., including the bycatch amounts associated with this portion of the set-aside, and the Quileute Tribe to manage 8,000 mt., including the bycatch amounts associated with this portion of the set-aside. The Council also requested that NOAA Fisheries convene the co-managers, including the states of Oregon and Washington, and the Washington coastal treaty tribes, in government to government discussions to develop a proposal for 2010 and beyond for tribal set-asides of Pacific Whiting. In accordance with this recommendation, NOAA Fisheries proposes an overall Tribal set-aside of 50,000 mt. for 2009 only. Further, NOAA proposes interim individual Tribal set-asides for the Quileute and Makah Tribes in the amounts of 8,000 mt. and 42,000 mt., respectively, which represents the amounts requested or agreed upon at the time the shares of the 2009 fishery were being established by the Council in accordance with the procedures set forth in 50 CFR 660.324. These interim individual Tribal set-asides for 2009 only are not in any manner to be considered a determination of treaty rights to the harvest of Pacific whiting for use in future fishing seasons, nor do they set precedent for individual Tribal allocations of the Pacific whiting resource: the amounts being set aside for each tribe for 2009 are based on the timely requests from the tribes at the June Council meeting.

NMFS and the co-managers have also begun the process of determining the long-term tribal allocation for whiting. They met at the September 2008 Council meeting and agreed on a process in which NOAA would pull together the current information regarding whiting, circulate it among the co-managers, seek comment on the information and possible analyses, and then prepare analyses of the information to be used by the co-managers in developing a tribal allocation for use in 2010 and beyond. This process is on-going. Its goal is agreement among the co-managers on a total tribal allocation for incorporation into the Council's planning process for the 2010 season. The further goal is to provide the tribes the time and information to develop the inter-tribal allocation or other necessary management agreement.

NOAA Fisheries believes that the 50,000 mt. interim set aside for 2009 only, although higher than the prior tribal set asides, is still clearly within the tribal treaty right to Pacific whiting. Although as described above, further scientific review will occur in late 2008 and early 2009, current knowledge on the distribution and abundance of the coastal Pacific whiting stock reveals that 50,000 mt. lies within the range of a tribal treaty right to Pacific whiting. As described above, the co-managers are working to determine the long-term tribal set-aside for 2010 and beyond before the Council planning for the 2010 whiting season concludes.

The tribes do not have formal allocation for Pacific cod or lingcod; however, the Council recommended adopting a tribal proposal for tribal Pacific cod and lingcod harvest guidelines in 2009 and 2010. In both 2009 and 2010, the tribes will be subject to an annual 400-mt Pacific cod harvest guideline and a 250 mt harvest guideline for lingcod. Spiny dogfish,

thornyheads, and several rockfish species taken in tribal fisheries will be managed via limited entry trip limits, described below.

For some species for which the tribes have a modest harvest, no specific allocation has been determined. Rather than try to reserve specific allocations for the tribes, NMFS is establishing trip limits recommended by the tribes and the Council to accommodate tribal fisheries. The Makah tribe is proposing a directed longline fishery for spiny dogfish, in which the fishery would be restricted to limited entry fixed gear cumulative trip limits.

For rockfish species, the 2009–2010 tribal fisheries will operate under trip and cumulative limits, and will be required by tribal regulations to fully retain all overfished and marketable rockfish species. All tribal fisheries are restricted to limited entry cumulative limit for longspine and shortspine thornyheads. For Other Minor Nearshore, Shelf and Slope rockfish, all tribal fisheries are restricted to a 300-lb (136-kg) per trip limit for each species group, or equal to the limited entry trip limits North of 40°10.00′ N. lat. if trip limits for those species groups are made less restrictive than 300-lb per trip through inseason adjustments during 2009–2010. For canary and yelloweye rockfish, all tribal fisheries are restricted to trip limits of 300-lb (136-kg) and 100-lb (45-kg), respectively. The tribes will continue to develop depth, area, and time restrictions in the directed tribal Pacific halibut fishery in order to minimize impacts on yelloweye rockfish. Tribal fishing regulations, as recommended by the tribes and the Council and adopted by NMFS, are in Federal regulations at 50 CFR 660.385.

Federal and State Jurisdiction

The management measures herein, as well as Federal regulations at 50 CFR part 660, subpart G, govern groundfish fishing vessels of the United States in the U.S. EEZ from 3–200 nautical miles offshore of the coasts of Washington, Oregon, and California. The States of Washington, Oregon, and California retain jurisdiction in state waters from 0–3 nautical miles offshore. This is true even though boundaries of some fishing areas cross between Federal and state waters. Under their own legal authorities, the states generally conform their state regulations to the Federal management measures, so measures that apply to Federal and state waters are the same. This is not true in every case, however, and fishers are advised to consult both state and Federal regulations if they intend to fish in both state and Federal waters.

Groundfish stocks are distributed throughout Federal and State waters. Therefore, the Federal harvest limits (OYs) include fish taken in both Federal and State waters, as do vessel trip limits for individual groundfish species. Other Federal management measures related to federally-regulated groundfish fishing also apply to landings and other shoreside activities in Washington, Oregon and California.

Housekeeping Measures

NMFS is proposing to correct and update the definitions in § 660.302 as a housekeeping measure within this action. Changes to the definitions section pertaining to commonly used geographic coordinates and prohibited species are intended to improve the grammar and comprehensibility of the regulatory language and to correct misspellings. Housekeeping changes to the definitions do not change the intent or effect of those prohibitions. NMFS is also proposing to correct and update the description of the limited entry fixed gear sablefish primary season dates in § 660.303 and § 660.372. Changes to these sections pertaining to primary season dates are intended to improve the grammar and comprehensibility of the regulatory language. Housekeeping changes to the season dates description do not change the intent or effect of the primary sablefish season dates. NMFS is also proposing to clarify language as § 660.373(b)(3)(ii) regarding cumulative trip limits for whiting vessels using multiple trawl gear types. Changes to these sections pertaining to cumulative trip limits in the whiting fishery are intended to improve the grammar and comprehensibility of the regulatory language. Housekeeping changes to the cumulative trip limit description do not change the intent or effect of the cumulative trip limits in the whiting fishery. In addition, any references to the years 2007 or 2008 are removed, or revised to read 2009 or 2010, as appropriate.

Classification

At this time, NMFS has preliminarily determined that the 2009–2010 groundfish harvest specifications and management measures, which this proposed rule would implement, are consistent with the national standards of the Magnuson-Stevens Act and other applicable laws. NMFS, in making that final determination, will take into account the data, views, and comments received during the comment period.

A DEIS was prepared for the 2009–2010 groundfish harvest specifications and management measures. The DEIS includes an RIR and an IRFA. The Environmental Protection Agency published a notice of availability for the draft EIS on August 29, 2008 (73 FR 50962.) A copy of the DEIS is available online at *http://www.pcouncil.org/.*

The Council considered two sets of alternatives for 2009–2010 groundfish management, the first set of alternatives addressed the selection of ABCs and OYs and the second set of alternatives provided a range of management measures based on the initial range of OYs considered. For species that were not overfished, and for which there was no new stock assessment information the Council considered only a single ABC alternative. For overfished species, and species with new or updated stock assessments the Council narrowed the range of ABC/OY alternatives by eliminating the no harvest alternative and by eliminating some of the harvest alternatives at the higher end of the range. Then the Council arranged suites of OY alternatives for overfished species that ranged from the low end to the high end of the range of ABCs/OYs, so that management measures could be considered for that range of overall harvest.

The range of management measure alternatives intended to keep total catch at the low end of the ABC/OY alternatives are considered here, since these were the alternatives the Council evaluated for their effects on small entities. Management measure alternatives included the no action alternative, which would have implemented the 2007–2008 regime for 2009–2010; and a range of alternative management measures that would be necessary to keep the cumulative impacts of all sectors of the fishery below the preliminarily preferred OYs for overfished species. All of the alternatives included management measures intended to constrain target fisheries for healthy stocks to minimize the effects of the fisheries on rebuilding stocks.

Each of the alternatives analyzed by the Council was expected to have different overall effects on the economy. Among other factors, the DEIS for this action reviewed alternatives for expected increases or decreases in revenue and income from 2007 levels. Alternative 1 was expected to decrease annual income, as compared to the no action alternative, from combined recreational angler expenditures and commercial fisheries landings by $75.2 million, and decrease the number of coastwide fisheries-related jobs by 3,226 jobs. Alternative 2 was expected to decrease annual income, as compared to the no action alternative, from combined recreational angler

expenditures and commercial fisheries landings by $34.1 million, and decrease the number of coastwide fisheries-related jobs by 1,446 jobs. Alternative 3 was expected to increase annual income, as compared to the no action alternative, from combined recreational angler expenditures and commercial fisheries landings by $1.8 million, and increase the number of coastwide fisheries-related jobs by 41 jobs. The Council's preferred alternative was expected to have a range of annual income effects, depending on the level of Pacific whiting OYs chosen in 2007 and 2008, from decreasing annual income by $37.2 million at the low whiting OY to increasing annual income by $0.6 million, as compared to the no action alternative, from combined recreational angler expenditures and commercial fisheries landings. The Council's preferred alternative was expected to have a range of annual employment effects, depending on the level of Pacific whiting OYs chosen in 2007 and 2008, from decreasing employment by 1,699 jobs at the low whiting OY to decreasing employment by 7 jobs at the high whiting OY. The Council's preferred alternative is primarily designed to meet the overfished species rebuilding requirement of the Magnuson-Stevens Act to rebuild overfished species as quickly as possible, taking into account the status and biology of the stocks and the needs of fishing communities.

The Council's final preferred alternative was developed through an integrated approach of analyzing alternative suites of rebuilding harvest levels and rebuilding trajectories for all of the overfished species, in the same manner that was used for 2007 and 2008 and Amendment 16–4. This approach allowed the Council to develop a management package that focused the greatest protection on the most sensitive overfished species and the most vulnerable fishing communities, in order to meet the Magnuson-Stevens Act requirement to rebuild as quickly as possible, taking into account the status and biology of the overfished stocks and the needs of fishing communities. For non-overfished species, the effects of this action will be that they will be harvested in 2009–2010 at or below MSY harvest levels. Harvests of most non-overfished species will not achieve their MSY levels, primarily because their harvest will be constrained to achieve faster rebuilding of co-occurring overfished species.

The economic effect of this action is that many fishery sectors are expected to achieve social and economic benefits that are similar to status quo levels. However, some sectors are more or less severely affected by management measures to rebuild overfished species. Although the yelloweye rebuilding period is the same as the status quo T_{TARGET}, the OYs for 2009 and 2010 are lower than in past years. These lower yelloweye OYs will negatively affect northern hook-and-line fisheries, particularly the recreational fisheries. The increase in the English sole and arrowtooth flounder OYs, and the expected stable whiting OY, will stabilize the effects of this action on the trawl fisheries. The increase in the sablefish OY will positively affect all of the commercial fisheries. On a coastwide basis, the commercial ex-vessel revenues for the major directed groundfish sectors are estimated to be approximately $104 million, and the number of recreational bottomfish charter boat trips is estimated to be 399,000. These figures are 124 percent of 2007 exvessel revenues, and 96 percent of 2007 recreational charter boat trips.

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

This proposed rule will regulate businesses that harvest groundfish. According to the Small Business Administration, a small commercial harvesting business is one that has annual receipts under $4.0 million and a small charterboat business is one that has annual receipts under $6.5 million. The Council estimates that nearly 2,600 small entities harvest groundfish. These entities include those that either target groundfish or harvest groundfish as bycatch and include limited entry trawlers and fixed gear, open access participants, the west coast charterboat fleet, and the tribal fleets. Included in this estimate are businesses, probably fewer than 30, that should be classified as ''large'' businesses as they are affiliates or components of large processing companies. Following past practice, the Council classifies the four catcher-processors that fish and process in the whiting fishery ''large'' entities as they are components of large international seafood companies.

Noting the exceptions above, the Council has classified all harvesters in the groundfish fishery as ''small businesses.'' Therefore, projected impacts for the fishery provide the context for the impacts on these businesses. Chapter 7 of the DEIS provides the analysis that underlies the RIR and IRFA analysis found in Chapter 10 of the DEIS and the following discussion. The analysis provides projections that compare various alternatives considered including: 2007, No-Action (status quo regulations), and Council's preferred (regulations associated with this rule). For the commercial fleets, the Council's preferred Alternative leads to $104 million in projected ex-vessel revenues. This is $13 million greater than the No-Action Alternative projection—$91 million and $20 million greater than those earned in 2007. These increases are from the increase in the sablefish OY and the use of the 2008 whiting OY for projecting the 2009 and 2010 whiting OYs. In 2007, the commercial and tribal fleets harvested 5,200 mt of the 5,900 mt sablefish OY and received about $21 million in ex-vessel revenues. The proposed 2009–10 sablefish OYs are about 8,400 mt each—a 46 percent increase. In 2007, whiting vessels harvested about 86 percent of the 243,000 OY, earning about $39 million in ex-vessel revenues. The 2008 OY is 269,000 mt—an 11 percent increase. Please note that in 2008, it is likely that harvests will reach only 60 percent of this OY.

The Council's analysis provides impacts by gear group or fishery. Under these proposed regulations, the projected commercial ex-vessel revenues for the non-tribal directed groundfish groups are about $90 million yearly. These figures represent slight increases from the No-Action (status quo) alternative. Forecast revenues for the limited entry non-whiting trawl fleet are higher than those forecast under previous years' (2007–2008) management regime. The prime reason for this increase is the increase in the sablefish OY as opposed to changes in the rebuilding species OYs. However, the proposed area-based management controls for this fishery are likely to be more limiting than those developed for the 2007–2008 fisheries. These changes will lead to a decrease in fishable area and a potential increase in the cost of fishing because vessels traveling to and fishing at deeper depths will need more fuel. The projected revenues earned by limited entry whiting fishery (which includes the catcher-processor fleet) are similar to those projected for the previous biennial period. However, the potential amount of ex-vessel revenue will chiefly depend on the Pacific whiting assessment, adopted yearly by the Council during the March meeting. Fixed gear sablefish harvesters will produce more revenue than earned in the 2007–08 period because of the higher sablefish OY. However, similar to the situation for limited entry trawlers, area management will be more restrictive and cause harvesting costs to rise. The nearshore groundfish fishery

will be able to reach ex-vessel revenues that equal the status quo but also will face increased area limits. Under the proposed rules, tribal groundfish fisheries should produce the same amount of ex-vessel revenues and personal income as under the No-Action Alternative.

For the coastwide recreational fishery, the projected number of charterboat and private angler trips associated with this rule is higher under the proposed compared to the No Action alternative and are less than in 2007. Under the No Action Alternative, 1.2 million angler trips are projected. These trips would lead to an estimated $114 million in angler expenditures and $90 million in personal income (profits, wages, and other income that result from angler expenditures and remain in fishing communities). Under the Council-preferred Alternative, anglers will take an estimated 1.27 million trips and spend $118 million and yield $93 million in personal income. This is an increase of 3 percent compared to No Action alternative but lower than the 2007 levels of expenditure ($122 million) and personal income ($96 million). As groundfish are caught in targeted bottomfish trips and in targeted trips for halibut, salmon, tuna and other species, these estimates are projections for the total west coast recreational fishery. For groundfish-targeted trips only, the No Action Alternative leads to $48 million in personal income. This is slightly down from 2007 levels of $51 million. Charterboats are considered small businesses. Under these proposed regulations, coastwide, the projected annual number of charterboat trips for all species is 399,000 trips. This is a decrease from 2007 levels of 414,000 trips and a slight increase from the No-Action level of 392,000 trips. The impacts to the recreational sectors are driven by the OYs for yelloweye rockfish, canary rockfish, and to a lesser extent bocaccio and widow rockfish. The 2009–10 yelloweye rockfish OYs under the final Council preferred alternative represent a decrease of 3 mt from No Action levels. Management measures designed so as not to exceed the yelloweye rockfish OY also keep recreational catch within harvest guidelines for other potentially constraining species, such as canary rockfish. The proposed yelloweye bycatch reduction measures include restricting recreational fisheries to depths shallower than 20 fm in certain areas and/or during certain months and expanding areas to protect yelloweye rockfish.

There are no new reporting, record-keeping, and other compliance requirements in the proposed rule. Within its recommendations for the 2009 Specifications and Management measures, the Council recommended mandatory logbooks for the limited entry and open access fixed gear fishing fleets. However, development and implementation of a Federal logbook system would take more time than is available for this rulemaking and will be considered for implementation in the future. References to collections-of-information made in this action are intended to properly cite those collections in Federal regulations, and not to alter their effect in any way.

No Federal rules have been identified that duplicate, overlap, or conflict with this action.

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

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

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

Lower Columbia River coho (70 FR 37160, June 28, 2005) were recently listed and Oregon Coastal coho (73 FR 7816, February 11, 2008) were recently relisted as threatened under the ESA. The 1999 biological opinion concluded that the bycatch of salmonids in the Pacific whiting fishery were almost entirely Chinook salmon, with little or no bycatch of coho, chum, sockeye, and steelhead. The Southern Distinct Population Segment (DPS) of green sturgeon (71 FR 17757, April 7, 2006) were also recently listed as threatened under the ESA. As a consequence, NMFS has reinitiated its Section 7 consultation on the PFMC's Groundfish FMP.

Pursuant to Executive Order 13175, this proposed rule was developed after meaningful consultation and collaboration with tribal officials from the area covered by the FMP. Under the Magnuson-Stevens Act at 16 U.S.C. 1852(b)(5), one of the voting members of the Pacific Council must be a representative of an Indian tribe with federally recognized fishing rights from the area of the Council's jurisdiction. In addition, regulations implementing the

FMP establish a procedure by which the tribes with treaty fishing rights in the area covered by the FMP request new allocations or regulations specific to the tribes, in writing, before the first of the two meetings at which the Council considers groundfish management measures. The regulations at 50 CFR 660.324(d) further state ''the Secretary will develop tribal allocations and regulations under this paragraph in consultation with the affected tribe(s) and, insofar as possible, with tribal consensus.'' The tribal management measures in this proposed rule have been developed following these procedures. The tribal representative on the Council made a motion to adopt the non-whiting tribal management measures, which was passed by the Council. Those management measures, which were developed and proposed by the tribes, are included in this proposed rule. The tribal whiting set aside was based on the requests from the affected tribes at the June meeting.

List of Subjects in 50 CFR Part 660

Fishing, Fisheries, and Indian Fisheries.

Dated: December 9, 2008.

Samuel D. Rauch III,

Deputy Assistant Administrator for Regulatory Programs, National Marine Fisheries Service.

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

PART 660—FISHERIES OFF WEST COAST STATES

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

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

2. In § 660.302, paragraph (2)(x) of the definition for ''North-South management area'', and the definition for the introductory text of ''Processing or to process'' and the definition for ''Prohibited species'' are revised to read as follows:

§ 660.302 Definitions.

* * * * *

North-South management area * * *

(2) * * *

(x) Cape Arago, OR—43°20.83′ N. lat.

* * * * *

Processing or to process means the preparation or packaging of groundfish to render it suitable for human consumption, retail sale, industrial uses or long-term storage, including, but not limited to, cooking, canning, smoking, salting, drying, filleting, freezing, or rendering into meal or oil, but does not mean heading and gutting unless additional preparation is done. (Also see an exception to certain requirements at § 660.373(a)(iii) pertaining to Pacific whiting shoreside vessels 75-ft (23-m) or less LOA that, in addition to heading and gutting, remove the tails and freeze catch at sea.)

* * * * *

Prohibited species means those species and species groups whose retention is prohibited unless authorized by provisions of this section or other applicable law. The following are prohibited species: Any species of salmonid, Pacific halibut, Dungeness crab caught seaward of Washington or Oregon, and groundfish species or species groups under the PCGFMP for which quotas have been achieved and/or the fishery closed.

3. In § 660.303, paragraph (c) is revised to read as follows:

§ 660.303 Reporting and recordkeeping.

* * * * *

(c) Any person landing groundfish must retain on board the vessel from which groundfish is landed, and provide to an authorized officer upon request, copies of any and all reports of groundfish landings containing all data, and in the exact manner, required by the applicable state law throughout the cumulative limit period during which a landing occurred and for 15 days thereafter. For participants in the primary sablefish season (detailed at § 660.372(b)), the cumulative limit period to which this requirement applies is April 1 through October 31 or, for an individual permit holder, when that permit holder's tier limit is attained, whichever is earlier.

* * * * *

4. In § 660.306, a new paragraph (f)(7) is added to read as follows:

§ 660.306 Prohibitions.

* * * * *

(f) * * *

(7) Sort or discard any portion of the catch taken by a catcher vessel in the mothership sector prior to the catch being received on a mothership, and prior to the observer being provided access to the unsorted catch, with the exception of minor amounts of catch that are lost when the codend is separated from the net and prepared for transfer.

* * * * *

5. In § 660.314, paragraphs (c)(1), (d)(3)(iii) introductory text, (d)(3)(iii)(B), and (e) introductory text are revised to read as follows:

§ 660.314 Groundfish observer program.

(c) * * *

(1) NMFS-certified observers.

(i) A catcher/processor or mothership 125-ft (38.1-m) LOA or longer must carry two NMFS-certified observers, and a catcher-processor or mothership shorter than 125-ft (38.1-m) LOA must carry one NMFS-certified observer, each day that the vessel is used to take, retain, receive, land, process, or transport groundfish.

(ii) A Pacific whiting shoreside vessel that sorts catch at sea must carry one NMFS-certified observer, from the time the vessel leaves port on a trip in which the catch is sorted at sea to the time that all catch from that trip has been offloaded.

* * * * *

(d) * * *

(3) * * *

(iii) *Hardware and software.* Pacific whiting vessels that are required to carry one or more NMFS-certified observers under provisions at paragraphs (c)(1)(i) and (ii) of this section must provide hardware and software pursuant to regulations at 50 CFR 679.50(f)(1)(iii)(B)(1) and 50 CFR 679.50(f)(2), as follows:

* * * * *

(B) *NMFS-supplied software.* Ensuring that each vessel that is required to carry a NMFS-certified observer obtains the data entry software provided by the NMFS for use by the observer.

* * * * *

(e) *Procurement of observer services by catcher/processors, motherships, and Pacific whiting shoreside vessels that sort at sea.* Owners of vessels required to carry observers under provisions at paragraph (c)(1)(i) or (ii) of this section must arrange for observer services from an observer provider permitted by the North Pacific Groundfish Observer Program under 50 CFR 679.50(i), except that:

* * * * *

6. In § 660.365, paragraphs (b), (c), (d), and (g) are revised to read as follows:

§ 660.365 Overfished species rebuilding plans.

* * * * *

(b) *Canary rockfish.* The target year for rebuilding the canary rockfish stock to BMSY is 2021. The harvest control rule to be used to rebuild the canary rockfish stock is an annual SPR harvest rate of 88.7 percent.

(c) *Cowcod.* The target year for rebuilding the cowcod stock south of Point Conception to BMSY is 2072. The harvest control rule to be used to rebuild the cowcod stock is an annual SPR harvest rate of 82.1 percent.

(d) *Darkblotched rockfish.* The target year for rebuilding the darkblotched rockfish stock to BMSY is 2028. The

harvest control rule to be used to rebuild the darkblotched rockfish stock is an annual SPR harvest rate of 62.1 percent.

* * * * *

(g) *Yelloweye rockfish.* The target year for rebuilding the yelloweye rockfish stock to BMSY is 2084. The harvest control rule to be used to rebuild the yelloweye rockfish stock is an annual SPR harvest rate of 66.3 percent in 2009 and in 2010. Yelloweye rockfish is subject to a ramp-down strategy where the harvest level has been reduced annually from 2007 through 2009. Yelloweye rockfish will remain at the 2009 level in 2010. Beginning in 2011, yelloweye rockfish will be subject to a constant harvest rate strategy with a constant SPR harvest rate of 71.9 percent.

7. In § 660.370 paragraphs (c)(1)(ii), (d), (h)(6)(i)(A) through (C), and (h)(6)(ii)(A) and (B) are revised to read as follows:

§ 660.370 Specifications and management measures.

* * * * *

(c) * * *

(1) * * *

(ii) *Differential trip landing limits and frequency limits based on gear type, closed seasons, and bycatch limits.* Trip landing and frequency limits that differ by gear type and closed seasons may be imposed or adjusted on a biennial or more frequent basis for the purpose of rebuilding and protecting overfished or depleted stocks. To achieve the rebuilding of an overfished or depleted stock, bycatch limits may be established and adjusted to be used to close the primary season for any sector of the Pacific whiting fishery described at § 660.373(b), before the sector's Pacific whiting allocation is achieved if the applicable bycatch limit is reached. Bycatch limit amounts are specified at § 660.373(b)(4).

* * * * *

(d) *Automatic actions.* Automatic management actions may be initiated by the NMFS Regional Administrator without prior public notice, opportunity to comment, or a Council meeting. These actions are nondiscretionary, and the impacts must have been taken into account prior to the action. Unless otherwise stated, a single notice will be published in the **Federal Register** making the action effective if good cause exists under the APA to waive notice and comment.

(1) Automatic actions are used in the Pacific whiting fishery to:

(i) Close sectors of the fishery or to reinstate trip limits in the shore-based fishery when a whiting harvest guideline, commercial harvest guideline, or a sector's allocation is reached, or is projected to be reached;

(ii) Close all sectors or a single sector of the fishery when a bycatch limit is reached or projected to be reached;

(iii) Reapportion unused Pacific whiting allocation to other sectors of the fishery;

(iv) Reapportion unused bycatch limit species to other sectors of the Pacific whiting fishery.

(V) Implement the Ocean Salmon Conservation Zone, described at § 660.373(c)(3), when NMFS projects the Pacific whiting fishery may take in excess of 11,000 Chinook within a calendar year,

(vi) Implement Pacific Whiting Bycatch Reduction Areas, described at § 660.373(c)(3), when NMFS projects a sector-specific bycatch limit will be reached before the sector's whiting allocation.

(2) [Reserved]

* * * * *

(h) * * *

(6) * * *

(i) * * *

(A) Coastwide—widow rockfish, canary rockfish, darkblotched rockfish, yelloweye rockfish, shortbelly rockfish, black rockfish, blue rockfish, minor nearshore rockfish, minor shelf rockfish, minor slope rockfish, shortspine and longspine thornyhead, Dover sole, arrowtooth flounder, petrale sole, starry flounder, English sole, other flatfish, lingcod, sablefish, Pacific cod, spiny dogfish, other fish, longnose skate, and Pacific whiting;

(B) North of 40°10′ N. lat.—POP, yellowtail rockfish;

(C) South of 40°10′ N. lat.—minor shallow nearshore rockfish, minor deeper nearshore rockfish, California scorpionfish, chilipepper rockfish, bocaccio rockfish, splitnose rockfish, Pacific sanddabs, cowcod and cabezon.

(ii) * * *

(A) Coastwide—widow rockfish, canary rockfish, darkblotched rockfish, yelloweye rockfish, shortbelly rockfish, black rockfish, blue rockfish, minor nearshore rockfish, minor shelf rockfish, minor slope rockfish, shortspine and longspine thornyhead, Dover sole, arrowtooth flounder, petrale sole, starry flounder, English sole, other flatfish, lingcod, sablefish, Pacific cod, spiny dogfish, longnose skate, other fish, Pacific whiting, and Pacific sanddabs;

(B) North of 40°10′ N. lat.—POP, yellowtail rockfish;

* * * * *

8. In § 660.372, paragraph (b)(1) is revised to read as follows:

§ 660.372 Fixed gear sablefish fishery management.

* * * * *

(b) * * *

(1) *Season dates.* North of 36° N. lat., the primary sablefish season for the limited entry, fixed gear, sablefish-endorsed vessels begins at 12 noon l.t. on April 1 and ends at 12 noon l.t. on October 31, or for an individual permit holder when that permit holder's tier limit has been reached, whichever is earlier, unless otherwise announced by the Regional Administrator through the routine management measures process described at § 660.370(c).

* * * * *

9. In § 660.373, paragraphs (a), (b)(3)(ii), and (b)(4) are revised, and new paragraph (c)(4) is added to read as follows:

§ 660.373 Pacific whiting (whiting) fishery management.

(a) *Sectors.*

(1) The catcher/processor sector is composed of catcher/processors, which are vessels that harvest and process whiting during a calendar year.

(2) The mothership sector is composed of motherships and catcher vessels that harvest whiting for delivery to motherships. Motherships are vessels that process, but do not harvest, whiting during a calendar year.

(3) The shore-based sector is composed of vessels that harvest whiting for delivery to Pacific whiting shoreside first receivers. Notwithstanding the other provisions of 50 CFR Part 660, Subpart G, a vessel that is 75 feet or less LOA that harvests whiting and, in addition to heading and gutting, cuts the tail off and freezes the whiting, is not considered to be a catcher/processor nor is it considered to be processing fish. Such a vessel is considered a participant in the shore-based whiting sector, and is subject to regulations and allocations for that sector.

(b) * * *

(3) * * *

(ii) If, during a primary whiting season, a whiting vessel harvests a groundfish species other than whiting for which there is a midwater trip limit, then that vessel may also harvest up to another footrope-specific limit for that species during any cumulative limit period that overlaps the start or end of the primary whiting season.

(4) *Bycatch limits in the whiting fishery.* The bycatch limits for the whiting fishery may be established, adjusted, and used inseason to close a sector or sectors of the whiting fishery to achieve the rebuilding of an overfished or depleted stock. These

limits are routine management measures under § 660.370(c) and, as such, may be adjusted inseason or may have new species added to the list of those with bycatch limits. Closure of a sector or sectors when a bycatch limit is projected to be reached is an automatic action under § 660.370(d).

(i) The whiting fishery bycatch limit is apportioned among the sectors identified in paragraph (a) of this section based on the same percentages used to allocate whiting among the sectors, established in § 660.323(a). The sector specific bycatch limits are: For catcher/processors 6.1 mt of canary rockfish, 153.0 mt of widow rockfish, and 8.5 mt of darkblotched rockfish; for motherships 4.3 mt of canary rockfish, 108.0 mt of widow rockfish, and 6.0 mt of darkblotched rockfish; and for shore-based 7.6 mt of canary rockfish, 189.0 mt of widow rockfish, and 10.5 mt of darkblotched rockfish.

(ii) The Regional Administrator may make available for harvest to the other sectors of the whiting fishery identified in § 660.323, the amounts of a sector's bycatch limit species remaining when a sector is closed because its whiting allocation or a bycatch limit has been reached or is projected to be reached. The remaining bycatch limit species shall be redistributed in proportion to each sector's initial whiting allocation. When considering redistribution of bycatch limits between the sectors of the whiting fishery, the Regional Administrator will take into consideration the best available data on total projected fishing impacts on the bycatch limit species, as well as impacts on other groundfish species.

(iii) If a bycatch limit is reached or is projected to be reached, the following action applicable to the sector may be taken.

(A) Catcher/processor sector. Further taking and retaining, receiving, or at-sea processing of whiting by a catcher/processor is prohibited. No additional unprocessed whiting may be brought on board after at-sea processing is prohibited, but a catcher/processor may continue to process whiting that was on board before at-sea processing was prohibited.

(B) Mothership sector. Further receiving or at-sea processing of whiting by a mothership is prohibited. No additional unprocessed whiting may be brought on board after at-sea processing is prohibited, but a mothership may continue to process whiting that was on board before at-sea processing was prohibited. Whiting may not be taken and retained, possessed, or landed by a catcher vessel participating in the mothership sector.

(C) Shore-based sector. Whiting may not be taken and retained, possessed, or landed by a catcher vessel participating in the shore-based sector except as authorized under a trip limit specified under § 660.370(c).

(iv) The Regional Administrator will announce in the **Federal Register** when a bycatch limit is reached, or is projected to be reached, specifying the action being taken as specified under paragraph (b)(4) of this section. The Regional Administrator will announce in the **Federal Register** any reapportionment of bycatch limit species. In order to prevent exceeding the bycatch limits or to avoid underutilizing the Pacific whiting resource, prohibitions against further taking and retaining, receiving, or at-sea processing of whiting, or reapportionment of bycatch limits species may be made effective immediately by actual notice to fishers and processors, by e-mail, Internet (*http://www.nwr.noaa.gov/Groundfish-Halibut/Groundfish-Fishery-Management/Whiting-Management/index.cfm*), phone, fax, letter, press release, and/or USCG Notice to Mariners (monitor channel 16 VHF), followed by publication in the **Federal Register**.

(c) * * *

(4) *Pacific Whiting Bycatch Reduction Areas.* Vessels using limited entry midwater trawl gear during the primary whiting season may be prohibited from fishing shoreward of a boundary line approximating the 75-fm (137-m), 100-fm (183-m) or 150-fm (274-m) depth contours. Latitude and longitude coordinates for the boundary lines approximating the depth contours are provided at § 660.393(a). Closures may be implemented inseason for a sector(s) through automatic action, defined at 660.370(d), when NMFS projects that a sector will exceed a bycatch limit specified for that sector before the sector's whiting allocation is projected to be reached.

* * * * *

10. In § 660.381, paragraphs (c) introductory text and (d) introductory text are revised to read as follows:

§ 660.381 Limited entry trawl fishery management measures.

* * * * *

(c) *Cumulative trip limits and prohibitions by limited entry trawl gear type.* Management measures may vary depending on the type of trawl gear (*i.e.*, large footrope, small footrope, selective flatfish, or midwater trawl gear) used and/or on board a vessel during a fishing trip, cumulative limit period, and the area fished. Trawl nets may be used on and off the seabed. For some species or species groups, Table 3 (North) and Table 3 (South) provide cumulative and/or trip limits that are specific to different types of trawl gear: large footrope, small footrope (including selective flatfish), selective flatfish, midwater, and multiple types. If Table 3 (North) and Table 3 (South) provide gear specific limits for a particular species or species group, it is unlawful to take and retain, possess or land that species or species group with limited entry trawl gears other than those listed.

* * * * *

(d) *Groundfish Conservation Areas (GCAs) applicable to trawl vessels.* A GCA, a type of closed area, is a geographic area defined by coordinates expressed in degrees of latitude and longitude. The latitude and longitude coordinates of the GCA boundaries are specified at §§ 660.390 through 660.394. A vessel that is fishing within a GCA listed in this paragraph (d) with trawl gear authorized for use within a GCA may not have any other type of trawl gear on board the vessel. The following GCAs apply to vessels participating in the limited entry trawl fishery. Additional closed areas that specifically apply to the Pacific whiting fisheries are described at § 660.373(c).

* * * * *

11. In § 660.382 paragraphs (c)(4) through (8) are redesignated as (c)(10) through (14), and new paragraphs (c)(4) through (9) are added, to read as follows:

§ 660.382 Limited entry fixed gear fishery management measures.

* * * * *

(c) * * *

(4) *Westport Offshore Recreational YRCA.* The latitude and longitude coordinates that define the Westport Offshore Recreational YRCA boundaries are specified at § 660.390. The Westport Offshore Recreational YRCA is designated as an area to be avoided (a voluntary closure) by commercial fixed gear fishers.

(5) *Point St. George YRCA.* The latitude and longitude coordinates of the Point St. George YRCA boundaries are specified at § 660.390. Fishing with limited entry fixed gear is prohibited within the Point St. George YRCA, on dates when the closure is in effect. It is unlawful to take and retain, possess, or land groundfish taken with limited entry fixed gear within the Point St. George YRCA, on dates when the closure is in effect. The closure is not in effect at this time, and commercial fishing for groundfish is open within the Point St. George YRCA from January 1 through December 31. This closure may be imposed through inseason

adjustment. Limited entry fixed gear vessels may transit through the Point St. George YRCA, at any time, with or without groundfish on board.

(6) *South Reef YRCA.* The latitude and longitude coordinates of the South Reef YRCA boundaries are specified at § 660.390. Fishing with limited entry fixed gear is prohibited within the South Reef YRCA, on dates when the closure is in effect. It is unlawful to take and retain, possess, or land groundfish taken with limited entry fixed gear within the South Reef YRCA, on dates when the closure is in effect. The closure is not in effect at this time, and commercial fishing for groundfish is open within the South Reef YRCA from January 1 through December 31. This closure may be imposed through inseason adjustment. Limited entry fixed gear vessels may transit through the South Reef YRCA, at any time, with or without groundfish on board.

(7) *Reading Rock YRCA.* The latitude and longitude coordinates of the Reading Rock YRCA boundaries are specified at § 660.390. Fishing with limited entry fixed gear is prohibited within the Reading Rock YRCA, on dates when the closure is in effect. It is unlawful to take and retain, possess, or land groundfish taken with limited entry fixed gear within the Reading Rock YRCA, on dates when the closure is in effect. The closure is not in effect at this time, and commercial fishing for groundfish is open within the Reading Rock YRCA from January 1 through December 31. This closure may be imposed through inseason adjustment. Limited entry fixed gear vessels may transit through the Reading Rock YRCA, at any time, with or without groundfish on board.

(8) *Point Delgada (North) YRCA.* The latitude and longitude coordinates of the Point Delgada (North) YRCA boundaries are specified at § 660.390. Fishing with limited entry fixed gear is prohibited within the Point Delgada (North) YRCA, on dates when the closure is in effect. It is unlawful to take and retain, possess, or land groundfish taken with limited entry fixed gear within the Point Delgada (North) YRCA, on dates when the closure is in effect. The closure is not in effect at this time, and commercial fishing for groundfish is open within the Point Delgada (North) YRCA from January 1 through December 31. This closure may be imposed through inseason adjustment. Limited entry fixed gear vessels may transit through the Point Delgada (North) YRCA, at any time, with or without groundfish on board.

(9) *Point Delgada (South) YRCA.* The latitude and longitude coordinates of the Point Delgada (South) YRCA boundaries are specified at § 660.390. Fishing with limited entry fixed gear is prohibited within the Point Delgada (South) YRCA, on dates when the closure is in effect. It is unlawful to take and retain, possess, or land groundfish taken with limited entry fixed gear within the Point Delgada (South) YRCA, on dates when the closure is in effect. The closure is not in effect at this time, and commercial fishing for groundfish is open within the Point Delgada (South) YRCA from January 1 through December 31. This closure may be imposed through inseason adjustment. Limited entry fixed gear vessels may transit through the Point Delgada (South) YRCA, at any time, with or without groundfish on board.

* * * * *

12. In § 660.383 paragraph (c)(4) through (10) are redesignated as (c)(10) through (16), and new paragraphs (c)(4) through (9) are added, to read as follows:

§ 660.383 Open access fishery management measures.

* * * * *

(c) * * *

(4) *Westport Offshore Recreational YRCA.* The latitude and longitude coordinates that define the Westport Offshore Recreational YRCA boundaries are specified at § 660.390. The Westport Offshore Recreational YRCA is designated as an area to be avoided (a voluntary closure) by commercial fixed gear fishers.

(5) *Point St. George YRCA.* The latitude and longitude coordinates of the Point St. George YRCA boundaries are specified at § 660.390. Fishing with open access gear is prohibited within the Point St. George YRCA, on dates when the closure is in effect. It is unlawful to take and retain, possess, or land groundfish taken with open access gear within the Point St. George YRCA, on dates when the closure is in effect. The closure is not in effect at this time, and commercial fishing for groundfish is open within the Point St. George YRCA from January 1 through December 31. This closure may be imposed through inseason adjustment. Open access vessels may transit through the Point St. George YRCA, at any time, with or without groundfish on board.

(6) *South Reef YRCA.* The latitude and longitude coordinates of the South Reef YRCA boundaries are specified at § 660.390. Fishing with open access gear is prohibited within the South Reef YRCA, on dates when the closure is in effect. It is unlawful to take and retain, possess, or land groundfish taken with open access gear within the South Reef YRCA, on dates when the closure is in effect. The closure is not in effect at this time, and commercial fishing for groundfish is open within the South Reef YRCA from January 1 through December 31. This closure may be imposed through inseason adjustment. Open access vessels may transit through the South Reef YRCA, at any time, with or without groundfish on board.

(7) *Reading Rock YRCA.* The latitude and longitude coordinates of the Reading Rock YRCA boundaries are specified at § 660.390. Fishing with open access gear is prohibited within the Reading Rock YRCA, on dates when the closure is in effect. It is unlawful to take and retain, possess, or land groundfish taken with open access gear within the Reading Rock YRCA, on dates when the closure is in effect. The closure is not in effect at this time, and commercial fishing for groundfish is open within the Reading Rock YRCA from January 1 through December 31. This closure may be imposed through inseason adjustment. Open access vessels may transit through the Reading Rock YRCA, at any time, with or without groundfish on board.

(8) *Point Delgada (North) YRCA.* The latitude and longitude coordinates of the Point Delgada (North) YRCA boundaries are specified at § 660.390. Fishing with open access gear is prohibited within the Point Delgada (North) YRCA, on dates when the closure is in effect. It is unlawful to take and retain, possess, or land groundfish taken with open access gear within the Point Delgada (North) YRCA, on dates when the closure is in effect. The closure is not in effect at this time, and commercial fishing for groundfish is open within the Point Delgada (North) YRCA from January 1 through December 31. This closure may be imposed through inseason adjustment. Open access vessels may transit through the Point Delgada (North) YRCA, at any time, with or without groundfish on board.

(9) *Point Delgada (South) YRCA.* The latitude and longitude coordinates of the Point Delgada (South) YRCA boundaries are specified at § 660.390. Fishing with open access gear is prohibited within the Point Delgada (South) YRCA, on dates when the closure is in effect. It is unlawful to take and retain, possess, or land groundfish taken with open access gear within the Point Delgada (South) YRCA, on dates when the closure is in effect. The closure is not in effect at this time, and commercial fishing for groundfish is open within the Point Delgada (South) YRCA from January 1 through December 31. This closure may be imposed

through inseason adjustment. Open access vessels may transit through the Point Delgada (South) YRCA, at any time, with or without groundfish on board.

* * * * *

13. In § 660.384,

a. Redesignate paragraphs (c)(1)(i)(C) as (c)(1)(i)(D), and (c)(3)(i)(E) as (c)(3)(i)(J);

b. Revise newly redesignated paragraphs (c)(1)(i)(D)(*1*) and (*2*);

c. Revise paragraphs (c)(1)(iii)(A), (c)(1)(iii)(B), (c)(2)(iii), (c)(3)(i)(A)(*1*) through (*4*), (c)(3)(ii)(A)(*1*) through (*4*), (c)(3)(ii)(B), (c)(3)(iii)(A)(*1*) through (*4*), (c)(3)(iv), (c)(3)(v)(A)(*2*) and (c)(3)(v)(A)(*3*);

d. Add paragraphs (c)(1)(i)(C), (c)(3)(i)(A)(*5*), (c)(3)(i)(A)(*6*), (c)(3)(i)(E) through (I), (c)(3)(ii)(A)(*5*), (c)(3)(ii)(A)(*6*), (c)(3)(iii)(A)(5), (c)(3)(iii)(A)(*6*) and (c)(3)(v)(A)(*4*); to read as follows:

§ 660.384 Recreational fishery management measures.

* * * * *

(c) * * *

(1) * * *

(i) * * *

(C) *Westport Offshore Recreational Yelloweye Rockfish Conservation Area.* Recreational fishing for groundfish and halibut is prohibited within the Westport Offshore Recreational YRCA. It is unlawful for recreational fishing vessels to take and retain, possess, or land groundfish taken with recreational gear within the Westport Offshore Recreational YRCA. A vessel fishing in the Westport Offshore Recreational YRCA may not be in possession of any groundfish. Recreational vessels may transit through the Westport Offshore Recreational YRCA with or without groundfish on board. The Westport Offshore Recreational YRCA is defined by latitude and longitude coordinates specified at § 660.390.

(D) * * *

(*1*) Between the U.S. border with Canada and the Queets River, recreational fishing for groundfish is prohibited seaward of a boundary line approximating the 20-fm (37-m) depth contour from May 21 through September 30, except on days when the Pacific halibut fishery is open in this area. Days open to Pacific halibut recreational fishing off Washington are announced on the NMFS hotline at (206) 526–6667 or (800) 662–9825. Coordinates for the boundary line approximating the 20-fm (37-m) depth contour are listed in § 660.391.

(*2*) Between the Queets River and Leadbetter Point, recreational fishing for groundfish is prohibited seaward of a boundary line approximating the 30-fm (55-m) depth contour from March 15 through June 15, except that recreational fishing for sablefish and Pacific cod is permitted within the recreational RCA from May 1 through June 15. Retention of lingcod seaward of the boundary line approximating the 30-fm (55-m) depth contour south of 46°58′ N. lat. is prohibited on Fridays and Saturdays from July 1 through August 31. For additional regulations regarding the Washington recreational lingcod fishery, see paragraph (c)(1)(iii) of this section. Coordinates for the boundary line approximating the 30-fm (55-m) depth contour are listed in § 660.391.

(iii) * * *

(A) Between the U.S./Canada border to 48°10′ N. lat. (Cape Alava) (Washington Marine Area 4), recreational fishing for lingcod is open, for 2009, from April 16 through October 15, and for 2010, from April 16 through October 15.

(B) Between 48°10′ N. lat. (Cape Alava) and 46°16′ N. lat. (Washington/Oregon border) (Washington Marine Areas 1–3), recreational fishing for lingcod is open for 2009, from March 14 through October 17, and for 2010, from March 13 through October 16.

(2) * * *

(iii) *Bag limits, size limits.* The bag limits for each person engaged in recreational fishing in the EEZ seaward of Oregon are three lingcod per day, which may be no smaller than 22 in (56 cm) total length; and 10 marine fish per day, which excludes Pacific halibut, salmonids, tuna, perch species, sturgeon, sanddabs, flatfish, lingcod, striped bass, hybrid bass, offshore pelagic species and baitfish (herring, smelt, anchovies and sardines), but which includes rockfish, greenling, cabezon and other groundfish species. The bag limit for all flatfish is 25 fish per day, which excludes Pacific halibut, but which includes all soles, flounders and Pacific sanddabs. In the Pacific halibut fisheries, retention of groundfish is governed in part by annual management measures for Pacific halibut fisheries, which are published in the **Federal Register**. Between the Oregon border with Washington and Cape Falcon, when Pacific halibut are onboard the vessel, groundfish may not be taken and retained, possessed or landed, except sablefish and Pacific cod. Between Cape Falcon and Humbug Mountain, during days open to the Oregon Central Coast ''all-depth'' sport halibut fishery, when Pacific halibut are onboard the vessel, no groundfish may be taken and retained, possessed or landed, except sablefish and Pacific cod. ''All-depth'' season days are established in the annual management measures for Pacific halibut fisheries, which are published in the **Federal Register** and are announced on the NMFS halibut hotline, 1–800–662–9825. The minimum size limit for cabezon retained in the recreational fishery is 16-in (41-cm), and for greenling is 10-in (26-cm). Taking and retaining canary rockfish and yelloweye rockfish is prohibited at all times and in all areas.

(3) * * *

(i) * * *

(A) * * *

(*1*) Between 42° N. lat. (California/Oregon border) and 40°10.00′ N. lat. (North Region), recreational fishing for all groundfish (except ''other flatfish'' as specified in paragraph (c)(3)(iv) of this section) is prohibited seaward of the 20-fm (37-m) depth contour along the mainland coast and along islands and offshore seamounts from May 15 through September 15; and is closed entirely from January 1 through May 14 and from September 16 through December 31 (*i.e.*, prohibited seaward of the shoreline).

(*2*) Between 40°10′ N. lat. and 38°57′ N. lat. (North-Central North of Point Arena Region), recreational fishing for all groundfish (except ''other flatfish'' as specified in paragraph (c)(3)(iv) of this section) is prohibited seaward of the 20-fm (37-m) depth contour along the mainland coast and along islands and offshore seamounts from May 15 through August 15; and is closed entirely from January 1 through May 14 and from August 16 through December 31 (*i.e.*, prohibited seaward of the shoreline). Closures around the Farallon Islands (see paragraph (c)(3)(i)(C) of this section) and Cordell Banks (see paragraph (c)(3)(i)(D) of this section) also apply in this area.

(*3*) Between 38°57′ N. lat. and 37°11′ N. lat. (North-Central South of Point Arena Region), recreational fishing for all groundfish (except ''other flatfish'' as specified in paragraph (c)(3)(iv) of this section) is prohibited seaward of the boundary line approximating the 30-fm (55-m) depth contour along the mainland coast and along islands and offshore seamounts from June 13 through October 31; and is closed entirely from January 1 through June 12 and from November 1 through December 31 (*i.e.*, prohibited seaward of the shoreline). Closures around the Farallon Islands (see paragraph (c)(3)(i)(C) of this section) and Cordell Banks (see paragraph (c)(3)(i)(D) of this section) also apply in this area. Coordinates for the boundary line approximating the 30-fm (55-m) depth contour are listed in § 660.391.

(*4*) Between 37°11′ N. lat. and 36° N. lat. (Monterey South-Central Region), recreational fishing for all groundfish (except ''other flatfish'' as specified in paragraph (c)(3)(iv) of this section) is prohibited seaward of a boundary line approximating the 40-fm (73-m) depth contour along the mainland coast and along islands and offshore seamounts from May 1 through November 15; and is closed entirely from January 1 through April 30 and from November 16 through December 31 (*i.e.*, prohibited seaward of the shoreline). Coordinates for the boundary line approximating the 40-fm (73-m) depth contour are specified in § 660.391.

(*5*) Between 36° N. lat. and 34°27′ N. lat. (Morro Bay South-Central Region), recreational fishing for all groundfish (except ''other flatfish'' as specified in paragraph (c)(3)(iv) of this section) is prohibited seaward of a boundary line approximating the 40-fm (73-m) depth contour along the mainland coast and along islands and offshore seamounts from May 1 through November 15; and is closed entirely from January 1 through April 30 and from November 16 through December 31 (*i.e.*, prohibited seaward of the shoreline). Coordinates for the boundary line approximating the 40-fm (73-m) depth contour are specified in § 660.391.

(*6*) South of 34°27′ N. latitude (South Region), recreational fishing for all groundfish (except California scorpionfish as specified below in this paragraph and in paragraph (v) and ''other flatfish'' as specified in paragraph (c)(3)(iv) of this section) is prohibited seaward of a boundary line approximating the 60-fm (110-m) depth contour from March 1 through December 31 along the mainland coast and along islands and offshore seamounts, except in the CCAs where fishing is prohibited seaward of the 20-fm (37-m) depth contour when the fishing season is open (see paragraph (c)(3)(i)(B) of this section). Recreational fishing for all groundfish (except California scorpionfish and ''other flatfish'') is closed entirely from January 1 through February 28 (*i.e.*, prohibited seaward of the shoreline). Recreational fishing for California scorpionfish south of 34°27′ N. lat. is prohibited seaward of a boundary line approximating the 40-fm (73-m) depth contour from January 1 through February 28, and seaward of the 60-fm (110-m) depth contour from March 1 through December 31, except in the CCAs where fishing is prohibited seaward of the 20-fm (37-m) depth contour when the fishing season is open. Coordinates for the boundary line approximating the 40-fm (73-m) and 60-fm (110-m) depth contours are specified in §§ 660.391 and 660.392.

* * * * *

(E) *Point St. George Yelloweye Rockfish Conservation Area (YRCA).* Recreational fishing for groundfish is prohibited within the Point St. George YRCA, as defined by latitude and longitude coordinates at § 660.390, on dates when the closure is in effect. The closure is not in effect at this time, and recreational fishing for groundfish is open within the Point St. George YRCA from January 1 through December 31. This closure may be imposed through inseason adjustment.

(F) *South Reef YRCA.* Recreational fishing for groundfish is prohibited within the South Reef YRCA, as defined by latitude and longitude coordinates at § 660.390, on dates when the closure is in effect. The closure is not in effect at this time, and recreational fishing for groundfish is open within the South Reef YRCA from January 1 through December 31. This closure may be imposed through inseason adjustment.

(G) *Reading Rock YRCA.* Recreational fishing for groundfish is prohibited within the Reading Rock YRCA, as defined by latitude and longitude coordinates at § 660.390, on dates when the closure is in effect. The closure is not in effect at this time, and recreational fishing for groundfish is open within the Reading Rock YRCA from January 1 through December 31. This closure may be imposed through inseason adjustment.

(H) *Point Delgada (North) YRCA.* Recreational fishing for groundfish is prohibited within the Point Delgada (North) YRCA, as defined by latitude and longitude coordinates at § 660.390, on dates when the closure is in effect. The closure is not in effect at this time, and recreational fishing for groundfish is open within the Point Delgada (North) YRCA from January 1 through December 31. This closure may be imposed through inseason adjustment.

(I) *Point Delgada (South) YRCA.* Recreational fishing for groundfish is prohibited within the Point Delgada (South) YRCA, as defined by latitude and longitude coordinates at § 660.390, on dates when the closure is in effect. The closure is not in effect at this time, and recreational fishing for groundfish is open within the Point Delgada (South) YRCA from January 1 through December 31. This closure may be imposed through inseason adjustment.

(J) * * *

(ii) * * *

(A) * * *

(*1*) Between 42° N. lat. (California/Oregon border) and 40°10′ N. lat. (North Region), recreational fishing for the RCG complex is open from May 15 through September 15 (*i.e.*, it's closed from January 1 through May 14 and from September 16 through December 31).

(*2*) Between 40°10′ N. lat. and 38°57′ N. lat. (North Central North of Point Arena Region), recreational fishing for the RCG Complex is open from May 15 through August 15 (*i.e.*, it's closed from January 1 through May 14 and May 16 through December 31).

(*3*) Between 38°57′ N. lat. and 37°11′ N. lat. (North Central South of Point Arena Region), recreational fishing for the RCG Complex is open from June 13 through October 31 (*i.e.*, it's closed from January 1 through June 12 and November 1 through December 31.

(*4*) Between 37°11′ N. lat. and 36° N. lat. (Monterey South-Central Region), recreational fishing for the RCG Complex is open from May 1 through November 15 (*i.e.*, it's closed from January 1 through April 30 and from November 16 through December 31).

(*5*) Between 36′ N. lat. and 34°27′ N. lat. (Morro Bay South-Central Region), recreational fishing for the RCG Complex is open from May 1 through November 15 (*i.e.*, it's closed from January 1 through April 30 and from November 16 through December 31).

(*6*) South of 34°27′ N. latitude (South Region), recreational fishing for the RCG Complex is open from March 1 through December 31 (*i.e.*, it's closed from January 1 through February 28.

(B) *Bag limits, hook limits.* In times and areas when the recreational season for the RCG Complex is open, there is a limit of 2 hooks and 1 line when fishing for rockfish. The bag limit is 10 RCG Complex fish per day coastwide. Retention of canary rockfish, yelloweye rockfish and cowcod is prohibited. North of 40°10′ N. lat., within the 10 RCG Complex fish per day limit, no more than 2 may be bocaccio, no more than 2 may be greenling (kelp and/or other greenlings) and no more than 2 may be cabezon. South of 40°10′ N. lat., within the 10 RCG Complex fish per day limit, no more than 2 may be bocaccio, no more than 2 may be greenling (kelp and/or other greenlings) and no more than 2 may be cabezon. Multi-day limits are authorized by a valid permit issued by California and must not exceed the daily limit multiplied by the number of days in the fishing trip.

* * * * *

(iii) * * *

(A) * * *

(*1*) Between 42° N. lat. (California/Oregon border) and 40°10.00′ N. lat. (North Region), recreational fishing for lingcod is open from May 15 through

September 15 (*i.e.*, it's closed from January 1 through May 14 and from September 16 through December 31).

(*2*) Between 40°10′ N. lat. and 38°57′ N. lat. (North Central North of Point Arena Region), recreational fishing for lingcod is open from May 15 through August 15 (*i.e.*, it's closed from January 1 through May 14 and May 16 through December 31).

(*3*) Between 38°57′ N. lat. and 37°11′ N. lat. (North Central South of Point Arena Region), recreational fishing for lingcod is open from June 13 through October 31 (*i.e.*, it's closed from January 1 through June 12 and November 1 through December 31.

(*4*) Between 37°11′ N. lat. and 36° N. lat. (Monterey South-Central Region), recreational fishing for lingcod is open from May 1 through November 15 (*i.e.*, it's closed from January 1 through April 30 and from November 16 through December 31).

(*5*) Between 36′ N. lat. and 34°27′ N. lat. (Morro Bay South-Central Region), recreational fishing for lingcod is open from May 1 through November 15 (*i.e.*, it's closed from January 1 through April 30 and from November 16 through December 31).

(*6*) South of 34°27′ N. latitude (South Region), recreational fishing for lingcod is open from April 1 through November 30 (*i.e.*, it's closed from January 1 through March 31 and from December 1 through 31).

* * * * *

(iv) ''*Other flatfish*''. Coastwide off California, recreational fishing for ''other flatfish'' is permitted both shoreward of and within the closed areas described in paragraph (c)(3)(i) of this section. ''Other flatfish'' are defined at § 660.302 and include butter sole, curlfin sole, flathead sole, Pacific sanddab, rex sole, rock sole, and sand sole. Recreational fishing for ''other flatfish'' is permitted within the closed areas. ''Other flatfish,'' except Pacific sanddab, are subject to the overall 20-fish bag limit for all species of finfish, of which there may be no more than 10 fish of any one species. There is no season restriction or size limit for ''other flatfish;'' however, it is prohibited to filet ''other flatfish'' at sea. There is a limit of 2 hooks and 1 line when fishing for ''other flatfish''.

(v) * * *

(A) * * *

(*2*) Between 37°11′ N. lat. and 36° N. lat. (Monterey South Central Region), recreational fishing for California scorpionfish is open from May 1 through November 30 (*i.e.*, it's closed from January 1 through April 30 and from December 1 through December 31).

(*3*) Between 36° N. lat. and 34°27′ N. lat. (Morro Bay South Central Region), recreational fishing for California scorpionfish is open from May 1 through November 30 (*i.e.*, it's closed from January 1 through April 30 and from December 1 through December 31).

(*4*) South of 34°27′ N. lat. (South Region), recreational fishing for California scorpionfish is open from January 1 through December 31.

* * * * *

14. In § 660.385, paragraphs (a), (b)(1), (b)(2)(i)(A)(*1*), (b)(2)(i)(B)(*2*), (b)(2)(i)(B)(*3*), and (e) are revised to read as follows:

§ 660.385 Washington coastal tribal fisheries management measures.

* * * * *

(a) *Sablefish.* The tribal allocation is 694 mt per year. This allocation is, for each year, 10 percent of the Monterey through Vancouver area (North of 36° N. lat.) OY, less 1.6 percent estimated discard mortality.

(b) * * *

(1) *Black Rockfish.* For the commercial harvest of black rockfish off Washington State, a harvest guideline of: 20,000 lb (9,072 kg) north of Cape Alava, WA (48°10′ N. lat.) and 10,000 lb (4,536 kg) between Destruction Island, WA (47°40′ N. lat.) and Leadbetter Point, WA (46°38.17′ N. lat.). There are no tribal harvest restrictions for black rockfish in the area between Cape Alava and Destruction Island.

(2) * * *

(i) * * *

(A) * * *

(*1*) Small and large footrope trawl gear—17,000 lb (7,711-kg) per 2 months.

* * * * *

(B) * * *

(*2*) Selective flatfish trawl gear—5,000-lb (2,268-kg) per 2 months.

(*3*) Multiple bottom trawl gear—5,000-lb (2,268-kg) per 2 months.

* * * * *

(e) Pacific whiting. The tribal set-aside for 2009 is 50,000 mt, with 42,000 to be managed by the Makah Tribe and 8,000 mt to be managed by the Quileute Tribe.

* * * * *

15. In § 660.390, paragraphs (f) through (j) are redesignated as paragraphs (l) through (p), paragraph (e) is redesignated as paragraph (f), and new paragraphs (e), and (g) through (k) are added to read as follows:

§ 660.390 Groundfish conservation areas.

* * * * *

(e) *Westport Offshore Recreational YRCA.* The Westport Offshore Recreational YRCA is an area off the southern Washington coast intended to protect yelloweye rockfish. The Westport Recreational YRCA is defined by straight lines connecting the following specific latitude and longitude coordinates in the order listed:

(1) 46°54.30′ N. lat., 124°53.40′ W. long.;

(2) 46°54.30′ N. lat., 124°51.00′ W. long.;

(3) 46°53.30′ N. lat., 124°51.00′ W. long.;

(4) 46°53.30′ N. lat., 124°53.40′ W. long.; and connecting back to 46°54.30′ N. lat., 124°53.40′ W. long.

* * * * *

(g) *Point St. George YRCA.* The Point St. George YRCA is an area off the northern California coast, northwest of Point St. George, intended to protect yelloweye rockfish. The Point St. George YRCA is defined by straight lines connecting the following specific latitude and longitude coordinates in the order listed:

(1) 41°51.00′ N. lat., 124°23.75′ W. long.;

(2) 41°51.00′ N. lat., 124°20.75′ W. long.;

(3) 41°48.00′ N. lat., 124°20.75′ W. long.;

(4) 41°48.00′ N. lat., 124°23.75′ W. long.; and connecting back to 41°51.00′ N. lat., 124°23.75′ W. long.

(h) *South Reef YRCA.* The South Reef YRCA is an area off the northern California coast, southwest of Crescent City, intended to protect yelloweye rockfish. The South Reef YRCA is defined by straight lines connecting the following specific latitude and longitude coordinates in the order listed:

(1) 41°42.20′ N. lat., 124°16.00′ W. long.;

(2) 41°42.20′ N. lat., 124°13.80′ W. long.;

(3) 41°40.50′ N. lat., 124°13.80′ W. long.;

(4) 41°40.50′ N. lat., 124°16.00′ W. long.; and connecting back to 41°42.20′ N. lat., 124°16.00′ W. long.

(i) *Reading Rock YRCA.* The Reading Rock YRCA is an area off the northern California coast, between Crescent City and Eureka, intended to protect yelloweye rockfish. The Reading Rock YRCA is defined by straight lines connecting the following specific latitude and longitude coordinates in the order listed:

(1) 41°21.50′ N. lat., 124°12.00′ W. long.;

(2) 41°21.50′ N. lat., 124°10.00′ W. long.;

(3) 41°20.00′ N. lat., 124°10.00′ W. long.;

(4) 41°20.00′ N. lat., 124°12.00′ W. long.; and connecting back to 41°21.50′ N. lat., 124°12.00′ W. long.

(j) *Point Delgada YRCAs.* The Point Delgada YRCAs are two areas off the northern California coast, south of Point Delgada and Shelter Cove, intended to protect yelloweye rockfish. The Northern Point Delgada YRCA is defined by straight lines connecting the following specific latitude and longitude coordinates in the order listed:

(1) 39°59.00′ N. lat., 124°05.00′ W. long.;

(2) 39°59.00′ N. lat., 124°03.00′ W. long.;

(3) 39°57.00′ N. lat., 124°03.00′ W. long.;

(4) 39°57.00′ N. lat., 124°05.00′ W. long.; and connecting back to 39°59.00′ N. lat., 124°05.00′ W. long.

(k) *Southern Point Delgada YRCA.* The Southern Point Delgada YRCA is defined by straight lines connecting the following specific latitude and longitude coordinates in the order listed:

(1) 39°57.00′ N. lat., 124°05.00′ W. long.;

(2) 39°57.00′ N. lat., 124°02.00′ W. long.;

(3) 39°54.00′ N. lat., 124°02.00′ W. long.;

(4) 39°54.00′ N. lat., 124°05.00′ W. long.; and connecting back to 39°57.00′ N. lat., 124°05.00′ W. long.

* * * * *

16. In § 660.391 paragraphs (d) through (m) are redesignated as paragraphs (e) through (n), and new paragraph (d) is added to read as follows:

§ 660.391 Latitude/longitude coordinates defining the 10-fm (18-m) through 40-fm (73-m) depth contours.

* * * * *

(d) The 25-fm (46-m) depth contour between the Queets River, WA, and 42° N. lat., modified to reduce impacts on canary and yelloweye rockfish by shifting the line shoreward in the area between 47°31.70′ N. lat. and 46°44.18′ N. lat., is defined by straight lines connecting all of the following points in the order stated:

(1) 47°31.70′ N. lat., 124°34.66′ W. long.;

(2) 47°25.67′ N. lat., 124°32.78′ W. long.;

(3) 47°12.82′ N. lat., 124°26.00′ W. long.;

(4) 46°52.94′ N. lat., 124°18.94′ W. long.;

(5) 46°44.18′ N. lat., 124°14.89′ W. long.;

(6) 46°38.17′ N. lat., 124°13.70′ W. long.;

(7) 46°16.00′ N. lat., 124°12.50′ W. long.;

(8) 46°15.99′ N. lat., 124°12.04′ W. long.;

(9) 46°13.72′ N. lat., 124°11.04′ W. long.;

(10) 46°09.50′ N. lat., 124°07.62′ W. long.;

(11) 46°04.00′ N. lat., 124°03.20′ W. long.;

(12) 45°57.61′ N. lat., 124°01.85′ W. long.;

(13) 45°51.73′ N. lat., 124°01.06′ W. long.;

(14) 45°47.27′ N. lat., 124°01.22′ W. long.;

(15) 45°43.19′ N. lat., 124°00.32′ W. long.;

(16) 45°36.11′ N. lat., 124°00.38′ W. long.;

(17) 45°32.95′ N. lat., 124°01.38′ W. long.;

(18) 45°27.47′ N. lat., 124°01.46′ W. long.;

(19) 45°23.18′ N. lat., 124°01.94′ W. long.;

(20) 45°19.04′ N. lat., 124°01.29′ W. long.;

(21) 45°16.79′ N. lat., 124°01.90′ W. long.;

(22) 45°13.54′ N. lat., 124°01.64′ W. long.;

(23) 45°09.56′ N. lat., 124°01.94′ W. long.;

(24) 45°06.15′ N. lat., 124°02.38′ W. long.;

(25) 45°00.77′ N. lat., 124°03.72′ W. long.;

(26) 44°49.08′ N. lat., 124°06.49′ W. long.;

(27) 44°40.06′ N. lat., 124°08.14′ W. long.;

(28) 44°36.64′ N. lat., 124°08.51′ W. long.;

(29) 44°29.41′ N. lat., 124°09.24′ W. long.;

(30) 44°25.18′ N. lat., 124°09.37′ W. long.;

(31) 44°16.34′ N. lat., 124°10.30′ W. long.;

(32) 44°12.16′ N. lat., 124°10.82′ W. long.;

(33) 44°06.59′ N. lat., 124°11.00′ W. long.;

(34) 44°02.09′ N. lat., 124°11.24′ W. long.;

(35) 43°57.82′ N. lat., 124°11.60′ W. long.;

(36) 43°53.44′ N. lat., 124°12.34′ W. long.;

(37) 43°49.19′ N. lat., 124°13.08′ W. long.;

(38) 43°45.19′ N. lat., 124°13.73′ W. long.;

(39) 43°41.22′ N. lat., 124°14.59′ W. long.;

(40) 43°37.52′ N. lat., 124°15.05′ W. long.;

(41) 43°33.97′ N. lat., 124°16.00′ W. long.;

(42) 43°29.72′ N. lat., 124°17.78′ W. long.;

(43) 43°27.63′ N. lat., 124°19.11′ W. long.;

(44) 43°20.66′ N. lat., 124°25.39′ W. long.;

(45) 43°15.57′ N. lat., 124°26.86′ W. long.;

(46) 43°06.88′ N. lat., 124°29.30′ W. long.;

(47) 43°03.37′ N. lat., 124°29.06′ W. long.;

(48) 43°01.03′ N. lat., 124°29.41′ W. long.;

(49) 42°56.59′ N. lat., 124°31.93′ W. long.;

(50) 42°54.08′ N. lat., 124°34.55′ W. long.;

(51) 42°51.16′ N. lat., 124°37.02′ W. long.;

(52) 42°49.27′ N. lat., 124°37.73′ W. long.;

(53) 42°46.02′ N. lat., 124°37.54′ W. long.;

(54) 42°45.76′ N. lat., 124°35.68′ W. long.;

(55) 42°42.25′ N. lat., 124°30.47′ W. long.;

(56) 42°40.51′ N. lat., 124°29.00′ W. long.;

(57) 42°40.00′ N. lat., 124°29.01′ W. long.;

(58) 42°39.64′ N. lat., 124°28.28′ W. long.;

(59) 42°38.80′ N. lat., 124°27.57′ W. long.;

(60) 42°35.42′ N. lat., 124°26.77′ W. long.;

(61) 42°33.13′ N. lat., 124°29.06′ W. long.;

(62) 42°31.44′ N. lat., 124°30.71′ W. long.;

(63) 42°29.03′ N. lat., 124°31.71′ W. long.;

(64) 42°24.98′ N. lat., 124°29.95′ W. long.;

(65) 42°20.05′ N. lat., 124°28.16′ W. long.;

(66) 42°14.24′ N. lat., 124°26.03′ W. long.;

(67) 42°10.23′ N. lat., 124°23.93′ W. long.;

(68) 42°06.20′ N. lat., 124°22.70′ W. long.;

(69) 42°04.66′ N. lat., 124°21.49′ W. long.; and

(70) 42°00.00′ N. lat., 124°20.80′ W. long.

* * * * *

17. In § 660.392:

A. Paragraphs (a)(120) through (192) are revised, and paragraph (a)(193) is added;

B. Paragraphs (f)(137) through (194) are revised, and paragraphs (f)(195) through (204) are added:

C. Paragraphs (g)(1) through (28) are revised, and paragraph (g)(29) is removed;

D. Paragraphs (h)(1) through (14) are revised;

E. Paragraphs (i)(1) through (16) are revised, and paragraph (i)(17) is added;

F. Paragraphs (j)(144) through (244) are revised, and paragraphs (j)(245) through (253) are added;

G. Paragraphs (k)(1) through (31) are revised, and paragraphs (k)(32) through (38) are removed, and

H. Paragraphs (m)(1) through (18) are revised.

The revisions and additions read as follows:

§ 660.392 Latitude/longitude coordinates defining the 50-fm (91-m) through 75-fm (137-m) depth contours.

* * * * *

(a) * * *

(120) 36°10.41′ N. lat., 121°42.88′ W. long.;

(121) 36°02.56′ N. lat., 121°36.37′ W. long.;

(122) 36°01.11′ N. lat., 121°36.39′ W. long.;

(123) 36°00.00′ N. lat., 121°35.15′ W. long.;

(124) 35°58.26′ N. lat., 121°32.88′ W. long.;

(125) 35°40.38′ N. lat., 121°22.59′ W. long.;

(126) 35°27.74′ N. lat., 121°04.69′ W. long.;

(127) 35°01.43′ N. lat., 120°48.01′ W. long.;

(128) 34°37.98′ N. lat., 120°46.48′ W. long.;

(129) 34°32.98′ N. lat., 120°43.34′ W. long.;

(130) 34°27.00′ N. lat., 120°33.31′ W. long.;

(131) 34°23.47′ N. lat., 120°24.76′ W. long.;

(132) 34°25.78′ N. lat., 120°16.82′ W. long.;

(133) 34°24.65′ N. lat., 120°04.83′ W. long.;

(134) 34°23.18′ N. lat., 119°56.18′ W. long.;

(135) 34°19.20′ N. lat., 119°41.64′ W. long.;

(136) 34°16.82′ N. lat., 119°35.32′ W. long.;

(137) 34°13.43′ N. lat., 119°32.29′ W. long.;

(138) 34°05.39′ N. lat., 119°15.13′ W. long.;

(139) 34°07.98′ N. lat., 119°13.43′ W. long.;

(140) 34°07.64′ N. lat., 119°13.10′ W. long.;

(141) 34°04.56′ N. lat., 119°13.73′ W. long.;

(142) 34°03.90′ N. lat., 119°12.66′ W. long.;

(143) 34°03.66′ N. lat., 119°06.82′ W. long.;

(144) 34°04.58′ N. lat., 119°04.91′ W. long.;

(145) 34°01.28′ N. lat., 119°00.21′ W. long.;

(146) 34°00.19′ N. lat., 119°03.14′ W. long.;

(147) 33°59.66′ N. lat., 119°03.10′ W. long.;

(148) 33°59.54′ N. lat., 119°00.88′ W. long.;

(149) 34°00.82′ N. lat., 118°59.03′ W. long.;

(150) 33°59.11′ N. lat., 118°47.52′ W. long.;

(151) 33°59.07′ N. lat., 118°36.33′ W. long.;

(152) 33°55.06′ N. lat., 118°32.86′ W. long.;

(153) 33°53.56′ N. lat., 118°37.75′ W. long.;

(154) 33°51.22′ N. lat., 118°36.14′ W. long.;

(155) 33°50.48′ N. lat., 118°32.16′ W. long.;

(156) 33°51.86′ N. lat., 118°28.71′ W. long.;

(157) 33°50.09′ N. lat., 118°27.88′ W. long.;

(158) 33°49.95′ N. lat., 118°26.38′ W. long.;

(159) 33°50.73′ N. lat., 118°26.17′ W. long.;

(160) 33°49.86′ N. lat., 118°24.25′ W. long.;

(161) 33°48.10′ N. lat., 118°26.87′ W. long.;

(162) 33°47.54′ N. lat., 118°29.66′ W. long.;

(163) 33°44.10′ N. lat., 118°25.25′ W. long.;

(164) 33°41.78′ N. lat., 118°20.28′ W. long.;

(165) 33°38.18′ N. lat., 118°15.69′ W. long.;

(166) 33°37.50′ N. lat., 118°16.71′ W. long.;

(167) 33°35.98′ N. lat., 118°16.54′ W. long.;

(168) 33°34.15′ N. lat., 118°11.22′ W. long.;

(169) 33°34.29′ N. lat., 118°08.35′ W. long.;

(170) 33°35.53′ N. lat., 118°06.66′ W. long.;

(171) 33°35.93′ N. lat., 118°04.78′ W. long.;

(172) 33°34.97′ N. lat., 118°02.91′ W. long.;

(173) 33°33.84′ N. lat., 117°59.77′ W. long.;

(174) 33°35.33′ N. lat., 117°55.89′ W. long.;

(175) 33°35.05′ N. lat., 117°53.72′ W. long.;

(176) 33°31.32′ N. lat., 117°48.01′ W. long.;

(177) 33°27.99′ N. lat., 117°45.19′ W. long.;

(178) 33°26.93′ N. lat., 117°44.24′ W. long.;

(179) 33°25.46′ N. lat., 117°42.06′ W. long.;

(180) 33°18.45′ N. lat., 117°35.73′ W. long.;

(181) 33°10.29′ N. lat., 117°25.68′ W. long.;

(182) 33°07.47′ N. lat., 117°21.62′ W. long.;

(183) 33°04.47′ N. lat., 117°21.24′ W. long.;

(184) 32°59.89′ N. lat., 117°19.11′ W. long.;

(185) 32°57.41′ N. lat., 117°18.64′ W. long.;

(186) 32°55.71′ N. lat., 117°18.99′ W. long.;

(187) 32°54.43′ N. lat., 117°16.93′ W. long.;

(188) 32°52.34′ N. lat., 117°16.73′ W. long.;

(189) 32°52.64′ N. lat., 117°17.76′ W. long.;

(190) 32°52.24′ N. lat., 117°19.36′ W. long.;

(191) 32°47.06′ N. lat., 117°21.92′ W. long.;

(192) 32°41.93′ N. lat., 117°19.68′ W. long.; and

(193) 32°33.59′ N. lat., 117°17.89′ W. long.

* * * * *

(f) * * *

(137) 36°00.00′ N. lat., 121°35.34′ W. long.;

(138) 35°58.25′ N. lat., 121°32.88′ W. long.;

(139) 35°40.38′ N. lat., 121°22.59′ W. long.;

(140) 35°26.31′ N. lat., 121°03.73′ W. long.;

(141) 35°01.36′ N. lat., 120°49.02′ W. long.;

(142) 34°39.52′ N. lat., 120°48.72′ W. long.;

(143) 34°31.26′ N. lat., 120°44.12′ W. long.;

(144) 34°27.00′ N. lat., 120°36.00′ W. long.;

(145) 34°23.00′ N. lat., 120°25.32′ W. long.;

(146) 34°25.65′ N. lat., 120°17.20′ W. long.;

(147) 34°23.18′ N. lat., 119°56.17′ W. long.;

(148) 34°18.73′ N. lat., 119°41.89′ W. long.;

(149) 34°11.18′ N. lat., 119°31.21′ W. long.;

(150) 34°10.01′ N. lat., 119°25.84′ W. long.;

(151) 34°03.88′ N. lat., 119°12.46′ W. long.;

(152) 34°03.58′ N. lat., 119°06.71′ W. long.;

(153) 34°04.52′ N. lat., 119°04.89′ W. long.;

(154) 34°01.28′ N. lat., 119°00.27′ W. long.;

(155) 34°00.20′ N. lat., 119°03.18′ W. long.;

(156) 33°59.60′ N. lat., 119°03.14′ W. long.;
(157) 33°59.45′ N. lat., 119°00.87′ W. long.;
(158) 34°00.71′ N. lat., 118°59.07′ W. long.;
(159) 33°59.05′ N. lat., 118°47.34′ W. long.;
(160) 33°58.86′ N. lat., 118°36.24′ W. long.;
(161) 33°55.05′ N. lat., 118°32.85′ W. long.;
(162) 33°53.63′ N. lat., 118°37.88′ W. long.;
(163) 33°51.22′ N. lat., 118°36.13′ W. long.;
(164) 33°50.19′ N. lat., 118°32.19′ W. long.;
(165) 33°51.28′ N. lat., 118°29.12′ W. long.;
(166) 33°49.89′ N. lat., 118°28.04′ W. long.;
(167) 33°49.95′ N. lat., 118°26.38′ W. long.;
(168) 33°50.73′ N. lat., 118°26.16′ W. long.;
(169) 33°50.06′ N. lat., 118°24.79′ W. long.;
(170) 33°48.48′ N. lat., 118°26.86′ W. long.;
(171) 33°47.75′ N. lat., 118°30.21′ W. long.;
(172) 33°44.10′ N. lat., 118°25.25′ W. long.;
(173) 33°41.77′ N. lat., 118°20.32′ W. long.;
(174) 33°38.17′ N. lat., 118°15.69′ W. long.;
(175) 33°37.48′ N. lat., 118°16.72′ W. long.;
(176) 33°35.80′ N. lat., 118°16.65′ W. long.;
(177) 33°33.92′ N. lat., 118°11.36′ W. long.;
(178) 33°34.09′ N. lat., 118°08.15′ W. long.;
(179) 33°35.73′ N. lat., 118°05.01′ W. long.;
(180) 33°33.75′ N. lat., 117°59.82′ W. long.;
(181) 33°35.25′ N. lat., 117°55.89′ W. long.;
(182) 33°35.03′ N. lat., 117°53.80′ W. long.;
(183) 33°31.37′ N. lat., 117°48.15′ W. long.;
(184) 33°27.49′ N. lat., 117°44.85′ W. long.;
(185) 33°16.63′ N. lat., 117°34.01′ W. long.;
(186) 33°07.21′ N. lat., 117°21.96′ W. long.;
(187) 33°03.35′ N. lat., 117°21.22′ W. long.;
(188) 33°02.14′ N. lat., 117°20.26′ W. long.;
(189) 32°59.87′ N. lat., 117°19.16′ W. long.;
(190) 32°57.39′ N. lat., 117°18.72′ W. long.;
(191) 32°56.11′ N. lat., 117°18.41′ W. long.;
(192) 32°55.31′ N. lat., 117°18.80′ W. long.;
(193) 32°54.38′ N. lat., 117°17.09′ W. long.;
(194) 32°52.81′ N. lat., 117°16.94′ W. long.;
(195) 32°52.56′ N. lat., 117°19.30′ W. long.;
(196) 32°50.86′ N. lat., 117°20.98′ W. long.;
(197) 32°46.96′ N. lat., 117°22.69′ W. long.;
(198) 32°45.58′ N. lat., 117°22.38′ W. long.;
(199) 32°44.98′ N. lat., 117°21.87′ W. long.;
(200) 32°43.52′ N. lat., 117°19.32′ W. long.;
(201) 32°41.52′ N. lat., 117°20.12′ W. long.;
(202) 32°37.00′ N. lat., 117°20.10′ W. long.;
(203) 32°34.76′ N. lat., 117°18.77′ W. long.; and
(204) 32°33.70′ N. lat., 117°18.46′ W. long.
(g) * * *
(1) 34°09.83′ N. lat., 120°25.61′ W. long.;
(2) 34°07.03′ N. lat., 120°16.43′ W. long.;
(3) 34°06.38′ N. lat., 120°04.00′ W. long.;
(4) 34°07.90′ N. lat., 119°55.12′ W. long.;
(5) 34°05.07′ N. lat., 119°37.33′ W. long.;
(6) 34°05.04′ N. lat., 119°32.80′ W. long.;
(7) 34°04.00′ N. lat., 119°26.70′ W. long.;
(8) 34°02.27′ N. lat., 119°18.73′ W. long.;
(9) 34°00.98′ N. lat., 119°19.10′ W. long.;
(10) 33°59.44′ N. lat., 119°21.89′ W. long.;
(11) 33°58.70′ N. lat., 119°32.22′ W. long.;
(12) 33°57.81′ N. lat., 119°33.72′ W. long.;
(13) 33°57.65′ N. lat., 119°35.94′ W. long.;
(14) 33°56.14′ N. lat., 119°41.09′ W. long.;
(15) 33°55.84′ N. lat., 119°48.00′ W. long.;
(16) 33°57.22′ N. lat., 119°52.09′ W. long.;
(17) 33°59.32′ N. lat., 119°55.65′ W. long.;
(18) 33°57.73′ N. lat., 119°55.06′ W. long.;
(19) 33°56.48′ N. lat., 119°53.80′ W. long.;
(20) 33°49.29′ N. lat., 119°55.76′ W. long.;
(21) 33°48.11′ N. lat., 119°59.72′ W. long.;
(22) 33°49.14′ N. lat., 120°03.58′ W. long.;
(23) 33°52.95′ N. lat., 120°10.00′ W. long.;
(24) 33°56.00′ N. lat., 120°17.00′ W. long.;
(25) 34°00.12′ N. lat., 120°28.12′ W. long.;
(26) 34°08.23′ N. lat., 120°36.25′ W. long.;
(27) 34°08.80′ N. lat., 120°34.58′ W. long.; and
(28) 34°09.83′ N. lat., 120°25.61′ W. long.
(h) * * *
(1) 33°04.44′ N. lat., 118°37.61′ W. long.;
(2) 33°02.56′ N. lat., 118°34.12′ W. long.;
(3) 32°55.54′ N. lat., 118°28.87′ W. long.;
(4) 32°55.02′ N. lat., 118°27.69′ W. long.;
(5) 32°49.78′ N. lat., 118°20.88′ W. long.;
(6) 32°48.32′ N. lat., 118°19.89′ W. long.;
(7) 32°47.60′ N. lat., 118°22.00′ W. long.;
(8) 32°44.59′ N. lat., 118°24.52′ W. long.;
(9) 32°49.97′ N. lat., 118°31.52′ W. long.;
(10) 32°53.62′ N. lat., 118°32.94′ W. long.;
(11) 32°55.63′ N. lat., 118°34.82′ W. long.;
(12) 33°00.71′ N. lat., 118°38.42′ W. long.;
(13) 33°03.49′ N. lat., 118°38.81′ W. long.; and
(14) 33°04.44′ N. lat., 118°37.61′ W. long.
(i) * * *
(1) 33°28.15′ N. lat., 118°38.17′ W. long.;
(2) 33°29.23′ N. lat., 118°36.27′ W. long.;
(3) 33°28.85′ N. lat., 118°30.85′ W. long.;
(4) 33°26.69′ N. lat., 118°27.37′ W. long.;
(5) 33°26.30′ N. lat., 118°25.38′ W. long.;
(6) 33°25.35′ N. lat., 118°22.83′ W. long.;
(7) 33°22.60′ N. lat., 118°18.82′ W. long.;
(8) 33°19.49′ N. lat., 118°16.91′ W. long.;
(9) 33°17.13′ N. lat., 118°16.58′ W. long.;
(10) 33°16.65′ N. lat., 118°17.71′ W. long.;
(11) 33°18.35′ N. lat., 118°27.86′ W. long.;
(12) 33°20.07′ N. lat., 118°32.34′ W. long.;

(13) 33°21.82′ N. lat., 118°32.08′ W. long.;
(14) 33°23.15′ N. lat., 118°29.89′ W. long.;
(15) 33°24.99′ N. lat., 118°32.25′ W. long.;
(16) 33°25.73′ N. lat., 118°34.88′ W. long.; and
(17) 33°28.15′ N. lat., 118°38.17′ W. long.

(j) * * *

(144) 37°28.20′ N. lat., 122°54.92′ W. long.;
(145) 37°27.34′ N. lat., 122°52.91′ W. long.;
(146) 37°26.45′ N. lat., 122°52.95′ W. long.;
(147) 37°26.06′ N. lat., 122°51.17′ W. long.;
(148) 37°23.07′ N. lat., 122°51.34′ W. long.;
(149) 37°11.00′ N. lat., 122°43.89′ W. long.;
(150) 37°07.00′ N. lat., 122°41.06′ W. long.;
(151) 37°04.12′ N. lat., 122°38.94′ W. long.;
(152) 37°00.64′ N. lat., 122°33.26′ W. long.;
(153) 36°59.15′ N. lat., 122°27.84′ W. long.;
(154) 37°01.41′ N. lat., 122°24.41′ W. long.;
(155) 36°58.75′ N. lat., 122°23.81′ W. long.;
(156) 36°59.17′ N. lat., 122°21.44′ W. long.;
(157) 36°57.51′ N. lat., 122°20.69′ W. long.;
(158) 36°51.46′ N. lat., 122°10.01′ W. long.;
(159) 36°48.43′ N. lat., 122°06.47′ W. long.;
(160) 36°48.66′ N. lat., 122°04.99′ W. long.;
(161) 36°47.75′ N. lat., 122°03.33′ W. long.;
(162) 36°51.23′ N. lat., 121°57.79′ W. long.;
(163) 36°49.72′ N. lat., 121°57.87′ W. long.;
(164) 36°48.84′ N. lat., 121°58.68′ W. long.;
(165) 36°47.89′ N. lat., 121°58.53′ W. long.;
(166) 36°48.66′ N. lat., 121°50.49′ W. long.;
(167) 36°45.56′ N. lat., 121°54.11′ W. long.;
(168) 36°45.30′ N. lat., 121°57.62′ W. long.;
(169) 36°38.54′ N. lat., 122°01.13′ W. long.;
(170) 36°35.76′ N. lat., 122°00.87′ W. long.;
(171) 36°32.58′ N. lat., 121°59.12′ W. long.;
(172) 36°32.95′ N. lat., 121°57.62′ W. long.;
(173) 36°31.96′ N. lat., 121°56.27′ W. long.;
(174) 36°31.74′ N. lat., 121°58.24′ W. long.;
(175) 36°30.57′ N. lat., 121°59.66′ W. long.;
(176) 36°27.80′ N. lat., 121°59.30′ W. long.;
(177) 36°26.52′ N. lat., 121°58.09′ W. long.;
(178) 36°23.65′ N. lat., 121°58.94′ W. long.;
(179) 36°20.93′ N. lat., 122°00.28′ W. long.;
(180) 36°18.23′ N. lat., 122°03.10′ W. long.;
(181) 36°14.21′ N. lat., 121°57.73′ W. long.;
(182) 36°14.68′ N. lat., 121°55.43′ W. long.;
(183) 36°10.42′ N. lat., 121°42.90′ W. long.;
(184) 36°02.55′ N. lat., 121°36.35′ W. long.;
(185) 36°01.04′ N. lat., 121°36.47′ W. long.;
(186) 36°00.00′ N. lat., 121°35.40′ W. long.;
(187) 35°58.25′ N. lat., 121°32.88′ W. long.;
(188) 35°39.35′ N. lat., 121°22.63′ W. long.;
(189) 35°25.09′ N. lat., 121°03.02′ W. long.;
(190) 35°10.84′ N. lat., 120°55.90′ W. long.;
(191) 35°04.35′ N. lat., 120°51.62′ W. long.;
(192) 34°55.25′ N. lat., 120°49.36′ W. long.;
(193) 34°47.95′ N. lat., 120°50.76′ W. long.;
(194) 34°39.27′ N. lat., 120°49.16′ W. long.;
(195) 34°31.05′ N. lat., 120°44.71′ W. long.;
(196) 34°27.00′ N. lat., 120°36.54′ W. long.;
(197) 34°22.60′ N. lat., 120°25.41′ W. long.;
(198) 34°25.45′ N. lat., 120°17.41′ W. long.;
(199) 34°22.94′ N. lat., 119°56.40′ W. long.;
(200) 34°18.37′ N. lat., 119°42.01′ W. long.;
(201) 34°11.22′ N. lat., 119°32.47′ W. long.;
(202) 34°09.58′ N. lat., 119°25.94′ W. long.;
(203) 34°03.89′ N. lat., 119°12.47′ W. long.;
(204) 34°03.57′ N. lat., 119°06.72′ W. long.;
(205) 34°04.53′ N. lat., 119°04.90′ W. long.;
(206) 34°02.84′ N. lat., 119°02.37′ W. long.;
(207) 34°01.30′ N. lat., 119°00.26′ W. long.;
(208) 34°00.22′ N. lat., 119°03.20′ W. long.;
(209) 33°59.56′ N. lat., 119°03.36′ W. long.;
(210) 33°59.35′ N. lat., 119°00.92′ W. long.;
(211) 34°00.49′ N. lat., 118°59.08′ W. long.;
(212) 33°59.07′ N. lat., 118°47.34′ W. long.;
(213) 33°58.73′ N. lat., 118°36.45′ W. long.;
(214) 33°55.24′ N. lat., 118°33.42′ W. long.;
(215) 33°53.71′ N. lat., 118°38.01′ W. long.;
(216) 33°51.19′ N. lat., 118°36.50′ W. long.;
(217) 33°49.85′ N. lat., 118°32.31′ W. long.;
(218) 33°49.61′ N. lat., 118°28.07′ W. long.;
(219) 33°49.77′ N. lat., 118°26.34′ W. long.;
(220) 33°50.36′ N. lat., 118°25.84′ W. long.;
(221) 33°49.92′ N. lat., 118°25.05′ W. long.;
(222) 33°48.70′ N. lat., 118°26.70′ W. long.;
(223) 33°47.72′ N. lat., 118°30.48′ W. long.;
(224) 33°44.11′ N. lat., 118°25.25′ W. long.;
(225) 33°41.62′ N. lat., 118°20.31′ W. long.;
(226) 33°38.15′ N. lat., 118°15.85′ W. long.;
(227) 33°37.53′ N. lat., 118°16.82′ W. long.;
(228) 33°35.76′ N. lat., 118°16.75′ W. long.;
(229) 33°33.76′ N. lat., 118°11.37′ W. long.;
(230) 33°33.76′ N. lat., 118°07.94′ W. long.;
(231) 33°35.59′ N. lat., 118°05.05′ W. long.;
(232) 33°33.67′ N. lat., 117°59.98′ W. long.;
(233) 33°34.98′ N. lat., 117°55.66′ W. long.;
(234) 33°34.84′ N. lat., 117°53.83′ W. long.;
(235) 33°31.43′ N. lat., 117°48.76′ W. long.;
(236) 33°16.61′ N. lat., 117°34.49′ W. long.;
(237) 33°07.43′ N. lat., 117°22.40′ W. long.;
(238) 33°02.93′ N. lat., 117°21.12′ W. long.;
(239) 33°02.09′ N. lat., 117°20.28′ W. long.;
(240) 32°59.91′ N. lat., 117°19.28′ W. long.;
(241) 32°57.27′ N. lat., 117°18.82′ W. long.;
(242) 32°56.17′ N. lat., 117°19.43′ W. long.;

(243) 32°55.22′ N. lat., 117°19.09′ W. long.;
(244) 32°54.30′ N. lat., 117°17.13′ W. long.;
(245) 32°52.89′ N. lat., 117°17.03′ W. long.;
(246) 32°52.61′ N. lat., 117°19.50′ W. long.;
(247) 32°50.85′ N. lat., 117°21.14′ W. long.;
(248) 32°47.11′ N. lat., 117°22.95′ W. long.;
(249) 32°45.66′ N. lat., 117°22.60′ W. long.;
(250) 32°42.99′ N. lat., 117°20.70′ W. long.;
(251) 32°40.72′ N. lat., 117°20.23′ W. long.;
(252) 32°38.11′ N. lat., 117°20.59′ W. long.; and
(253) 32°33.83′ N. lat., 117°19.18′ W. long.
(k) * * *
(1) 34°10.82′ N. lat., 120°33.26′ W. long.;
(2) 34°11.78′ N. lat., 120°28.12′ W. long.;
(3) 34°08.65′ N. lat., 120°18.46′ W. long.;
(4) 34°07.01′ N. lat., 120°10.46′ W. long.;
(5) 34°06.56′ N. lat., 120°04.00′ W. long.;
(6) 34°08.11′ N. lat., 119°55.01′ W. long.;
(7) 34°05.18′ N. lat., 119°37.94′ W. long.;
(8) 34°05.22′ N. lat., 119°35.52′ W. long.;
(9) 34°05.12′ N. lat., 119°32.74′ W. long.;
(10) 34°04.32′ N. lat., 119°27.32′ W. long.;
(11) 34°02.32′ N. lat., 119°18.46′ W. long.;
(12) 34°00.95′ N. lat., 119°18.95′ W. long.;
(13) 33°59.40′ N. lat., 119°21.74′ W. long.;
(14) 33°58.70′ N. lat., 119°32.21′ W. long.;
(15) 33°56.12′ N. lat., 119°41.10′ W. long.;
(16) 33°55.74′ N. lat., 119°48.00′ W. long.;
(17) 33°56.91′ N. lat., 119°52.04′ W. long.;
(18) 33°59.06′ N. lat., 119°55.38′ W. long.;
(19) 33°57.82′ N. lat., 119°54.99′ W. long.;
(20) 33°56.58′ N. lat., 119°53.75′ W. long.;
(21) 33°54.43′ N. lat., 119°54.07′ W. long.;
(22) 33°52.67′ N. lat., 119°54.78′ W. long.;
(23) 33°48.33′ N. lat., 119°55.09′ W. long.;
(24) 33°47.28′ N. lat., 119°57.30′ W. long.;
(25) 33°47.36′ N. lat., 120°00.39′ W. long.;
(26) 33°49.16′ N. lat., 120°05.06′ W. long.;
(27) 33°52.00′ N. lat., 120°08.15′ W. long.;
(28) 33°58.11′ N. lat., 120°25.59′ W. long.;
(29) 34°02.15′ N. lat., 120°32.70′ W. long.;
(30) 34°08.86′ N. lat., 120°37.12′ W. long.; and
(31) 34°10.82′ N. lat., 120°33.26′ W. long.
* * * * *
(m) * * *
(1) 33°28.17′ N. lat., 118°38.16′ W. long.;
(2) 33°29.35′ N. lat., 118°36.23′ W. long.;
(3) 33°28.85′ N. lat., 118°30.85′ W. long.;
(4) 33°26.69′ N. lat., 118°27.37′ W. long.;
(5) 33°26.33′ N. lat., 118°25.37′ W. long.;
(6) 33°25.35′ N. lat., 118°22.83′ W. long.;
(7) 33°22.47′ N. lat., 118°18.53′ W. long.;
(8) 33°19.51′ N. lat., 118°16.82′ W. long.;
(9) 33°17.07′ N. lat., 118°16.38′ W. long.;
(10) 33°16.58′ N. lat., 118°17.61′ W. long.;
(11) 33°18.35′ N. lat., 118°27.86′ W. long.;
(12) 33°20.07′ N. lat., 118°32.35′ W. long.;
(13) 33°21.82′ N. lat., 118°32.09′ W. long.;
(14) 33°23.15′ N. lat., 118°29.99′ W. long.;
(15) 33°24.96′ N. lat., 118°32.21′ W. long.;
(16) 33°25.67′ N. lat., 118°34.88′ W. long.;
(17) 33°27.57′ N. lat., 118°37.90′ W. long.; and
(18) 33°28.17′ N. lat., 118°38.16′ W. long.

18. In § 660.393:

A. Paragraphs (a)(210) through (297) are redesignated as (a)(220) through (307), and paragraphs (a)(35) through (209) are redesignated as (a)(38) through (212);

B. Paragraphs (h)(215) through (291) are redesignated as (h)(224) through (300), and paragraphs (h)(187) through (214) are redesignated as (h)(188) through (215);

C. New paragraphs (a)(35) through (37), (a)(213) through (219), (h)(187), and (h)(216) through (223) are added; and

D. Newly redesignated paragraphs (a)(261), (262), and (304) and (h)(188), (201), (206), and (249) are revised.

The additions and revisions read as follows:

§ 660.393 Latitude/longitude coordinates defining the 100 fm (183 m) through 150 fm (274 m) depth contours.

(a) * * *
(35) 48°02.35′ N. lat., 125°17.30′ W. long.;
(36) 48°02.35′ N. lat., 125°18.07′ W. long.;
(37) 48°00.00′ N. lat., 125°19.30′ W. long.;
* * * * *
(213) 37°26.81′ N. lat., 122°55.57′ W. long.;
(214) 37°26.78′ N. lat., 122°53.91′ W. long.;
(215) 37°25.74′ N. lat., 122°54.13′ W. long.;
(216) 37°25.33′ N. lat., 122°53.59′ W. long.;
(217) 37°25.29′ N. lat., 122°52.57′ W. long.;
(218) 37°24.50′ N. lat., 122°52.09′ W. long.;
(219) 37°23.25′ N. lat., 122°53.12′ W. long.;
* * * * *
(261) 36°00.00′ N. lat., 121°35.41′ W. long.;
(262) 35°57.84′ N. lat., 121°32.81′ W. long.;
* * * * *
(304) 32°53.36′ N. lat., 117°19.97′ W. long.;
* * * * *
(h) * * *
(187) 39°39.82 N. lat., 123°59.98′ W. long.;
(188) 39°34.59 N. lat., 123°58.08′ W. long.;
* * * * *
(201) 38°18.75 N. lat., 123°31.21′ W. long.;
* * * * *
(206) 38°06.15 N. lat., 123°30.00′ W. long.;
* * * * *
(216) 37°26.10 N. lat., 122°57.07′ W. long.;
(217) 37°26.51 N. lat., 122°54.23′ W. long.;
(218) 37°25.05′ N. lat., 122°55.64′ W. long.;
(219) 37°24.42′ N. lat., 122°54.94′ W. long.;
(220) 37°25.16′ N. lat., 122°52.73′ W. long.;
(221) 37°24.55′ N. lat., 122°52.48′ W. long.;
(222) 37°22.81′ N. lat., 122°54.36′ W. long.;
(223) 37°19.87′ N. lat., 122°53.98′ W. long.;
* * * * *

(249) 36°00.00′ N. lat., 121°35.45′ W. long.;

* * * * *

19. In § 660.394:

A. Paragraphs (l)(179) through (214) are redesignated as (l)(180) through (242), paragraphs (l)(164) through (l)(177) are redesignated as (l)(166) through (179), and paragraph (l)(130) through (163) are redesignated as paragraphs (l)(131) through (164);

B. Paragraphs (l)(178) is removed;

C. Paragraph (l)(121) is revised;

D. New paragraphs (l)(130) and (165) are added;

E. Newly designated paragraphs (l)(140) and (179) are revised;

F. Paragraphs (m)(119) through (199) are redesignated as (m)(121) through (201);

G. New paragraphs (m)(119) and (120) are added, and

H. Newly redesignated paragraphs (m)(121) and (122) are revised.

The additions and revisions read as follows:

§ 660.394 Latitude/longitude coordinates defining the 180-fm (329-m) through 250-fm (457-m) depth contours.

* * * * *

(l) * * *

(121) 40°38.87′ N. lat., 124°30.15′ W. long.;

* * * * *

(130) 40°16.29′ N. lat., 124°34.50′ W. long.;

* * * * *

(140) 39°55.72′ N. lat., 124°09.86′ W. long.;

* * * * *

(165) 37°55.07′ N. lat., 123°27.20′ W. long.;

* * * * *

(179) 36°55.69′ N. lat., 122°22.32′ W. long.;

* * * * *

(m) * * *

(119) 39°56.44′ N. lat., 124°12.52′ W. long.;

(120) 39°54.98′ N. lat., 124°08.71′ W. long.;

(121) 39°52.60′ N. lat., 124°10.01′ W. long.;

(122) 39°37.37′ N. lat., 124°00.58′ W. long.;

* * * * *

20. In part 660, subpart G, Tables 1–5 are revised to read as follows:

TABLE 1a. TO PART 660, SUBPART G—2009, SPECIFICATIONS OF ABCS, OYS, AND HGS, BY MANAGEMENT AREA

[Weights in metric tons]

Species	ABC specifications						OY[b]	HG[b]	
	ABC contributions by area					ABC		Commercial	Recreational
	Vancouver[a]	Columbia	Eureka	Monterey	Conception				
ROUNDFISH:									
Lingcod[c] N of 42° N. lat									
S of 42° N. lat	4,473		805			5,278	5,278		
Pacific Cod[e]	3,200		[d]			3,200	1,600	1,200	
Pacific Whiting[f]	[f]					[f]	134,773–404,318		
Sablefish[g] N of 36° N. lat							7,052	6,347	
S of 36° N. lat	9,914					9,914	1,371	1,371	
Cabezon[h]									
S of 42° N. lat	[d]		81		25	106	69		
FLATFISH:									
Dover sole[i]	29,453					29,453	16,500		
English sole[j]	14,326					14,326	14,326		
Petrale sole[k]	1,509		1,302			2,811	2,433		
Arrowtooth flounder[l]	11,267					11,267	11,267		
Starry Flounder[m]	1,509					1,509	1,004		
Other flatfish[n]	6,731					6,731	4,884		
ROCKFISH:									
Pacific Ocean Perch[o]	1,160					1,160	189	187	
Shortbelly[p]	6,950					6,950	6,950		
Widow[q]	7,728					7,728	522	460.4	7.2
Canary[r]	937					937	105	42.3	43.8
Chilipepper[s]	[d]			3,037		3,037	2,885	2,885	
Bocaccio[t]	[d]			793		793	288	206.4	67.3
Splitnose[u]	[d]			615		615	461		

TABLE 1a. TO PART 660, SUBPART G—2009, SPECIFICATIONS OF ABCS, OYS, AND HGS, BY MANAGEMENT AREA—Continued

[Weights in metric tons]

Species	ABC specifications						OY[b]	HG[b]	
	ABC contributions by area					ABC		Commercial	Recreational
	Vancouver[a]	Columbia	Eureka	Monterey	Conception				
Yellowtail[v]	4,562			(d)		4,562	4,562		
Shortspine thornyhead[w] N of 34°27′ N. lat							1,608	1,608	
S of 34°27′ N. lat			2,437			2,437	414		
Longspine thornyhead[x] N of 34°27′ N. lat							2,231		
S of 34°27′ N. lat			3,766			3,766	395		
Cowcod[y]	(d)			13		13	4		
Darkblotched[z]			437			437	285	282.05	
Yelloweye[aa]						31	17	3.1	
California Scorpionfish[bb]						175	175	175	
Black[cc] N of 46°16′ N. lat	490					490	490		
S of 46°16′ N. lat			1,469			1,469	1,000		
Minor Rockfish[dd] N of 40°10′ N. lat	3,678					3,678	2,283		
Minor Rockfish[ee] S of 40°10′ N. lat				3,384		3,384	1,990		
Remaining	1,640			1,318					
Bank[ff]	(d)			350					
Blackgill[gg]	(d)			292					
Blue Bocaccio north	28 318			213					
Chilipepper north	32								
Redstripe	576			(d)					
Sharpchin	307			45					
Silvergrey	38			(d)					
Splitnose north	242								
Yellowmouth	99			(d)					
Yellowtail				116					
Gopher	(d)			302					
Other rockfish[hh]	2,038			2,066					
SHARKS/SKATES/RATFISH/MORIDS/GRENADIERS/KELP GREENLING:									
Longnose Skate[ii]	3,428					3,428	1,349		
Other fish[jj]	11,200					11,200	5,600		

TABLE 1b. TO PART 660, SUBPART G—2009, HARVEST GUIDELINES FOR MINOR ROCKFISH BY DEPTH SUB-GROUPS

[Weights in metric tons]

Species	Total catch ABC	Total catch OY	Recreational HG	Commercial HG	Limited entry HG		Open access HG	
					Mt	%	Mt	%
Minor Rockfish[dd] N of 40°10′ N. lat	3,678	2,283				91.7		8.3
Nearshore		155						

TABLE 1b. TO PART 660, SUBPART G—2009, HARVEST GUIDELINES FOR MINOR ROCKFISH BY DEPTH SUB-GROUPS—Continued

[Weights in metric tons]

Species	Total catch ABC	Total catch OY	Recreational HG	Commercial HG	Limited entry HG		Open access HG	
					Mt	%	Mt	%
Shelf	.....	968						
Slope	.....	1,160						
Minor Rockfish [ee] S of 40°10′ N. lat	3,384	1,990				55.7		44.3
Nearshore		650						
Shelf		714						
Slope		626						

TABLE 1c. TO PART 660, SUBPART G—2009, OPEN ACCESS AND LIMITED ENTRY ALLOCATIONS BY SPECIES OR SPECIES GROUP

[Weights in metric tons]

Species	Commercial total catch HGs	Commercial total catch HGs			
		Limited entry	Open access		
			Mt	%	Mt
Lingcod: N of 42° N. lat.					
S of 42° N. lat			81.0		19.0
Sablefish [kk] N of 36° N. lat	6,347	5,750	90.6	597	9.4
Widow [ll]	460.4		97.0		3.0
Canary [ll]	42.3		87.7		12.3
Chilipepper	2,885	1,607	55.7	1,278	44.3
Bocaccio [ll]	206.4		55.7		44.3
Yellowtail			91.7		8.3
Shortspine thornyhead N of 34°27′ N. lat	1,608	1,603	99.7	5	0.27
Minor Rockfish: N of 40°10′ N. lat			91.7		8.3
S of 40°10′ N. lat			55.7		44.3

[a] ABCs apply only to the U.S. portion of the Vancouver area.

[b] Optimum Yields (OYs) and Harvest Guidelines (HGs) are specified as total catch values. A harvest guideline is a specified harvest target and not a quota. The use of this term may differ from the use of similar terms in state regulation.

[c] Lingcod—A coastwide lingcod stock assessment was prepared in 2005. The lingcod biomass was estimated to be at 64 percent of its unfished biomass coastwide in 2005. The ABC of 5,278 mt was calculated using an F_{MSY} proxy of $F_{45\%}$. Because the stock is above $B_{40\%}$ coastwide, the coastwide OY was set equal to the ABC. The tribal harvest guideline is 250 mt.

[d] ''Other species''—These species are neither common nor important to the commercial and recreational fisheries in the areas footnoted. Accordingly, these species are included in the harvest guidelines of ''other fish'', ''other rockfish'' or ''remaining rockfish''.

[e] Pacific Cod—The 3,200 mt ABC for the Vancouver-Columbia area is based on historical landings data. The 1,600 mt OY is the ABC reduced by 50 percent as a precautionary adjustment. A tribal harvest guideline of 400 mt is deducted from the OY resulting in a commercial OY of 1,200 mt.

[f] Pacific whiting—The most recent stock assessment was prepared in February 2008. The stock assessment base model estimated the Pacific whiting biomass to be at 42.6 percent (50th percentile estimate of depletion) of its unfished biomass in 2008. Final adoption of the Pacific whiting ABC and OY have been deferred until the Council's March 2009 meeting. Therefore, table 1a does not contain an ABC value, but does contain the OY range considered in the DEIS. It is anticipated that a new assessment will be available in early 2009 and the results will be used to set the 2009 ABC and OY. The final ABC and OY will be published as a separate action following the Council's recommendation at its March 2009 meeting.

[g] Sablefish—A coastwide sablefish stock assessment was prepared in 2007. The sablefish biomass was estimated to be at 38.3 percent of its unfished biomass in 2007. The coastwide ABC of 9,914 mt was based on the new stock assessment with a F_{MSY} proxy of $F_{45\%}$. The 40–10 harvest policy was applied to the ABC then apportion between the northern and southern areas with 72 percent going to the area north of 36° N. lat. and 28 percent going to the area south of 36° N. lat. The OY for the area north of 36° N. lat. is

7,052 mt. When establishing the OY for the area south of 36° N. lat. a 50 percent reduction was made resulting in a Conception area OY of 1,371 mt. The Coastwide OY of 8,423 mt is the sum of the northern and southern area OYs. The tribal allocation for the area north of 36° N. lat. is 705 mt (10 percent of the OY north of 36° N. lat.), which is further reduced by 1.6 percent (11 mt) to account for discard mortality. The tribal landed catch value is 694 mt.

[h] Cabezon south of 42° N. lat. was assessed in 2005. The Cabezon stock was estimated to be at 40 percent of its unfished biomass north of 34°27′ N. lat. and 28 percent of its unfished biomass south of 34°27′ N. lat. in 2005. The ABC of 106 mt is based on the 2005 stock assessment with a harvest rate proxy of $F_{45\%}$. The OY of 69 mt is consistent with the application of a 60–20 harvest rate policy specified in the California Nearshore Management Plan.

[i] Dover sole north of 34°27′ N. lat. was assessed in 2005. The Dover sole biomass was estimated to be at 59.8 percent of its unfished biomass in 2005 and was projected to be increasing. The ABC of 29,453 mt is based on the results of the 2005 assessment with an F_{MSY} proxy of $F_{40\%}$. Because the stock is above $B_{40\%}$ coastwide, the OY could be set equal to the ABC. The OY of 16,500 mt is less than the ABC. The OY is set at the MSY harvest level which is considerably larger than the coastwide catches in any recent years.

[j] A coastwide English sole stock assessment was prepared in 2005 and updated in 2007. The stock was estimated to be at 116 percent of its unfished biomass in 2007. The stock biomass is believed to be declining. The ABC of 14,326 mt is based on the results of the 2007 assessment update with an F_{MSY} proxy of $F_{40\%}$. Because the stock is above $B_{40\%}$, the OY was set equal to the ABC.

[k] A petrale sole stock assessment was prepared for 2005. In 2005 the petrale sole stock was estimated to be at 32 percent of its unfished biomass coastwide (34 percent in the northern assessment area and 29 percent in the southern assessment area). The ABC of 2,811 mt is based on the 2005 stock assessment with a $F_{40\%}$ F_{MSY} proxy. To derive the OY, the 40–10 harvest policy was applied to the ABC for both the northern and southern assessment areas. As a precautionary measure, an additional 25 percent reduction was made in the OY contribution for the southern area due assessment uncertainty. The coastwide OY is 2,433 mt in 2009.

[l] Arrowtooth flounder was assessed in 2007 and was estimated to be at 79 percent of its unfished biomass in 2007. Because the stock is above $B_{40\%}$, the OY is set equal to the ABC.

[m] Starry Flounder was assessed for the first time in 2005 and was estimated to be above 40 percent of its unfished biomass in 2005. However, the stock was projected to decline below 40 percent in both the northern and southern areas after 2008. The starry flounder assessment was considered to be a data-poor assessment relative to other groundfish assessments. For 2009, the coastwide ABC of 1,509 mt is based on the 2005 assessment with a F_{MSY} proxy of $F_{40\%}$. To derive the OY (1,004 mt), the 40–10 harvest policy was applied to the ABC for both the northern and southern assessment areas then an additional 25 percent reduction was made due to assessment uncertainty.

[n] ''Other flatfish'' are those flatfish species that do not have individual ABC/OYs and include butter sole, curlfin sole, flathead sole, Pacific sand dab, rex sole, rock sole, and sand sole. The other flatfish ABC is based on historical catch levels. The ABC of 6,731 mt is based on the highest landings for sanddabs (1995) and rex sole (1982) for the 1981–2003 period and on the average landings from the 1994–1998 period for the remaining other flatfish species. The OY of 4,884 mt is based on the ABC with a 25 percent precautionary adjustment for sanddabs and rex sole and a 50 percent precautionary adjustment for the remaining species.

[o] A POP stock assessment was prepared in 2005 and was updated in 2007. The stock assessment update estimated the stock to be at 27.5 percent of its unfished biomass in 2007. The ABC of 1,160 mt for the Vancouver and Columbia areas is based on the 2007 stock assessment update with an F_{MSY} proxy of $F_{50\%}$. The OY of 189 mt is based on a rebuilding plan with a target year to rebuild of 2017 and an SPR harvest rate of 86.4 percent. The OY is reduced by 2.0 mt for the amount anticipated to be taken during research activity and 0.14 mt for the amount expected to be taken during EFP fishing.

[p] Shortbelly rockfish remains an unexploited stock and is difficult to assess quantitatively. To understand the potential environmental determinants of fluctuations in the recruitment and abundance of an unexploited rockfish population in the California Current ecosystem, a non-quantitative assessment was conducted in 2007. The results of the assessment indicated the shortbelly stock was healthy with an estimated spawning stock biomass at 67 percent of its unfished biomass in 2005. The ABC and OY are being set at 6,950 mt which is 50 percent of the 2008 ABC and OY values. The stock is expected to remain at its current equilibrium with these harvest specifications.

[q] Widow rockfish was assessed in 2005 and an update was prepared in 2007. The stock assessment update estimated the stock to be at 36.2 percent of its unfished biomass in 2006. The ABC of 7,728 mt is based on the stock assessment update with an $F_{50\%}$ F_{MSY} proxy. The OY of 522 mt is based on a rebuilding plan with a target year to rebuild of 2015 and an SPR harvest rate of 95 percent. To derive the commercial harvest guideline of 460.4 mt the OY is reduced by 1.1 mt for the amount anticipated to be taken during research activity, 45.5 mt for the tribal set-aside, 7.2 mt the amount estimated to be taken in the recreational fisheries, 0.4 mt for the amount expected to be taken incidentally in non-groundfish fisheries, and 7.4 mt for the amount projected to be taken during EFP fishing. The following sector specific bycatch limits will be established for the Pacific whiting fishery: 153.0 mt for catcher/processors, 108.0 mt for motherships, and 189.0 mt for shore-based.

[r] Canary rockfish—A canary rockfish stock assessment was completed in 2007 and the stock was estimated to be at 32.7 percent of its unfished biomass coastwide in 2007. The coastwide ABC of 937 mt based on the 2007 rebuilding plan. The OY of 105 mt is based on a rebuilding plan with a target year to rebuild of 2021 and a SPR harvest rate of 88.7 percent. To derive the commercial harvest guideline of 42.3 mt, the OY is reduced by 8.0 mt for the amount anticipated to be taken during research activity, 7.3 mt the tribal set-aside, 43.8 mt the amount estimated to be taken in the recreational fisheries, 0.9 mt for the amount expected to be taken incidentally in non-groundfish fisheries, and 2.7 mt for the amount expected to be taken during EFP fishing. The following harvest guidelines are being specified for catch sharing in 2009: 19.7 mt for limited entry Non-Whiting Trawl, 18.0 mt for limited entry Whiting Trawl, 2.2 mt for limited entry fixed gear, 2.5 mt for directed open access, 4.9 mt for Washington recreational, 16.0 mt for Oregon recreational, and 22.9 mt for California recreational.

[s] Chilipepper rockfish was assessed in 2007 and the stock was estimated to be at 71 percent of its unfished biomass coastwide in 2007. The ABC of 3,037 mt is based on a F_{MSY} proxy of $F_{50\%}$. Because the unfished biomass is estimated to be above 40 percent the unfished biomass, the default OY could be set equal to the ABC. However, the OY of 2,885 mt was the ABC reduced by 5 percent as a precautionary measure for uncertainty in the stock assessment. Open access is allocated 44.3 percent (1,278 mt) of the commercial HG and limited entry is allocated 55.7 percent (1,607 mt) of the commercial HG.

[t] A bocaccio stock assessment and a rebuilding analysis were prepared in 2007. The bocaccio stock was estimated to be at 13.8 percent of its unfished biomass in 2007. The ABC of 793 mt for the Monterey-Conception area is based on the new assessment with an F_{MSY} proxy of $F_{50\%}$. The OY of 288 mt is based on a rebuilding plan with a target year to rebuild of 2026 and a SPR harvest rate of 77.7 percent. To derive the commercial harvest guideline of 206.4 mt, the OY is reduced by 2.0 mt for the amount anticipated to be taken during research activity, 67.3 mt for the amount estimated to be taken in the recreational fisheries, 1.3 mt for the amount expected to be taken incidentally in non-groundfish fisheries, and 11.0 mt for the amount expected to be taken during EFP fishing.

[u] Splitnose rockfish—The ABC is 615 mt in the Monterey-Conception area. The 461 mt OY for the area reflects a 25 percent precautionary adjustment because of the less rigorous stock assessment for this stock. In the north (Vancouver, Columbia and Eureka areas), splitnose is included within the minor slope rockfish OY. Because the harvest assumptions used to forecast future harvest were likely overestimates, carrying the previously used ABCs and OYs forward into 2009 was considered to be conservative and based on the best available data.

[v] Yellowtail rockfish—A yellowtail rockfish stock assessment was prepared in 2005 for the Vancouver, Columbia, Eureka areas. Yellowtail rockfish was estimated to be above 40 percent of its unfished biomass in 2005. The ABC of 4,562 mt is based on the 2005 stock assessment with the F_{MSY} proxy of $F_{50\%}$. The OY of 4,562 mt was set equal

to the ABC, because the stock is above the precautionary threshold of $B_{40\%}$.

[w] Shortspine thornyhead was assessed in 2005 and the stock was estimated to be at 63 percent of its unfished biomass in 2005. The ABC of 2,437 mt is based on a $F_{50\%}$ F_{MSY} proxy. For that portion of the stock (66 percent of the biomass) north of Point Conception (34°27′ N. lat.), the OY of 1,608 mt was set at equal to the ABC because the stock is estimated to be above the precautionary threshold. For that portion of the stock south of 34°27′ N. lat. (34 percent of the biomass), the OY of 414 mt was the portion of the ABC for the area reduced by 50 percent as a precautionary adjustment due to the short duration and amount of survey data for that area.

[x] Longspine thornyhead was assessed coastwide in 2005 and the stock was estimated to be at 71 percent of its unfished biomass in 2005. The coastwide ABC of 3,766 mt is based on a $F_{50\%}$ F_{MSY} proxy. The OY is set equal to the ABC because the stock is above the precautionary threshold. Separate OYs are being established for the areas north and south of 34°27′ N. lat. (Point Conception). The OY of 2,231 mt for that portion of the stock in the northern area (79 percent) the ABC reduced by 25 percent as a precautionary adjustment. For that portion of the stock in the south of 34°27′ N. lat. (21 percent), the OY of 395 mt was the portion of the ABC for the area reduced by 50 percent as a precautionary adjustment due to the short duration and amount of survey data for that area.

[y] Cowcod in the Conception area was assessed in 2007 and the stock was estimated to be between 3.4 to 16.3 percent of its unfished biomass. The ABC for the area south of 36° N. lat., the Conception and Monterey areas, is 13 mt and is based on the 2007 rebuilding analysis in which the Conception area stock assessment projection was doubled to account for both areas. A single OY of 4 mt is being set for both areas. The OY of 4 mt is based on a rebuilding plan with a target year to rebuild of 2072 and an SPR rate of 82.1 percent. The amount anticipated to be taken during research activity is 0.2 mt and the amount expected to be taken during EFP activity is 0.24 mt.

[z] Darkblotched rockfish was assessed in 2007 and a rebuilding analysis was prepared. The new stock assessment estimated the stock to be at 22.4 percent of its unfished biomass in 2007. The ABC is projected to be 437 mt and is based on the 2007 stock assessment with an F_{MSY} proxy of $F_{50\%}$. The OY of 285 mt is based on a rebuilding plan with a target year to rebuild of 2028 and an SPR harvest rate of 62.1 percent. The commercial OY of 282.05 mt is the OY reduced by 2.0 mt for the amount anticipated to be taken during research activity and 0.95 mt for the amount projected to be taken during EFP activity.

[aa] Yelloweye rockfish was fully assessed in 2006 and an assessment update was completed in 2007. The 2007 stock assessment update estimated the spawning stock biomass in 2006 to be at 14 percent of its unfished biomass coastwide. The 31 mt coastwide ABC was derived from the base model in the new stock assessment with an F_{MSY} proxy of $F_{50\%}$. The 17 mt OY is based on a rebuilding plan with a target year to rebuild of 2084 and an SPR harvest rate of 66.3 percent in 2009 and 2010 and an SPR harvest rate of 71.9 percent for 2011 and beyond. The OY is reduced by 2.8 mt for the amount anticipated to be taken during research activity, 2.3 mt the amount estimated to be taken in the tribal fisheries and 0.3 mt for the amount expected to be taken incidentally in non-groundfish fisheries. The catch sharing harvest guidelines for yelloweye rockfish in 2009 and 2010 are: limited entry non whiting trawl 0.6 mt, limited entry whiting 0.0 mt, limited entry fixed gear 1.4 mt, directed open access 1.1 mt, Washington recreational 2.7 mt, Oregon recreational 2.4 mt, California recreational 2.7 mt, and 0.3 mt for exempted fishing.

[bb] California Scorpionfish south of 34°27′ N. lat. was assessed in 2005 and was estimated to be above 40 percent of its unfished biomass in 2005. The ABC of 175 mt is based on the new assessment with a harvest rate proxy of $F_{50\%}$. Because the stock is above $B_{40\%}$ coastwide, the OY is set equal to the ABC.

[cc] New assessments were prepared for black rockfish south of 45°56.00 N. lat. (Cape Falcon, Oregon) and for black rockfish north of Cape Falcon. The ABC for the area north of 46°16′ N. lat. (Washington) is 490 mt (97 percent) of the 505 mt ABC contribution from the northern assessment area. The ABC for the area south of 46°16′ N. lat. (Oregon and California) is 1,469 mt which is the sum of a contribution of 15 mt (3 percent) from the northern area assessment, and 1,454 mt from the southern area assessment. The ABCs were based on the results of the new assessment and derived using an F_{MSY} proxy of $F_{50\%}$. Because both portions of the stock are above 40 percent, the OYs could be set equal to the ABCs. For the area north of 46°16′ N. lat., the OY of 490 mt is set equal to the ABC. The following tribal harvest guidelines are being set: 20,000 lb (9.1 mt) north of Cape Alava, WA (48°09.50′ N. lat.) and 10,000 lb (4.5 mt) between Destruction Island, WA (47°40′ N. lat.) and Leadbetter Point, WA (46°38.17′ N. lat.) The OY for the area south of 46°16′ N. lat. is being set at 1,000 mt which is a constant harvest level. The black rockfish OY in the area south of 46°16′ N. lat., is subdivided with separate HGs being set for the area north of 42° N. lat. (580 mt/58 percent) and for the area south of 42° N. lat. (420 mt/42 percent).

[dd] Minor rockfish north includes the ''remaining rockfish'' and ''other rockfish'' categories in the Vancouver, Columbia, and Eureka areas combined. These species include ''remaining rockfish'', which generally includes species that have been assessed by less rigorous methods than stock assessments, and ''other rockfish'', which includes species that do not have quantifiable stock assessments. Blue rockfish has been removed from the ''other rockfish'' and added to the remaining rockfish. The ABC of 3,678 mt is the sum of the individual ''remaining rockfish'' ABCs plus the ''other rockfish'' ABCs. The remaining rockfish ABCs continue to be reduced by 25 percent (F=0.75M) as a precautionary adjustment. To obtain the total catch OY of 2,283 mt, the remaining rockfish ABCs were further reduced by 25 percent and other rockfish ABCs were reduced by 50 percent. This was a precautionary measure to address limited stock assessment information.

[ee] Minor rockfish south includes the ''remaining rockfish'' and ''other rockfish'' categories in the Monterey and Conception areas combined. These species include ''remaining rockfish'' which generally includes species that have been assessed by less rigorous methods than stock assessment, and ''other rockfish'' which includes species that do not have quantifiable stock assessments. Blue rockfish has been removed from the ''other rockfish'' and added to the remaining rockfish. The ABC of 3,384 mt is the sum of the individual ''remaining rockfish'' ABCs plus the ''other rockfish'' ABCs. The remaining rockfish ABCs continue to be reduced by 25 percent (F=0.75M) as a precautionary adjustment. The remaining rockfish ABCs are further reduced by 25 percent, with the exception of blackgill rockfish (see footnote gg). The other rockfish ABCs were reduced by 50 percent. This was a precautionary measure due to limited stock assessment information. The resulting minor rockfish OY is 1,990 mt.

[ff] Bank rockfish—The ABC is 350 mt which is based on a 2000 stock assessment for the Monterey and Conception areas. This stock contributes 263 mt towards the minor rockfish OY in the south.

[gg] Blackgill rockfish in the Monterey and Conception areas was assessed in 2005 and is estimated to be at 49.9 percent of its unfished biomass in 2008. The ABC of 292 mt for the Monterey and Conception areas is based on the 2005 stock assessment with an F_{MSY} proxy of $F_{50\%}$ and is the two year average ABC for the 2007 and 2008 periods. This stock contributes 292 mt towards minor rockfish south.

[hh] ''Other rockfish'' includes rockfish species listed in 50 CFR 660.302. A new stock assessment was conducted for blue rockfish in 2007. As a result of the new stock assessment, the blue rockfish contribution to the other rockfish group is of 232 mt in the north and 30 mt in the south are removed. A new contribution of 28 mt contribution in the north and 202 mt contribution in the south is added to the remaining rockfish. The ABC for the remaining species is based on historical data from a 1996 review landings and includes an estimate of recreational landings. Most of these species have never been assessed quantitatively.

[ii] Longnose skate was fully assessed in 2006 and an assessment update was completed in 2007. The ABC of 3,428 is based on the 2007 with an F_{MSY} proxy of $F_{45\%}$. Longnose skate was previously managed as part of the Other Fish complex. The 2009 OY of 1,349 mt is a precautionary OY based on historical total catch increased by 50 percent.

[jj] ''Other fish'' includes sharks, skates, rays, ratfish, morids, grenadiers, kelp greenling, and other groundfish species noted above in footnote d/. The longnose skate contribution is being removed from this complex.

[kk] Sablefish allocation north of 36° N. lat.—The limited entry allocation is further

divided with 58 percent allocated to the trawl fishery and 42 percent allocated to the fixed-gear fishery.

[ll] Specific open access/limited entry allocations specified in the FMP have been suspended during the rebuilding period as necessary to meet the overall rebuilding target while allowing harvest of healthy stocks.

TABLE 2a. TO PART 660, SUBPART G—2010, AND BEYOND, SPECIFICATIONS OF ABCS, OYS, AND HGS, BY MANAGEMENT AREA

[Weights in metric tons]

Species	ABC specifications						OY[b]	HG[b]	
	ABC specifications by area					ABC		Commercial	Recreational
	Vancouver[a]	Columbia	Eureka	Monterey	Conception				
Lingcod[c] N of 42° N. lat									
S of 42° N. lat	4,058		771			4,829	4,829		
Pacific Cod[e]	3,200		([d])			3,200	1,600		
Pacific Whiting[f]	([f])					([f])	134,773–404,318		
Sablefish[g] N of 36° N. lat							5,824		
S of 36° N. lat	9,217					9,217	1,258		
Cabezon[h] S of 42° N. lat	([d])		86		25	111	79		
FLATFISH:									
Dover sole	28,582					28,582	16,500		
English sole[j]	9,745					9,745	9,745		
Petrale sole[k]	1,514		1,237			2,751	2,393		
Arrowtooth flounder[l]	10,112					10,112	10,112		
Starry Flounder[m]	1,578					1,578	1,077		
Other flatfish[n]	6,731					6,731	4,884		
ROCKFISH:									
Pacific Ocean Perch[o]	1,173					1,173	200	198	
Shortbelly[p]	6,950					6,950	6,950		
Widow[q]	6,937					6,937	509	447.4	7.2
Canary[r]	940					940	105	42.3	43.8
Chilipepper[s]	([d])			2,576		2,576	2,447	2,447	
Bocaccio[t]	([d])			793		793	288	206.4	67.3
Splitnose[u]	([d])			615		615	461		
Yellowtail[v]	4,562			([d])		4,562	4,562		
Shortspine thornyhead[w] N of 34°27′ N. lat							1,591	1,591	
S of 34°27′ N. lat	2,411					2,411	410		
Longspine thornyhead[x] N of 34°27′ N. lat							2,175		
S of 34°27′ N. lat	3,671					3,671	385		
Cowcod[y]	([d])			14		14	4		
Darkblotched[z]	440					440	291	288.05	
Yelloweye[aa]						32	17	3.1	8.0
California Scorpionfish[bb]					155	155	155		
Black[cc] N of 46°16′ N. lat	464					464	464		
S of 46°16′ N. lat			1,317			1,317	1,000		

TABLE 2a. TO PART 660, SUBPART G—2010, AND BEYOND, SPECIFICATIONS OF ABCS, OYS, AND HGS, BY MANAGEMENT AREA—Continued

[Weights in metric tons]

Species	ABC specifications						OY[b]	HG[b]	
	ABC specifications by area					ABC		Commercial	Recreational
	Vancouver[a]	Columbia	Eureka	Monterey	Conception				
Minor Rockfish[dd] N of 40°10′ N. lat	3,678					3,678	2,283		
Minor Rockfish[ee] S of 40°10′ N. lat				3,384		3,384	1,990		
Remaining	1,640			1,318					
Bank[ff]	([d])			350					
Blackgill[gg]	([d])			292					
Blue	28			213					
Bocaccio north	318								
Chilipepper north	32								
Redstripe	576			([d])					
Sharpchin	307			45					
Silvergrey	38			([d])					
Splitnose north	242								
Yellowmouth	99			([d])					
Yellowtail				116					
Gopher	([d])			302					
Other rockfish[hh]	2,038			2,066					
SHARKS/SKATES/RATFISH/MORIDS/GRENADIERS/KELP GREENLING:									
Longnose Skate[ii]	3,269					3,269	1,349		
Other fish[jj]	11,200					11,200	5,600		

TABLE 2b. TO PART 660, SUBPART G—2008, HARVEST GUIDELINES FOR MINOR ROCKFISH BY DEPTH SUB-GROUPS

[Weights in metric tons]

Species	Total catch ABC	Total catch OY	Recreational HG	Commercial HG	Limited entry HG		Open access HG	
					Mt	%	Mt	%
Minor Rockfish[dd] N of 40°10′ N. lat	3,678	2,283				91.7		8.3
Nearshore		155						
Shelf		968						
Slope		1,160						
Minor Rockfish[ee] S of 40°10′ N. lat	3,382	1,990				55.7		44.3
Nearshore		650						
Shelf		714						
Slope		626						

TABLE 2c. TO PART 660, SUBPART G—2008, OPEN ACCESS AND LIMITED ENTRY ALLOCATIONS BY SPECIES OR SPECIES GROUP

[Weights in metric tons]

Species	Commercial total catch HGs	Commercial total catch HGs			
		Limited entry		Open access	
		Mt	%	Mt	%
Lingcod:					

TABLE 2c. TO PART 660, SUBPART G—2008, OPEN ACCESS AND LIMITED ENTRY ALLOCATIONS BY SPECIES OR SPECIES GROUP—Continued

[Weights in metric tons]

Species	Commercial total catch HGs	Commercial total catch HGs			
		Limited entry		Open access	
		Mt	%	Mt	%
N of 42° N. lat.					
S of 42° N. lat			81.0		19.0
Sablefish [kk] N of 36° N. lat	5,824	5,276	90.6	548	9.4
Widow [ll]			97.0		3.0
Canary [ll]	42.3		87.7		12.3
Chilipepper	2,447	1,363	55.7	1,084	44.3
Bocaccio [ll]	206.4		55.7		44.3
Yellowtail			91.7		8.3
Shortspine thornyhead N of 34°27′ N. lat	1,591	1,586	99.7	5	0.27
Minor Rockfish: N of 40°10′ N. lat			91.7		8.3
S of 40°10′ N. lat			55.7		44.3

[a] ABCs apply only to the U.S. portion of the Vancouver area.

[b] Optimum Yields (OYs) and Harvest Guidelines (HGs) are specified as total catch values. A harvest guideline is a specified harvest target and not a quota. The use of this term may differ from the use of similar terms in state regulation.

[c] Lingcod—A coastwide lingcod stock assessment was prepared in 2005. The lingcod biomass was estimated to be at 64 percent of its unfished biomass coastwide in 2005. The ABC of 5,278 mt was calculated using an F_{MSY} proxy of $F_{45\%}$. Because the stock is above $B_{40\%}$ coastwide, the coastwide OY was set equal to the ABC. The tribal harvest guideline is 250 mt.

[d] ''Other species''—these species are neither common nor important to the commercial and recreational fisheries in the areas footnoted. Accordingly, these species are included in the harvest guidelines of ''other fish'', ''other rockfish'' or ''remaining rockfish''.

[e] Pacific Cod—The 3,200 mt ABC for the Vancouver-Columbia area is based on historical landings data. The 1,600 mt OY is the ABC reduced by 50 percent as a precautionary adjustment. A tribal harvest guideline of 400 mt is deducted from the OY resulting in a commercial OY of 1,200 mt.

[f] Pacific whiting—Pacific whiting—The most recent stock assessment was prepared in February 2008. The stock assessment base model estimated the Pacific whiting biomass to be at 42.6 percent (50th percentile estimate of depletion) of its unfished biomass in 2008. Final adoption of the Pacific whiting ABC and OY have been deferred until the Council's March 2009 meeting. Therefore, table 1a does not contain an ABC value, but does contain the OY range considered in the DEIS. It is anticipated that a new assessment will be available in early 2010 and the results will be used to set the 2010 ABC and OY. The final ABC and OY will be published as a separate action following the Council's recommendation at its March 2010 meeting.

[g] Sablefish—A coastwide sablefish stock assessment was prepared in 2007. The coastwide sablefish biomass was estimated to be at 38.3 percent of its unfished biomass in 2007. The coastwide ABC of 9,914 mt was based on the new stock assessment with a F_{MSY} proxy of $F_{45\%}$. The 40–10 harvest policy was applied to the ABC then apportioned between the northern and southern areas with 72 percent going to the area north of 36° N. lat. and 28 percent going to the area south of 36° N. lat. The OY for the area north of 36° N. lat. is 6,471 mt. When establishing the OY for the area south of 36° N. lat. a 50 percent reduction was made resulting in a Conception area OY of 1,258 mt. The OY for the area north of 36° N. lat. is 5,824 mt. The Coastwide OY of 7,729 mt is the sum of the northern and southern area OYs. The tribal allocation for the area north of 36° N. lat. is 647 mt (10 percent of the OY north of 36° N. lat.), which is further reduced by 1.6 percent (10 mt) to account for discard mortality. The tribal landed catch value is 637 mt.

[h] Cabezon south of 42° N. lat. was assessed in 2005. The Cabezon stock was estimated to be at 40 percent of its unfished biomass north of 34° 27′ N. lat. and 28 percent of its unfished biomass south of 34° 27′ N. lat. in 2005. The ABC of 106 mt is based on the 2005 stock assessment with a harvest rate proxy of $F_{45\%}$. The OY of 79 mt is consistent with the application of a 60–20 harvest rate policy specified in the California Nearshore Management Plan.

[i] Dover sole north of 34° 27′ N. lat. was assessed in 2005. The Dover sole biomass was estimated to be at 59.8 percent of its unfished biomass in 2005 and was projected to be increasing. The ABC of 29,453 mt is based on the results of the 2005 assessment with an F_{MSY} proxy of $F_{40\%}$. Because the stock is above $B_{40\%}$ coastwide, the OY could be set equal to the ABC. The OY of 16,500 mt is less than the ABC. The OY is set at the MSY harvest level which is considerably larger than the coastwide catches in any recent years.

[j] A coastwide English sole stock assessment was prepared in 2005 and updated in 2007. The stock was estimated to be at 116 percent of its unfished biomass in 2007. The stock biomass is believed to be declining. The ABC of 9,745 mt is based on the results of the 2007 assessment update with an F_{MSY} proxy of $F_{40\%}$. Because the stock is above $B_{40\%}$, the OY was set equal to the ABC.

[k] A petrale sole stock assessment was prepared for 2005. In 2005 the petrale sole stock was estimated to be at 32 percent of its unfished biomass coastwide (34 percent in the northern assessment area and 29 percent in the southern assessment area). The ABC of 2,751 mt is based on the 2005 assessment with a $F_{40\%}$ F_{MSY} proxy. To derive the OY, the 40–10 harvest policy was applied to the ABC for both the northern and southern assessment areas. As a precautionary measure, an additional 25 percent reduction was made in the OY contribution for the southern area due to assessment uncertainty. The coastwide OY is 2,393 mt in 2010.

[l] Arrowtooth flounder was assessed in 2007 and was estimated to be at 79 percent of its unfished biomass in 2007. Because the stock is above $B_{40\%}$, the OY is set equal to the ABC.

[m] Starry Flounder was assessed for the first time in 2005 and was estimated to be above 40 percent of its unfished biomass in 2005. However, the stock was projected to decline below 40 percent in both the northern and southern areas after 2008. For 2010, the coastwide ABC of 1,578 mt is based on the 2005 assessment with a F_{MSY} proxy of $F_{40\%}$. To derive the OY of 1,077 mt, the 40–10 harvest policy was applied to the ABC for both the northern and southern assessment areas then an additional 25 percent reduction was made due to assessment uncertainty.

[n] ''Other flatfish'' are those flatfish species that do not have individual ABC/OYs and include butter sole, curlfin sole, flathead sole, Pacific sand dab, rex sole, rock sole, and sand sole. The other flatfish ABC is based on historical catch levels. The ABC of 6,731 mt is based on the highest landings for sanddabs (1995) and rex sole (1982) for the 1981–2003 period and on the average landings from the 1994–1998 period for the remaining other flatfish species. The OY of 4,884 mt is based on the ABC with a 25 percent precautionary adjustment for sanddabs and rex sole and a 50 percent precautionary adjustment for the remaining species.

[o] A POP stock assessment was prepared in 2005 and was updated in 2007. The stock assessment update estimated the stock to be at 27.5 percent of its unfished biomass in 2007. The ABC of 1,160 mt for the Vancouver and Columbia areas is based on the 2007 stock assessment update with an F_{MSY} proxy of $F_{50\%}$. The OY of 200 mt is based on a rebuilding plan with a target year to rebuild of 2017 and an SPR harvest rate of 86.4 percent. The OY is reduced by 2.0 mt for the amount anticipated to be taken during research activity and 0.14 mt for the amount expected to be taken during EFP fishing.

[p] Shortbelly rockfish remains an unexploited stock and is difficult to assess quantitatively. To understand the potential environmental determinants of fluctuations in the recruitment and abundance of an unexploited rockfish population in the California Current ecosystem, a non-quantitative assessment was conducted in 2007. The results of the assessment indicated the shortbelly stock was healthy with an estimated spawning stock biomass at 67 percent of its unfished biomass in 2005. The ABC and OY are being set at 6,950 mt which is 50 percent of the 2008 ABC and OY values. The stock is expected to remain at its current equilibrium with these harvest specifications.

[q] Widow rockfish was assessed in 2005 and an update was prepared in 2007. The stock assessment update estimated the stock to be at 36.2 percent of its unfished biomass in 2006. The ABC of 6,937 mt is based on the stock assessment update with an $F_{50\%}$ F_{MSY} proxy. The OY of 509 is based on a rebuilding plan with a target year to rebuild of 2015 and an SPR harvest rate or 95 percent. To derive the commercial harvest guideline of 447.4 mt the OY is reduced by 1.1 mt for the amount anticipated to be taken during research activity, 45.5 mt for the tribal set-aside, 7.2 mt the amount estimated to be taken in the recreational fisheries, 0.4 mt for the amount expected to be taken incidentally in non-groundfish fisheries, and 7.4 mt for EFP fishing activities. The following sector specific bycatch limits will be established for the Pacific whiting fishery: 153.0 mt for catcher/processors, 108.0 mt for motherships, and 189.0 mt for shore-based.

[r] Canary rockfish—A canary rockfish stock assessment was completed in 2007 and the stock was estimated to be at 32.7 percent of its unfished biomass coastwide in 2007. The coastwide ABC of 940 mt is based on a F_{MSY} proxy of $F_{50\%}$. The OY of 105 mt is based on a rebuilding plan with a target year to rebuild of 2021 and a SPR harvest rate of 88.7 percent. To derive the commercial harvest guideline of 42.3 mt, the OY is reduced by 8.0 mt for the amount anticipated to be taken during research activity, 7.3 mt the tribal set-aside, 43.8 mt the amount estimated to be taken in the recreational fisheries, 0.9 mt for the amount expected to be taken incidentally in non-groundfish fisheries, and 2.7 mt for the amount expected to be taken during EFP fishing. The following harvest guidelines are being specified for catch sharing in 2009: 19.7 mt for limited entry Non-Whiting Trawl, 18.0 mt for limited entry Whiting Trawl, 2.2 mt for limited entry fixed gear, 2.5 mt for directed open access, 4.9 mt for Washington recreational, 16.0 mt for Oregon recreational, and 22.9 mt for California recreational.

[s] Chilipepper rockfish was assessed in 2007 and the stock was estimated to be at 71 percent of its unfished biomass coastwide in 2007. The ABC of 2,576 mt is based on the new assessment with an F_{MSY} proxy of $F_{50\%}$. Because the unfished biomass is estimated to be above 40 percent the unfished biomass, the default OY could be set equal to the ABC. However, the OY of 2,447 mt was the ABC reduced by 5 percent as a precautionary measure. Open access is allocated 44.3 percent (1,084 mt) of the commercial HG and limited entry is allocated 55.7 percent (1,363 mt) of the commercial HG.

[t] A bocaccio stock assessment and a rebuilding analysis were prepared in 2007. The bocaccio stock was estimated to be at 13.8 percent of its unfished biomass in 2007. The ABC of 793 mt for the Monterey-Conception area is based on the new stock assessment with an F_{MSY} proxy of $F_{50\%}$. The OY of 288 is based on a rebuilding plan with a target year to rebuild of 2026 and a SPR harvest rate of 77.7 percent. To derive the commercial harvest guideline of 206.4 mt, the OY is reduced by 2.0 mt for the amount anticipated to be taken during research activity, 67.3 mt for the amount estimated to be taken in the recreational fisheries, 1.3 mt for the amount expected to be taken incidentally in non-groundfish fisheries, and 11.0 mt for the amount expected to be taken during EFP fishing.

[u] Splitnose rockfish—The ABC is 615 mt in the Monterey-Conception area. The 461 mt OY for the area reflects a 25 percent precautionary adjustment because of the less rigorous stock assessment for this stock. In the north (Vancouver, Columbia and Eureka areas), splitnose is included within the minor slope rockfish OY. Because the harvest assumptions used to forecast future harvest were likely overestimates, carrying the previously used ABCs and OYs forward into 2010 was considered to be conservative and based on the best available data.

[v] Yellowtail rockfish—A yellowtail rockfish stock assessment was prepared in 2005 for the Vancouver, Columbia, Eureka areas. Yellowtail rockfish was estimated to be above 40 percent of its unfished biomass in 2005. The ABC of 4,562 mt is based on the 2005 stock assessment with the F_{MSY} proxy of $F_{50\%}$. The OY of 4,562 mt was set equal to the ABC, because the stock is above the precautionary threshold of $B_{40\%}$.

[w] Shortspine thornyhead was assessed in 2005 and the stock was estimated to be at 63 percent of its unfished biomass in 2005. The ABC of 2,411 mt is based on a $F_{50\%}$ F_{MSY} proxy. For that portion of the stock (66 percent of the biomass) north of Point Conception (34°27′ N. lat.), the OY of 1,591 mt was set at equal to the ABC because the stock is estimated to be above the precautionary threshold. For that portion of the stock south of 34°27′ N. lat. (34 percent of the biomass), the OY of 410 mt was the portion of the ABC for the area reduced by 50 percent as a precautionary adjustment due to the short duration and amount of survey data for that area.

[x] Longspine thornyhead was assessed coastwide in 2005 and the stock was estimated to be at 71 percent of its unfished biomass in 2005. The coastwide ABC of 3,671 mt is based on a $F_{50\%}$ F_{MSY} proxy. The OY is set equal to the ABC because the stock is above the precautionary threshold. Separate OYs are being established for the areas north and south of 34°27′ N. lat. (Point Conception). The OY of 2,175 mt for that portion of the stock in the northern area (79 percent) was the ABC reduced by 25 percent as a precautionary adjustment. For that portion of the stock in the southern area (21 percent), the OY of 385 mt was the portion of the ABC for the area reduced by 50 percent as a precautionary adjustment due to the short duration and amount of survey data for that area.

[y] Cowcod in the Conception area was assessed in 2007 and the stock was estimated to be between 3.4 to 16.3 percent of its unfished biomass. The ABC for the Monterey and Conception areas is 14 mt and is based on the 2007 rebuilding analysis in which the Conception area stock assessment projection was doubled to account for both areas. A single OY of 4 mt is being set for both areas. The OY of 4 mt is based on a rebuilding plan with a target year to rebuild of 2072 and an SPR rate of 82.1 percent. The amount anticipated to be taken during research activity is 0.2 mt and the amount expected to be taken during EFP activity is 0.24 mt.

[z] Darkblotched rockfish was assessed in 2007 and a rebuilding analysis was prepared. The new stock assessment estimated the stock to be at 22.4 percent of its unfished biomass in 2007. The ABC is projected to be 440 mt and is based on the 2007 stock assessment with an F_{MSY} proxy of $F_{50\%}$. The OY of 291 mt is based on a rebuilding plan with a target year to rebuild of 2028 and an SPR harvest rate of 62.1 percent. The commercial OY of 288.05 is the OY reduced by 2.0 mt for the amount anticipated to be taken during research activity and 0.95 mt for

the amount projected to be taken during EFP activity.

[aa] Yelloweye rockfish was fully assessed in 2006 and an assessment update was completed in 2007. The 2007 stock assessment update estimated the spawning stock biomass in 2006 to be at 14 percent of its unfished biomass coastwide. The 31 mt coastwide ABC was derived from the base model in the new stock assessment with an F_{MSY} proxy of $F_{50\%}$. The 17 mt OY is based on a rebuilding plan with a target year to rebuild of 2084 and an SPR harvest rate of 66.3 percent in 2009 and 2010 and an SPR harvest rate of 71.9 percent for 2011 and beyond. The OY is reduced by 2.8 mt for the amount anticipated to be taken during research activity, 2.3 mt the amount estimated to be taken in the tribal fisheries and 0.3 mt for the amount expected to be taken incidentally in non-groundfish fisheries. The catch sharing harvest guidelines for yelloweye rockfish in 2009 and 2010 are: Limited entry non whiting trawl 0.6 mt, limited entry whiting 0.0 mt, limited entry fixed gear 1.4 mt, directed open access 1.1 mt, Washington recreational 2.7 mt, Oregon recreational 2.4 mt, California recreational 2.7 mt, and 0.3 mt for exempted fishing.

[bb] California Scorpionfish south of 34°27′ N. lat. (point Conception) was assessed in 2005 and was estimated to be above 40 percent of its unfished biomass in 2005. The ABC of 155 mt is based on the new assessment with a harvest rate proxy of $F_{50\%}$. Because the stock is above $B_{40\%}$ coastwide, the OY is set equal to the ABC.

[cc] New assessments were prepared for black rockfish south of 45° 56.00 N. lat. (Cape Falcon, Oregon) and for black rockfish north of Cape Falcon. The ABC for the area north of 46° 16′ N. lat. (Washington) is 464 mt (97 percent) of the 478 mt ABC contribution from the northern assessment area. The ABC for the area south of 46° 16′ N. lat. (Oregon and California) is 1,317 mt which is the sum of a contribution of 14 mt (3 percent) from the northern area assessment, and 1,303 mt from the southern area assessment. The ABCs were derived using an F_{MSY} proxy of $F_{50\%}$. Because both portions of the stock are above 40 percent, the OYs could be set equal to the ABCs. For the area north of 46°16′ N. lat., the OY of 490 mt is set equal to the ABC. The following tribal harvest guidelines are being set: 20,000 lb (9.1 mt) north of Cape Alava, WA (48°09.50′ N. lat.) and 10,000 lb (4.5 mt) between Destruction Island, WA (47°40′ N. lat.) and Leadbetter Point, WA (46°38.17′ N. lat.) For the area south of 46°16′ N. lat., the OY of 1,000 mt is a constant harvest level. The black rockfish OY in the area south of 46°16′ N. lat., is subdivided with separate HGs being set for the area north of 42° N. lat. (580 mt/58 percent) and for the area south of 42° N. lat. (420 mt/42 percent).

[dd] Minor rockfish north includes the ''remaining rockfish'' and ''other rockfish'' categories in the Vancouver, Columbia, and Eureka areas combined. These species include ''remaining rockfish'', which generally includes species that have been assessed by less rigorous methods than stock assessments, and ''other rockfish'', which includes species that do not have quantifiable stock assessments. Blue rockfish has been removed from the ''other rockfish'' and added to the remaining rockfish. The ABC of 3,678 mt is the sum of the individual ''remaining rockfish'' ABCs plus the ''other rockfish'' ABCs. The remaining rockfish ABCs continue to be reduced by 25 percent (F = 0.75M) as a precautionary adjustment. To obtain the total catch OY of 2,283 mt, the remaining rockfish ABCs were further reduced by 25 percent and other rockfish ABCs were reduced by 50 percent. This was a precautionary measure to address limited stock assessment information.

[ee] Minor rockfish south includes the ''remaining rockfish'' and ''other rockfish'' categories in the Monterey and Conception areas combined. These species include ''remaining rockfish'' which generally includes species that have been assessed by less rigorous methods than stock assessment, and ''other rockfish'' which includes species that do not have quantifiable stock assessments. Blue rockfish has been removed from the ''other rockfish'' and added to the remaining rockfish. The ABC of 3,382 mt is the sum of the individual ''remaining rockfish'' ABCs plus the ''other rockfish'' ABCs. The remaining rockfish ABCs continue to be reduced by 25 percent (F = 0.75M) as a precautionary adjustment. The remaining rockfish ABCs are further reduced by 25 percent, with the exception of blackgill rockfish (see footnote gg). The other rockfish ABCs were reduced by 50 percent. This was a precautionary measure due to limited stock assessment information. The resulting minor rockfish OY is 1,990 mt.

[ff] Bank rockfish—The ABC is 350 mt which is based on a 2000 stock assessment for the Monterey and Conception areas. This stock contributes 263 mt towards the minor rockfish OY in the south.

[gg] Blackgill rockfish in the Monterey and Conception areas was assessed in 2005 and is estimated to be at 49.9 percent of its unfished biomass in 2008. The ABC of 292 mt for the Monterey and Conception areas is based on the 2005 stock assessment with an F_{MSY} proxy of $F_{50\%}$ and is the two year average ABC for the 2007 and 2008 periods. This stock contributes 292 mt towards minor rockfish south.

[hh] ''Other rockfish'' includes rockfish species listed in 50 CFR 660.302. A new stock assessment was conducted for blue rockfish in 2007. As a result of the new stock assessment, the blue rockfish contribution to the other rockfish group is of 232 mt in the north and 30 mt in the south are removed. A new contribution of 28 mt contribution in the north and 202 mt contribution in the south is added to the remaining rockfish. The ABC for the remaining species is based on historical data from a 1996 review landings and includes an estimate of recreational landings. Most of these species have never been assessed quantitatively.

[ii] Longnose skate was fully assessed in 2006 and an assessment update was completed in 2007. The ABC of 3,428 is based on the 2007 with an F_{MSY} proxy of $F_{45\%}$. Longnose skate was previously managed as part of the Other Fish complex. The 2009 OY of 1,349 mt is a precautionary OY based on historical total catch increased by 50 percent.

[jj] ''Other fish'' includes sharks, skates, rays, ratfish, morids, grenadiers, kelp greenling, and other groundfish species noted above in footnote d. The longnose skate contribution is being removed from this complex.

[kk] Sablefish allocation north of 36° N. lat.—The limited entry allocation is further divided with 58 percent allocated to the trawl fishery and 42 percent allocated to the fixed-gear fishery.

[ll] Specific open access/limited entry allocations specified in the FMP have been suspended during the rebuilding period as necessary to meet the overall rebuilding target while allowing harvest of healthy stocks.

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Table 3 (North) to Part 660, Subpart G -- 2009-2010 Trip Limits for Limited Entry Trawl Gear North of 40°10' N. Lat.

Other Limits and Requirements Apply -- Read § 660.301 - § 660.399 before using this table 111208

		JAN-FEB	MAR-APR	MAY-JUN	JUL-AUG	SEP-OCT	NOV-DEC
	Rockfish Conservation Area (RCA)[6/]:						
1	North of 48°10' N. lat.	shore - modified 200 fm [7/]	shore - 200 fm	shore - 150 fm		shore - 200 fm	shore - modified 200 fm [7/]
2	48°10' N. lat. - 45°46' N. lat.	75 fm - modified 200 fm [7/]	75 fm - 200 fm	75 fm - 150 fm		75 fm - 200 fm	75 fm - modified 200 fm [7/]
3	45°46' N. lat. - 40°10' N. lat.			75 fm - 200 fm			
	Selective flatfish trawl gear is required shoreward of the RCA; all trawl gear (large footrope, selective flatfish trawl, and small footrope trawl gear) is permitted seaward of the RCA. Large footrope and small footrope trawl gears (except for selective flatfish trawl gear) are prohibited shoreward of the RCA. Midwater trawl gear is permitted only for vessels participating in the primary whiting season.						
	See § 660.370 and § 660.381 for Additional Gear, Trip Limit, and Conservation Area Requirements and Restrictions. See §§ 660.390-660.394 and §§ 660.396-660.399 for Conservation Area Descriptions and Coordinates (including RCAs, YRCA, CCAs, Farallon Islands, Cordell Banks, and EFHCAs).						
	State trip limits and seasons may be more restrictive than federal trip limits, particularly in waters off Oregon and California.						
4	**Minor slope rockfish[2/] & Darkblotched rockfish**	1,500 lb/ 2 months					
5	**Pacific ocean perch**	1,500 lb/ 2 months					
6	**DTS complex**						
7	Sablefish						
8	large & small footrope gear	18,000 lb/ 2 months		22,000 lb/ 2 months			18,000 lb/ 2 months
9	selective flatfish trawl gear	5,000 lb/ 2 months	7,500 lb/ 2months				5,000 lb/ 2 months
10	multiple bottom trawl gear [8/]	5,000 lb/ 2 months	7,500 lb/ 2months				5,000 lb/ 2 months
11	Longspine thornyhead						
12	large & small footrope gear	22,000 lb/ 2 months					
13	selective flatfish trawl gear	3,000 lb/ 2 months	5,000 lb/ 2 months				3,000 lb/ 2 months
14	multiple bottom trawl gear [8/]	3,000 lb/ 2 months	5,000 lb/ 2 months				3,000 lb/ 2 months
15	Shortspine thornyhead						
16	large & small footrope gear	17,000 lb/2 months					
17	selective flatfish trawl gear	3,000 lb/ 2 months					
18	multiple bottom trawl gear [8/]	3,000 lb/ 2 months					
19	Dover sole						
20	large & small footrope gear	110,000 lb/ 2 months					
21	selective flatfish trawl gear	40,000 lb/ 2 months	45,000 lb/ 2 months				40,000 lb/ 2 months
22	multiple bottom trawl gear [8/]	40,000 lb/ 2 months	45,000 lb/ 2 months				40,000 lb/ 2 months

TABLE 3 (North)

Table 3 (North). Continued

23	**Whiting**					TABLE 3 (North) con't
24	midwater trawl	Before the primary whiting season: CLOSED. – During the primary season: mid-water trawl permitted in the RCA. See §660.373 for season and trip limit details. – After the primary whiting season: CLOSED.				
25	large & small footrope gear	Before the primary whiting season: 20,000 lb/trip. -- During the primary season: 10,000 lb/trip. -- After the primary whiting season: 10,000 lb/trip.				
26	**Flatfish** (except Dover sole)					
27	Arrowtooth flounder					
28	large & small footrope gear	150,000 lb/ 2 months				
29	selective flatfish trawl gear	90,000 lb/ 2 months				
30	multiple bottom trawl gear [8/]	90,000 lb/ 2 months				
31	Other flatfish [3/], English sole, starry flounder, & Petrale sole					
32	large & small footrope gear for Other flatfish [3/], English sole, & s tarry flounder	110,000 lb/ 2 months	110,000 lb/ 2 months, no more than 25,000 lb/ 2 months of which may be petrale sole.	110,000 lb/ 2 months, no more than 30,000 lb/ 2 months of which may be petrale sole.	110,000 lb/ 2 months	
33	large & small footrope gear for Petrale sole	25,000 lb/ 2 months			40,000 lb/ 2 months	
34	selective flatfish trawl gear for Other flatfish [3/], English sole, & starry flounder	90,000 lb/ 2 months, no more than 16,000 lb/ 2 months of which may be petrale sole.	90,000 lb/ 2 months, no more than 18,000 lb/ 2 months of which may be petrale sole.		90,000 lb/ 2 months, no more than 16,000 lb/ 2 months of which may be petrale sole.	
35	selective flatfish trawl gear for Petrale sole					
36	multiple bottom trawl gear [8/]	90,000 lb/ 2 months, no more than 16,000 lb/ 2 months of which may be petrale sole.	90,000 lb/ 2 months, no more than 18,000 lb/ 2 months of which may be petrale sole.		90,000 lb/ 2 months, no more than 16,000 lb/ 2 months of which may be petrale sole.	
37	**Minor shelf rockfish [1/], Shortbelly, Widow & Yelloweye rockfish**					
38	midwater trawl for Widow rockfish	Before the primary whiting season: CLOSED. – During primary whiting season: In trips of at least 10,000 lb of whiting, combined widow and yellowtail limit of 500 lb/ trip, cumulative widow limit of 1,500 lb/ month. Mid-water trawl permitted in the RCA. See §660.373 for primary whiting season and trip limit details. -- After the primary whiting season: CLOSED.				
39	large & small footrope gear	300 lb/ 2 months				
40	selective flatfish trawl gear	300 lb/ month		1,000 lb/ month, no more than 200 lb/ month of which may be yelloweye rockfish	300 lb/ month	
41	multiple bottom trawl gear [8/]	300 lb/ month		300 lb/ 2 months, no more than 200 lb/ month of which may be yelloweye rockfish	300 lb/ month	

Table 3 (North). Continued

42	**Canary rockfish**				
43	large & small footrope gear	CLOSED			
44	selective flatfish trawl gear	100 lb/ month	300 lb/ month	100 lb/ month	
45	multiple bottom trawl gear [8/]	CLOSED			
46	**Yellowtail**				
47	midwater trawl	Before the primary whiting season: CLOSED. -- During primary whiting season: In trips of at least 10,000 lb of whiting: combined widow and yellowtail limit of 500 lb/ trip, cumulative yellowtail limit of 2,000 lb/ month. Mid-water trawl permitted in the RCA. See §660.373 for primary whiting season and trip limit details. -- After the primary whiting season: CLOSED.			
48	large & small footrope gear	300 lb/ 2 months			
49	selective flatfish trawl gear	2,000 lb/ 2 months			
50	multiple bottom trawl gear [8/]	300 lb/ 2 months			
51	**Minor nearshore rockfish & Black rockfish**				
52	large & small footrope gear	CLOSED			
53	selective flatfish trawl gear	300 lb/ month			
54	multiple bottom trawl gear [8/]	CLOSED			
55	**Lingcod** [4/]				
56	large & small footrope gear	1,200 lb/ 2 months	4,000 lb/ 2 months		
57	selective flatfish trawl gear		1,200 lb/2 months		
58	multiple bottom trawl gear [8/]				
59	**Pacific cod**	30,000 lb/ 2 months	70,000 lb/ 2 months		30,000 lb/ 2 months
60	**Spiny dogfish**	200,000 lb/ 2 months	150,000 lb/ 2 months	100,000 lb/ 2 months	
61	**Other Fish** [5/]	Not limited			

TABLE 3 (North) con't

1/ Bocaccio, chilipepper and cowcod are included in the trip limits for minor shelf rockfish.
2/ Splitnose rockfish is included in the trip limits for minor slope rockfish.
3/ "Other flatfish" are defined at § 660.302 and include butter sole, curlfin sole, flathead sole, Pacific sanddab, rex sole, rock sole, and sand sole.
4/ The minimum size limit for lingcod is 22 inches (56 cm) total length North of 42° N. lat.
5/ "Other fish" are defined at § 660.302 and include sharks, skates (including longnose skate), ratfish, morids, grenadiers, and kelp greenling. Cabezon is included in the trip limits for "other fish."
6/ The Rockfish Conservation Area is a gear and/or sector specific closed area generally described by depth contours but specifically defined by lat/long coordinates set out at §§ 660.391-660.394.
7/ The "modified" fathom lines are modified to exclude certain petrale sole areas from the RCA.
8/ If a vessel has both selective flatfish gear and large or small footrope gear on board during a cumulative limit period (either simultaneously or successively), the most restrictive cumulative limit for any gear on board during the cumulative limit period applies for the entire cumulative limit period.

To convert pounds to kilograms, divide by 2.20462, the number of pounds in one kilogram.

Table 3 (South) to Part 660, Subpart G -- 2009-2010 Trip Limits for Limited Entry Trawl Gear South of 40°10' N. Lat.

Other Limits and Requirements Apply -- Read § 660.301 - § 660.399 before using this table

111208

		JAN-FEB	MAR-APR	MAY-JUN	JUL-AUG	SEP-OCT	NOV-DEC
	Rockfish Conservation Area (RCA)[6/]:						
1	South of 40°10' N. lat.	100 fm - 150 fm[7/]					
	All trawl gear (large footrope, selective flatfish trawl, midwater trawl, and small footrope trawl gear) is permitted seaward of the RCA. Large footrope trawl gear and midwater trawl gear are prohibited shoreward of the RCA.						
	See § 660.370 and § 660.381 for Additional Gear, Trip Limit, and Conservation Area Requirements and Restrictions. See §§ 660.390-660.394 and §§ 660.396-660.399 for Conservation Area Descriptions and Coordinates (including RCAs, YRCA, CCAs, Farallon Islands, Cordell Banks, and EFHCAs).						
	State trip limits and seasons may be more restrictive than federal trip limits, particularly in waters off Oregon and California.						
2	**Minor slope rockfish[2/] & Darkblotched rockfish**						
3	40°10' - 38° N. lat.	15,000 lb/ 2 months			10,000 lb/ 2 months		15,000 lb/ 2 months
4	South of 38° N. lat.	55,000 lb/ 2 months					
5	**Splitnose**						
6	40°10' - 38° N. lat.	15,000 lb/ 2 months			10,000 lb/ 2 months		15,000 lb/ 2 months
7	South of 38° N. lat.	55,000 lb/ 2 months					
8	**DTS complex**						
9	Sablefish	20,000 lb/ 2 months					
10	Longspine thornyhead	22,000 lb/ 2 months					
11	Shortspine thornyhead	17,000 lb/ 2 months					
12	Dover sole	110,000 lb/ 2 months					
13	**Flatfish** (except Dover sole)						
14	Other flatfish[3/], English sole, & starry flounder	110,000 lb/ 2 months	110,000 lb/ 2 months, no more than 30,000 lb/ 2 months of which may be petrale sole.				110,000 lb/ 2 months
15	Petrale sole	50,000 lb/ 2 months					50,000 lb/ 2 months
16	Arrowtooth flounder	10,000 lb/ 2 months					
17	**Whiting**						
18	midwater trawl	Before the primary whiting season: CLOSED. -- During the primary season: mid-water trawl permitted in the RCA. See §660.373 for season and trip limit details. -- After the primary whiting season: CLOSED.					
19	large & small footrope gear	Before the primary whiting season: 20,000 lb/trip. -- During the primary season: 10,000 lb/trip. -- After the primary whiting season: 10,000 lb/trip.					

TABLE 3 (South)

Table 3 (South). Continued

20	**Minor shelf rockfish[1/], Chilipepper, Shortbelly, Widow, & Yelloweye rockfish**				
21	large footrope or midwater trawl for Minor shelf rockfish & Shortbelly	300 lb/ month			
22	large footrope or midwater trawl for Chilipepper	5,000 lb/ 2 months			
23	large footrope or midwater trawl for Widow & Yelloweye	CLOSED			
24	small footrope trawl for Minor Shelf, Shortbelly, Widow & Yelloweye	300 lb/ month			
25	small footrope trawl for Chilipepper	5,000 lb/ 2 months			
26	**Bocaccio**				
27	large footrope or midwater trawl	300 lb/ 2 months			
28	small footrope trawl	CLOSED			
29	**Canary rockfish**				
30	large footrope or midwater trawl	CLOSED			
31	small footrope trawl	100 lb/ month	300 lb/ month	100 lb/ month	
32	**Cowcod**	CLOSED			
33	**Minor nearshore rockfish & Black rockfish**				
34	large footrope or midwater trawl	CLOSED			
35	small footrope trawl	300 lb/ month			
36	**Lingcod[4/]**				
37	large footrope or midwater trawl	1,200 lb/ 2 months	4,000 lb/ 2 months		
38	small footrope trawl		1,200 lb/ 2 months		
39	**Pacific cod**	30,000 lb/ 2 months	70,000 lb/ 2 months		30,000 lb/ 2 months
40	**Spiny dogfish**	200,000 lb/ 2 months	150,000 lb/ 2 months	100,000 lb/ 2 months	
41	**Other Fish[5/] & Cabezon**	Not limited			

TABLE 3 (South) con't

1/ Yellowtail is included in the trip limits for minor shelf rockfish.
2/ POP is included in the trip limits for minor slope rockfish
3/ "Other flatfish" are defined at § 660.302 and include butter sole, curlfin sole, flathead sole, Pacific sanddab, rex sole, rock sole, and sand sole.
4/ The minimum size limit for lingcod is 24 inches (61 cm) total length South of 42° N. lat.
5/ Other fish are defined at § 660.302 and include sharks, skates (including longnose skate), ratfish, morids, grenadiers, and kelp greenling.
6/ The Rockfish Conservation Area is a gear and/or sector specific closed area generally described by depth contours but specifically defined by lat/long coordinates set out at §§ 660.391-660.394.
7/ South of 34°27' N. lat., the RCA is 100 fm - 150 fm along the mainland coast; shoreline - 150 fm around islands.
To convert pounds to kilograms, divide by 2.20462, the number of pounds in one kilogram.

Table 4 (North) to Part 660, Subpart G -- 2009-2010 Trip Limits for Limited Entry Fixed Gear North of 40°10' N. Lat.

Other Limits and Requirements Apply -- Read § 660.301 - § 660.399 before using this table 111208

		JAN-FEB	MAR-APR	MAY-JUN	JUL-AUG	SEP-OCT	NOV-DEC
	Rockfish Conservation Area (RCA)[6/]:						
1	North of 46°16' N. lat.	shoreline - 100 fm					
2	46o16' N. lat. - 45°03.83' N. lat.	30 fm - 100 fm					
3	45°03.83' N. lat. - 42°50' N. lat.	30 fm - 125 fm [7/]					
4	42°50' N. lat. - 40°10' N. lat.	20 fm - 100 fm					
	See § 660.370 and § 660.382 for Additional Gear, Trip Limit, and Conservation Area Requirements and Restrictions. See §§ 660.390-660.394 and §§ 660.396-660.399 for Conservation Area Descriptions and Coordinates (including RCAs, YRCA, CCAs, Farallon Islands, Cordell Banks, and EFHCAs).						
	State trip limits and seasons may be more restrictive than federal trip limits, particularly in waters off Oregon and California.						
5	**Minor slope rockfish [2/] & Darkblotched rockfish**	4,000 lb/ 2 months					
6	**Pacific ocean perch**	1,800 lb/ 2 months					
7	**Sablefish**	300 lb/ day, or 1 landing per week of up to 1,000 lb, not to exceed 5,000 lb/ 2 months			500 lb/ day, or 1 landing per week of up to 1,000 lb, not to exceed 5,000 lb/ 2 months		
8	**Longspine thornyhead**	10,000 lb/ 2 months					
9	**Shortspine thornyhead**	2,000 lb/ 2 months					
10	**Dover sole**	5,000 lb/ month South of 42°N. lat., when fishing for "other flatfish," vessels using hook-and-line gear with no more than 12 hooks per line, using hooks no larger than "Number 2" hooks, which measure 11 mm (0.44 inches) point to shank, and up to two 1 lb (0.45 kg) weights per line are not subject to the RCAs.					
11	**Arrowtooth flounder**						
12	**Petrale sole**						
13	**English sole**						
14	**Starry flounder**						
15	**Other flatfish [1/]**						
16	**Whiting**	10,000 lb/ trip					
17	**Minor shelf rockfish [2/], Shortbelly, Widow, & Yellowtail rockfish**	200 lb/ month					
18	**Canary rockfish**	CLOSED					
19	**Yelloweye rockfish**	CLOSED					
20	**Minor nearshore rockfish & Black rockfish**						
21	North of 42° N. lat.	5,000 lb/ 2 months, no more than 1,200 lb of which may be species other than black or blue rockfish [3/]					
22	42° - 40°10' N. lat.	6,000 lb/ 2 months, no more than 1,200 lb of which may be species other than black or blue rockfish [3/]					
23	**Lingcod [4/]**	CLOSED		800 lb/ 2 months		400 lb/ month	CLOSED
24	**Pacific cod**	1,000 lb/ 2 months					
25	**Spiny dogfish**	200,000 lb/ 2 months		150,000 lb/ 2 months	100,000 lb/ 2 months		
26	**Other fish [5/]**	Not limited					

TABLE 4 (North)

1/ "Other flatfish" are defined at § 660.302 and include butter sole, curlfin sole, flathead sole, Pacific sanddab, rex sole, rock sole, and sand sole.
2/ Bocaccio, chilipepper and cowcod are included in the trip limits for minor shelf rockfish and splitnose rockfish is included in the trip limits for minor slope rockfish.
3/ For black rockfish north of Cape Alava (48°09.50' N. lat.), and between Destruction Is. (47°40' N. lat.) and Leadbetter Pnt. (46°38.17' N. lat.), there is an additional limit of 100 lb or 30 percent by weight of all fish on board, whichever is greater, per vessel, per fishing trip.
4/ The minimum size limit for lingcod is 22 inches (56 cm) total length North of 42° N. lat. and 24 inches (61 cm) total length South of 42° N. lat.
5/ "Other fish" are defined at § 660.302 and include sharks, skates (including longnose skates), ratfish, morids, grenadiers, and kelp greenling. Cabezon is included in the trip limits for "other fish."
6/ The Rockfish Conservation Area is a gear and/or sector specific closed area generally described by depth contours but specifically defined by lat/long coordinates set out at §§ 660.391-660.394.
7/ The 125 fm restriction is in place all year, except on days when the directed halibut fishery is open. On those days the 100 fm depth restriction is in effect.

To convert pounds to kilograms, divide by 2.20462, the number of pounds in one kilogram.

Table 4 (South) to Part 660, Subpart G -- 2009-2010 Trip Limits for Limited Entry Fixed Gear South of 40°10' N. Lat.

Other Limits and Requirements Apply -- Read § 660.301 - § 660.399 before using this table 111208

		JAN-FEB	MAR-APR	MAY-JUN	JUL-AUG	SEP-OCT	NOV-DEC
	Rockfish Conservation Area (RCA)[5/]:						
1	40°10' - 34°27' N. lat.	30 fm - 150 fm					
2	South of 34°27' N. lat.	60 fm - 150 fm (also applies around islands)					
	See § 660.370 and § 660.382 for Additional Gear, Trip Limit, and Conservation Area Requirements and Restrictions. See §§ 660.390-660.394 and §§ 660.396-660.399 for Conservation Area Descriptions and Coordinates (including RCAs, YRCA, CCAs, Farallon Islands, Cordell Banks, and EFHCAs).						
	State trip limits and seasons may be more restrictive than federal trip limits, particularly in waters off Oregon and California.						
3	**Minor slope rockfish[2/] & Darkblotched rockfish**	40,000 lb/ 2 months					
4	**Splitnose**	40,000 lb/ 2 months					
5	**Sablefish**						
6	40°10' - 36° N. lat.	300 lb/ day, or 1 landing per week of up to 1,000 lb, not to exceed 5,000 lb/ 2 months			500 lb/ day, or 1 landing per week of up to 1,000 lb, not to exceed 5,000 lb/ 2 months		
7	South of 36° N. lat.	400 lb/ day, or 1 landing per week of up to 1,500 lb					
8	**Longspine thornyhead**	10,000 lb / 2 months					
9	**Shortspine thornyhead**						
10	40°10' - 34°27' N. lat.	2,000 lb/ 2 months					
11	South of 34°27' N. lat.	3,000 lb/ 2 months					
12	**Dover sole**	5,000 lb/ month South of 42° N. lat., when fishing for "other flatfish," vessels using hook-and-line gear with no more than 12 hooks per line, using hooks no larger than "Number 2" hooks, which measure 11 mm (0.44 inches) point to shank, and up to two 1 lb (0.45 kg) weights per line are not subject to the RCAs.					
13	**Arrowtooth flounder**						
14	**Petrale sole**						
15	**English sole**						
16	**Starry flounder**						
17	**Other flatfish[1/]**						
18	**Whiting**	10,000 lb/ trip					
19	**Minor shelf rockfish[2/], Shortbelly, Widow rockfish, and Bocaccio (including Chilipepper between 40°10' - 34°27' N. lat.)**						
20	40°10' - 34°27' N. lat.	Minor shelf rockfish, shortbelly, widow rockfish, bocaccio & chilipepper: 2,500 lb/ 2 months, of which no more than 500 lb/ 2 months may be any species other than chilipepper.					
21	South of 34°27' N. lat.	3,000 lb/ 2 months	CLOSED		3,000 lb/ 2 months		
22	**Chilipepper rockfish**						
23	40°10' - 34°27' N. lat.	Chilipepper included under minor shelf rockfish, shortbelly, widow and bocaccio limits - - See above					
24	South of 34°27' N. lat.	2,000 lb/ 2 months, this opportunity only available seaward of the nontrawl RCA					
25	**Canary rockfish**	CLOSED					
26	**Yelloweye rockfish**	CLOSED					
27	**Cowcod**	CLOSED					
28	**Bocaccio**						
29	40°10' - 34°27' N. lat.	Bocaccio included under Minor shelf rockfish, shortbelly, widow & chilipepper limits -- See above					
30	South of 34°27' N. lat.	300 lb/ 2 months	CLOSED		300 lb/ 2 months		

TABLE 4 (South)

Table 4 (South). Continued

31	**Minor nearshore rockfish & Black rockfish**							
32	Shallow nearshore	600 lb/ 2 months	CLOSED	800 lb/ 2 months	900 lb/ 2 months	800 lb/ 2 months	600 lb/ 2 months	
33	Deeper nearshore							
34	40°10' - 34°27' N. lat.	700 lb/ 2 months	CLOSED	700 lb/ 2 months		600 lb/ 2 months	700 lb/ 2 months	
35	South of 34°27' N. lat.	500 lb/ 2 months		600 lb/ 2 months				
36	California scorpionfish	600 lb/ 2 months	CLOSED	600 lb/ 2 months	800 lb/ 2 months		600 lb/ 2 months	
37	**Lingcod**[3/]	CLOSED		800 lb/ 2 months			400 lb/ month	CLOSED
38	**Pacific cod**	1,000 lb/ 2 months						
39	**Spiny dogfish**	200,000 lb/ 2 months		150,000 lb/ 2 months	100,000 lb/ 2 months			
40	**Other fish**[4/] **& Cabezon**	Not limited						

TABLE 4 (South)

1/ "Other flatfish" are defined at § 660.302 and include butter sole, curlfin sole, flathead sole, Pacific sanddab, rex sole, rock sole, and sand sole.

2/ POP is included in the trip limits for minor slope rockfish. Yellowtail is included in the trip limits for minor shelf rockfish.

3/ The minimum size limit for lingcod is 24 inches (61 cm) total length South of 42° N. lat.

4/ "Other fish" are defined at § 660.302 and include sharks, skates (including longnose skates), ratfish, morids, grenadiers, and kelp greenling.

5/ The Rockfish Conservation Area is a gear and/or sector specific closed area generally described by depth contours but specifically defined by lat/long coordinates set out at §§ 660.391-660.394, except that the 20-fm depth contour off California is defined by the depth contour and not coordinates.

To convert pounds to kilograms, divide by 2.20462, the number of pounds in one kilogram.

Table 5 (North) to Part 660, Subpart G -- 2009-2010 Trip Limits for Open Access Gears North of 40°10' N. Lat.

Other Limits and Requirements Apply -- Read § 660.301 - § 660.399 before using this table 111208

		JAN-FEB	MAR-APR	MAY-JUN	JUL-AUG	SEP-OCT	NOV-DEC
Rockfish Conservation Area (RCA)[6/]:							
1	North of 46°16' N. lat.	shoreline - 100 fm					
2	46°16' N. lat. - 45°03.83' N. lat.	30 fm - 100 fm					
3	45°03.83' N. lat. - 42°50' N. lat.	30 fm - 125 fm [7/]					
4	42°50' N. lat. - 40°10' N. lat.	20 fm - 100 fm					
See § 660.370 and § 660.383 for Additional Gear, Trip Limit, and Conservation Area Requirements and Restrictions. See §§ 660.390-660.394 and §§ 660.396-660.399 for Conservation Area Descriptions and Coordinates (including RCAs, YRCA, CCAs, Farallon Islands, Cordell Banks, and EFHCAs).							
State trip limits and seasons may be more restrictive than federal trip limits, particularly in waters off Oregon and California.							
5	**Minor slope rockfish[1/] & Darkblotched rockfish**	Per trip, no more than 25% of weight of the sablefish landed					
6	**Pacific ocean perch**	100 lb/ month					
7	**Sablefish**	300 lb/ day, or 1 landing per week of up to 800 lb, not to exceed 2,400 lb/ 2 months		300 lb/ day, or 1 landing per week of up to 800 lb, not to exceed 2,200 lb/ 2 months			
8	**Thornyheads**	CLOSED					
9	**Dover sole**	3,000 lb/month, no more than 300 lb of which may be species other than Pacific sanddabs. South of 42° N. lat., when fishing for "other flatfish," vessels using hook-and-line gear with no more than 12 hooks per line, using hooks no larger than "Number 2" hooks, which measure 11 mm (0.44 inches) point to shank, and up to two 1 lb (0.45 kg) weights per line are not subject to the RCAs.					
10	**Arrowtooth flounder**						
11	**Petrale sole**						
12	**English sole**						
13	**Starry flounder**						
14	**Other flatfish[2/]**						
15	**Whiting**	300 lb/ month					
16	**Minor shelf rockfish[1/], Shortbelly, Widow, & Yellowtail rockfish**	200 lb/ month					
17	**Canary rockfish**	CLOSED					
18	**Yelloweye rockfish**	CLOSED					
19	**Minor nearshore rockfish & Black rockfish**						
20	North of 42° N. lat.	5,000 lb/ 2 months, no more than 1,200 lb of which may be species other than black or blue rockfish [3/]					
21	42° - 40°10' N. lat.	6,000 lb/ 2 months, no more than 1,200 lb of which may be species other than black or blue rockfish [3/]					
22	**Lingcod[4/]**	CLOSED		400 lb/ month			CLOSED
23	**Pacific cod**	1,000 lb/ 2 months					
24	**Spiny dogfish**	200,000 lb/ 2 months		150,000 lb/ 2 months	100,000 lb/ 2 months		
25	**Other Fish[5/]**	Not limited					

TABLE 5 (North)

Table 5 (North). Continued

26	**PINK SHRIMP NON-GROUNDFISH TRAWL** *(not subject to RCAs)*	
27	North	**Effective April 1 - October 31:** Groundfish: 500 lb/day, multiplied by the number of days of the trip, not to exceed 1,500 lb/trip. The following sublimits also apply and are counted toward the overall 500 lb/day and 1,500 lb/trip groundfish limits: lingcod 300 lb/month (minimum 24 inch size limit); sablefish 2,000 lb/month; canary, thornyheads and yelloweye rockfish are PROHIBITED. All other groundfish species taken are managed under the overall 500 lb/day and 1,500 lb/trip groundfish limits. Landings of these species count toward the per day and per trip groundfish limits and do not have species-specific limits. The amount of groundfish landed may not exceed the amount of pink shrimp landed.
28	**SALMON TROLL**	
29	North	Salmon trollers may retain and land up to 1 lb of yellowtail rockfish for every 2 lbs of salmon landed, with a cumulative limit of 200 lb/month, both within and outside of the RCA. This limit is within the 200 lb per month combined limit for minor shelf rockfish, widow rockfish and yellowtail rockfish, and not in addition to that limit. All groundfish species are subject to the open access limits, seasons and RCA restrictions listed in the table above.

TABLE 5 (North) con't

1/ Bocaccio, chilipepper and cowcod rockfishes are included in the trip limits for minor shelf rockfish. Splitnose rockfish is included in the trip limits for minor slope rockfish.
2/ "Other flatfish" are defined at § 660.302 and include butter sole, curlfin sole, flathead sole, Pacific sanddab, rex sole, rock sole, and sand sole.
3/ For black rockfish north of Cape Alava (48°09.50' N. lat.), and between Destruction Is. (47°40' N. lat.) and Leadbetter Pnt. (46°38.17' N. lat.), there is an additional limit of 100 lbs or 30 percent by weight of all fish on board, whichever is greater, per vessel, per fishing trip.
4/ The minimum size limit for lingcod is 22 inches (56 cm) total length North of 42° N. lat. and 24 inches (61 cm) total length South of 42° N. lat.
5/ "Other fish" are defined at § 660.302 and include sharks, skates (including longnose skates), ratfish, morids, grenadiers, and kelp greenling. Cabezon is included in the trip limits for "other fish."
6/ The Rockfish Conservation Area is a gear and/or sector specific closed area generally described by depth contours but specifically defined by lat/long coordinates set out at §§ 660.391-660.394.
7/ The 125 fm restriction is in place all year, except on days when the directed halibut fishery is open. On those days the 100 fm depth restriction is in effect.
To convert pounds to kilograms, divide by 2.20462, the number of pounds in one kilogram.

Table 5 (South) to Part 660, Subpart G -- 2009-2010 Trip Limits for Open Access Gears South of 40°10' N. Lat.

Other Limits and Requirements Apply – Read § 660.301 - § 660.399 before using this table 111208

		JAN-FEB	MAR-APR	MAY-JUN	JUL-AUG	SEP-OCT	NOV-DEC
	Rockfish Conservation Area (RCA)[5/]:						
1	40°10' - 34°27' N. lat.	30 fm - 150 fm					
2	South of 34°27' N. lat.	60 fm - 150 fm (also applies around islands)					
	See § 660.370 and § 660.383 for Additional Gear, Trip Limit, and Conservation Area Requirements and Restrictions. See §§ 660.390-660.394 and §§ 660.396-660.399 for Conservation Area Descriptions and Coordinates (including RCAs, YRCA, CCAs, Farallon Islands, Cordell Banks, and EFHCAs).						
	State trip limits and seasons may be more restrictive than federal trip limits, particularly in waters off Oregon and California.						
3	**Minor slope rockfish[1/] & Darkblotched rockfish**						
4	40°10' - 38° N. lat.	Per trip, no more than 25% of weight of the sablefish landed					
5	South of 38° N. lat.	10,000 lb/ 2 months					
6	**Splitnose**	200 lb/ month					
7	**Sablefish**						
8	40°10' - 36° N. lat.	300 lb/ day, or 1 landing per week of up to 800 lb, not to exceed 2,400 lb/ 2 months		300 lb/ day, or 1 landing per week of up to 800 lb, not to exceed 2,200 lb/ 2 months			
9	South of 36° N. lat.	400 lb/ day, or 1 landing per week of up to 1,500 lb, not to exceed 8,000 lb/ 2 months					
10	**Thornyheads**						
11	40°10' - 34°27' N. lat.	CLOSED					
12	South of 34°27' N. lat.	50 lb/ day, no more than 1,000 lb/ 2 months					
13	**Dover sole**	3,000 lb/month, no more than 300 lb of which may be species other than Pacific sanddabs. South of 42° N. lat., when fishing for "other flatfish," vessels using hook-and-line gear with no more than 12 hooks per line, using hooks no larger than "Number 2" hooks, which measure 11 mm (0.44 inches) point to shank, and up to two 1 lb (0.45 kg) weights per line are not subject to the RCAs.					
14	**Arrowtooth flounder**						
15	**Petrale sole**						
16	**English sole**						
17	**Starry flounder**						
18	**Other flatfish[2/]**						
19	**Whiting**	300 lb/ month					
20	**Minor shelf rockfish[1/], Shortbelly, Widow & Chilipepper rockfish**						
21	40°10' - 34°27' N. lat.	300 lb/ 2 months	CLOSED	200 lb/ 2 months		300 lb/ 2 months	
22	South of 34°27' N. lat.	750 lb/ 2 months		750 lb/ 2 months			
23	**Canary rockfish**	CLOSED					
24	**Yelloweye rockfish**	CLOSED					
25	**Cowcod**	CLOSED					
26	**Bocaccio**						
27	40°10' - 34°27' N. lat.	200 lb/ 2 months	CLOSED	100 lb/ 2 months		200 lb/ 2 months	
28	South of 34°27' N. lat.	100 lb/ 2 months		100 lb/ 2 months			

TABLE 5 (South)

Table 5 (South). Continued

29	**Minor nearshore rockfish & Black rockfish**						
30	Shallow nearshore	600 lb/ 2 months	CLOSED	800 lb/ 2 months	900 lb/ 2 months	800 lb/ 2 months	600 lb/ 2 months
31	Deeper nearshore						
32	40°10' - 34°27' N. lat.	700 lb/ 2 months	CLOSED	700 lb/ 2 months		600 lb/ 2 months	700 lb/ 2 months
33	South of 34°27' N. lat.	500 lb/ 2 months		600 lb/ 2 months			
34	California scorpionfish	600 lb/ 2 months	CLOSED	600 lb/ 2 months	800 lb/ 2 months		600 lb/ 2 months
35	**Lingcod**[3/]	CLOSED		400 lb/ month			CLOSED
36	**Pacific cod**	1,000 lb/ 2 months					
37	**Spiny dogfish**	200,000 lb/ 2 months		150,000 lb/ 2 months	100,000 lb/ 2 months		
38	**Other Fish**[4/] **& Cabezon**	Not limited					
39	**RIDGEBACK PRAWN AND, SOUTH OF 38°57.50' N. LAT., CA HALIBUT AND SEA CUCUMBER NON-GROUNDFISH TRAWL**						
40	**NON-GROUNDFISH TRAWL Rockfish Conservation Area (RCA) for CA Halibut, Sea Cucumber & Ridgeback Prawn:**						
41	40°10' - 38° N. lat.	100 fm - modified 200 fm [6/]	100 fm - 150 fm				100 fm - modified 200 fm [6/]
42	38° - 34°27' N. lat.	100 fm - 150 fm					
43	South of 34°27' N. lat.	100 fm - 150 fm along the mainland coast; shoreline - 150 fm around islands					
44		Groundfish: 300 lb/trip. Trip limits in this table also apply and are counted toward the 300 lb groundfish per trip limit. The amount of groundfish landed may not exceed the amount of the target species landed, except that the amount of spiny dogfish landed may exceed the amount of target species landed. Spiny dogfish are limited by the 300 lb/trip overall groundfish limit. The daily trip limits for sablefish coastwide and thornyheads south of Pt. Conception and the overall groundfish "per trip" limit may not be multiplied by the number of days of the trip. Vessels participating in the California halibut fishery south of 38°57.50' N. lat. are allowed to (1) land up to 100 lb/day of groundfish without the ratio requirement, provided that at least one California halibut is landed and (2) land up to 3,000 lb/month of flatfish, no more than 300 lb of which may be species other than Pacific sanddabs, sand sole, starry flounder, rock sole, curlfin sole, or California scorpionfish (California scorpionfish is also subject to the trip limits and closures in line 31).					
45	**PINK SHRIMP NON-GROUNDFISH TRAWL GEAR** *(not subject to RCAs)*						
46	South	**Effective April 1 - October 31:** Groundfish: 500 lb/day, multiplied by the number of days of the trip, not to exceed 1,500 lb/trip. The following sublimits also apply and are counted toward the overall 500 lb/day and 1,500 lb/trip groundfish limits: lingcod 300 lb/ month (minimum 24 inch size limit); sablefish 2,000 lb/ month; canary, thornyheads and yelloweye rockfish are PROHIBITED. All other groundfish species taken are managed under the overall 500 lb/day and 1,500 lb/trip groundfish limits. Landings of these species count toward the per day and per trip groundfish limits and do not have species-specific limits. The amount of groundfish landed may not exceed the amount of pink shrimp landed.					

TABLE 5 (South) con't

1/ Yellowtail rockfish is included in the trip limits for minor shelf rockfish and POP is included in the trip limits for minor slope rockfish.
2/ "Other flatfish" are defined at § 660.302 and include butter sole, curlfin sole, flathead sole, Pacific sanddab, rex sole, rock sole, and sand sole.
3/ The size limit for lingcod is 24 inches (61 cm) total length South of 42° N. lat.
4/ "Other fish" are defined at § 660.302 and include sharks, skates (including longnose skates), ratfish, morids, grenadiers, and kelp greenling.
5/ The Rockfish Conservation Area is a gear and/or sector specific closed area generally described by depth contours but specifically defined by lat/long coordinates set out at §§ 660.391-660.394, except that the 20-fm depth contour off California is defined by the depth contour and not coordinates.
6/ The "modified 200 fm" line is modified to exclude certain petrale sole areas from the RCA.

To convert pounds to kilograms, divide by 2.20462, the number of pounds in one kilogram.

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