UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
PROGRAM PLANNING AND INTEGRATION
Silver Spring, Maryland 20910

DEC 20 2010

To All Interested Government Agencies and Public Groups:

Under the National Environmental Policy Act, an environmental review has been performed on the following action.

TITLE: Interim Measures for the Pacific Coast Groundfish Fishery in Response to the Delay of Final 2011 Harvest Specifications and Management Measures and Implementation of the Trawl Rationalization Program – Environmental Assessment [0648-BA40]

LOCATION: Exclusive Economic Zone off the West coast.

SUMMARY: The proposed action would implement short-term, interim measures for the Pacific coast groundfish fisheries beginning in January, 2011. These interim measures are considered in the context of two major rulemaking actions: (1) a delay in the 2011 harvest specifications and management measures beyond January 2011, and (2) the scheduled implementation of the rationalized trawl fishery in January 2011. The interim measures include: interim reductions to the 2010 harvest level for sablefish; issuance of quota pounds for individual fishing quota (IFQ) species; revisions to the calculation for the Pacific halibut trawl bycatch mortality limit; and establishment of the trawl Rockfish Conservation Areas and landing allowances for non-IFQ species and Pacific whiting. The impacts of this interim action are not anticipated to be significant because they make relatively minor regulatory adjustments to the Pacific coast groundfish fishery, but would otherwise allow use of the same gears and fishing techniques as are currently employed. In addition, they are for a short-term time period and they are not anticipated to increase overall harvest of any species during that time period.

RESPONSIBLE OFFICIAL: William W. Stelle, Jr.
Northwest Regional Administrator
National Marine Fisheries Service, National Oceanic and Atmospheric Administration (NOAA)
7600 Sand Point Way NE, Seattle, WA 98115
(206) 526-6150

The environmental review process led us to conclude that this action will not have a significant impact on the environment. Therefore, an environmental impact statement was not prepared.

A copy of the finding of no significant impact (FONSI), including the environmental assessment, is enclosed for your information.

Although NOAA is not soliciting comments on this completed EA/FONSI we will consider any comments submitted that would assist us in preparing future NEPA documents. Please submit any written comments to the Responsible Official named above.

Sincerely,

for Paul N. Doremus, Ph. D.
NOAA NEPA Coordinator

Enclosure

INTERIM MEASURES FOR THE PACIFIC COAST GROUNDFISH FISHERY IN RESPONSE TO THE DELAY OF FINAL 2011 HARVEST SPECIFICATIONS AND MANAGEMENT MEASURES AND IMPLEMENTATION OF THE TRAWL RATIONALIZATION PROGRAM

ENVIRONMENTAL ASSESSMENT

RIN: 0648 - BA40

National Marine Fisheries Service
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7600 Sand Point Way NE
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December 15, 2010

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Chapter 1. **Introduction**

This document provides background information and analyses of a short-term action that would implement interim measures for the Pacific coast groundfish fisheries beginning in January, 2011. These interim measures are considered in the context of two major rulemaking actions: (1) a delay in the 2011 harvest specifications and management measures after January 2011 and (2) the scheduled implementation of the rationalized trawl fishery in January 2011.

The National Marine Fisheries Service (NMFS) intends to implement, based on recommendations from the Pacific Fishery Management Council (Council), updated harvest specifications and fishery management measures for the Pacific coast groundfish fishery on a biennial cycle, beginning in odd-numbered years. The 2011-2012 harvest specifications and management measures were scheduled to publish late in 2010 so that the trawl rationalization program and the 2011-2012 harvest specifications and management measures would be implemented simultaneously. However, the 2011-2012 harvest specifications and management measures have been delayed and will not be in place for the start of the 2011 groundfish fisheries, including several pieces necessary to sustainably manage the entire fishery and to begin the rationalized trawl fishery. As a result of the delay, the harvest specifications and management measures that were in place and implemented during 2010 will remain in place for the start of 2011. Section 5.4 of the Pacific Coast Groundfish Fishery Management Plan (FMP) provides that "in the absence of an approved recommendation at the beginning of the biennial fishing period, the current specifications in effect at the end of the previous biennial period will remain in effect until modified, superseded, or rescinded."

A major function of the biennial harvest specifications and management measures is to establish annual harvest levels for a two-year period, based on the best available science and other considerations. With the 2011 harvest specifications being delayed, combined with the scheduled implementation of the trawl rationalization program, there are some additional considerations that may be necessary prior to the start of the 2011 fisheries, knowing that the harvest levels that will remain in place at the start the year may be changing once the 2011-2012 harvest specifications and management measures are implemented later in 2011.

The trawl rationalization program is a limited access privilege program under the Magnuson-Stevens Fishery Conservation and Management Act. The program is intended to increase net economic benefits, create individual economic stability, provide full utilization of the trawl sector allocation, consider environmental impacts, and achieve individual accountability of catch and bycatch. The program consists of: (1) an individual fishing quota (IFQ) program for the shore-based trawl fleet (including whiting and non-whiting); (2) cooperative (coop) programs for the at-sea (whiting only) mothership and catcher-processor trawl fleets; and (3) fixed allocations for limited entry trawl sectors. Due to the complexity and timing of the program, the National Marine Fisheries Service (NMFS) has issued multiple rulemakings to implement this program, the last of which is scheduled to publish in early December so the program can begin in January 2011.

This document provides options analyzing how the rationalized groundfish fishery will be initiated by carrying forward with 2010 Optimum Yields (OYs) in most cases, as well as consideration of Annual Catch Limits (ACLs) for groundfish species that were proposed to be lower in 2011, compared to 2010 OYs. These draft ACLs were identified in the draft Environmental Impact Statement for Proposed Harvest Specifications and Management Measures for the 2011-2012 Pacific Coast Groundfish Fishery (PMFC and NMFS 2010b), and in the proposed rule for 2011-2012 Biennial Harvest Specifications and Management Measures; Amendment 16-5; and Amendment 23 (75 FR 67810). This document focuses on options for implementing interim measures for 2011 that meet the purpose and need described below, which would be implemented by an emergency rule, consistent with section 305(c)1) of the Magnuson-Stevens Fishery Conservation and Management Act . The document includes other interim changes to other fishery regulations that may be implemented, if they meet the purpose and need of this proposed action. As detailed below, NMFS sought the advice of the Council at their November, 2010 meeting on potential management actions that meet the purpose and need.

1.1 Purpose and Need for the Proposed Action

The proposed action includes: interim reductions to 2010 harvest levels; issuance of quota pounds for IFQ species; issuance of Pacific halibut bycatch quotas; and establishment of the trawl Rockfish Conservation Areas (RCAs) and trip limits for non-IFQ species. These actions are proposed in response to the delay of implementation of the 2011 harvest specifications and management measures and the implementation g of a rationalized trawl fishery.

The need for the proposed action is to: prevent conservation concerns with the continuation of 2010 harvest levels into 2011, knowing that final 2011 harvest levels (when implemented) may be lower than the 2010 harvest levels; to prevent the need to pull back quota pounds associated with the rationalized trawl fishery once the 2011 harvest specifications and management measures are approved; and to provide for calculation of Individual Bycatch Quota pounds for Pacific halibut necessary to initiate the trawl rationalization program, consistent with Council recommendations.

The purpose of the proposed action is to: manage the early part of the 2011 groundfish fishery in a manner that prevents any conservation concerns while allowing smooth implementation of the rationalized trawl fishery; to release quota pounds that would allow fishing opportunities early in the year; and to prevent issuing quota pounds for any species that may end up being too high once the final 2011 harvest specifications are implemented later in 2011.

Chapter 2. Alternatives Including the Proposed Action

There are several sets of alternatives considered in this EA that meet the purpose and need. The primary focus is considering alternative interim groundfish harvest levels for the start of 2011 fisheries. NMFS is also considering alternatives to: calculate and release the groundfish quota pounds for the start the 2011 rationalized trawl fishery (Section 2.2); calculate Pacific halibut individual bycatch quota (IBQ) pounds; adjust the trawl Rockfish Conservation Area (RCA); impose landing allowances for non-IFQ species for the rationalized trawl fishery, and address potential delay of implementation of program components necessary for implementation of the trawl rationalization program.

2.1 Interim Harvest Specifications

As described in Chapter 1, the harvest specifications and management measures that were in place and implemented during 2010 will remain in place for the start of 2011 because the final 2011 harvest specifications are delayed and will not be implemented at the start of 2011. Because of this circumstance, if catch early in 2011 is too high, both the biological resource and communities may be subject to overfishing and early fishery closure, respectively. Species that are caught by fisheries early in the year and where there may be limited ability to manage the fishery inseason to reduce catch later in the year may warrant consideration of a change to the harvest level as an interim action. Table 2-1 shows the 2010 Optimum Yields (OYs) compared to the proposed 2011 Annual Catch Limits (ACLs) for 2011.

Table 2-1: Harvest levels (mt) of Pacific coast groundfish species (overfished species are in CAPS).

Stock	No Action – 2010 Harvest Specifications Remain in Regulations at 50 CFR Part 660	Alternative 2 - Proposed 2011 Harvest Specifications (75 FR 67810)
	2010 OY (mt)	2011 ACL (mt)
BOCACCIO S. of 40°10’ N lat.	288	263
CANARY	105	102
COWCOD S. of 40°10’ N lat.	4	4
DARKBLOTCHED	330 a/	298
PACIFIC OCEAN PERCH	200	180
WIDOW	509	600
YELLOWEYE	14 a/	20 b/
PETRALE SOLE	1,200	976

Stock	No Action – 2010 Harvest Specifications Remain in Regulations at 50 CFR Part 660	Alternative 2 - Proposed 2011 Harvest Specifications (75 FR 67810)
	2010 OY (mt)	2011 ACL (mt)
Lingcod - coastwide	4,829	4432 c/
Pacific Cod	1,600	1,600
Pacific whiting - coastwide	193,935	96,968 – 290,903 d/
Sablefish (coastwide)	NA	NA
Sablefish N. of 36º N lat.	6,471	5,515
Sablefish S. of 36º N lat.	1,258	1,298
Shortbelly	6,950	50
Chilipepper S. of 40°10’ N lat.		1,981
Splitnose S. of 40°10’ N lat.	461	1,461
Yellowtail N. of 40°10’ N lat.	4,562	4,364
Shortspine Thornyhead (coastwide)	NA	NA
Shortspine Thornyhead - N. of 34º27' N lat.	1,591	1,573
Shortspine Thornyhead - S. of 34º27' N lat.	410	405
Longspine Thornyhead (coastwide)	NA	NA
Longspine Thornyhead - N. of 34º27' N lat.	2,175	2,119
Longspine Thornyhead - S. of 34º27' N lat.	385	376
Black Rockfish (WA)	464	426
Black Rockfish (OR-CA)	1,000	1,000
California scorpionfish	155	135
Cabezon (CA)	79	179
Cabezon (OR)	NA	50
Dover Sole	16,500	25,000

Stock	No Action – 2010 Harvest Specifications Remain in Regulations at 50 CFR Part 660	Alternative 2 - Proposed 2011 Harvest Specifications (75 FR 67810)
	2010 OY (mt)	2011 ACL (mt)
English Sole	9,745	19,761
Arrowtooth Flounder	10,112	15,174
Starry Flounder	1,077	1,352
Longnose skate	1,349	1,349
Minor Rockfish North	2,283	2,227
Minor Nearshore Rockfish North	155	99
Minor Shelf Rockfish North	968	968
Minor Slope Rockfish North	1,160	1,160
Minor Rockfish South	1,990	2,341
Minor Nearshore Rockfish South	650	1,001
Minor Shelf Rockfish South	714	714
Minor Slope Rockfish South	626	626
Other Flatfish	4,884	4,884
Other Fish	5,600	5,575

a/ The 330 mt darkblotched rockfish OY and the 14 mt yelloweye rockfish OY are the harvest specifications, as modified by the April 22, 2010 court order in NRDC v. Locke, Case 3:01-cv-00421-JL, that were in place at the end of 2010.

b/ The Council-proposed 2011 ACL for yelloweye rockfish is 20 mt with a 17 mt ACT. QP under this alternative would be based on the ACT of 17 mt.

c/ At its November 2010 meeting, the Council recommended that NMFS combine the 2011 lingcod ACLs from North of 42° N. lat. (2,330 mt) and South of 42° N. lat. (2,102 mt) for the beginning of 2011. 4,432 mt is the sum of the northern and southern ACLs.

d/ Pacific whiting stock assessments are conducted annually after the start of the year, and therefore the stock assessment that will inform the 2011 harvest specification for Pacific whiting has not yet been finalized. Therefore, a range of Pacific whiting ACLs were considered in the DEIS (PFMC and NMFS 2010b). A new stock assessment will be considered by the Council at its March 2011 meeting, and final

adoption of the Pacific whiting specifications have been deferred until the Council's March 2011 meeting.

There is one action alternative analyzed in this section. The alternative considers revising some of the initial 2011 OYs to the harvest levels that were proposed for 2011. Other alternatives were considered, but were rejected from further analysis. These alternatives are described in Section 2.1.3.

Table 2-2. Summary of the Alternatives

Interim Harvest Specifications	
Alt. 1 No Action	Alt. 2 – Preliminary Preferred
2010 OYs for all species	2011 ACLs for some species

2.1.1 Alternative 1 – No Action

Alternative 1 is the no action alternative, which would keep in place the same OYs that were in place in 2010 (Table 2-1). The basis of the 2010 OYs are described in the final Environmental Impact Statement (EIS) (PFMC and NMFS 2009) and proposed and final rules for the 2009-2010 harvest specifications and management measures (73 FR 80516, 74 FR 9874), in the final rule that established interim OY for petrale sole (74 FR 65480), in the final rule that established the 2010 harvest specifications for Pacific whiting (75 FR 23620), and in the final rule that revised OYs based on Court orders (75 FR 39178).

2.1.2 Alternative 2

Alternative 2 would revise the 2010 OYs for some species to make the harvest level consistent with the harvest levels proposed for 2011 (e.g., the 2011 ACLs). The basis of the 2011 ACLs are described in the draft Environmental Impact Statement (EIS) (PFMC and NMFS 2010b) and in the proposed rule for the 2011-2012 harvest specifications and management measures (75 FR 67810) and is summarized here for the species for which they are considered.

There are many species of groundfish for which the proposed 2011 harvest levels are lower than those that were in place for 2010. However, for many of those species, there is a low level of concern that the No Action alternative could cause conservation issues. There are several reasons for this: fishing effort and landings are not anticipated to be high early in the year; the species is an IFQ species that is trawl-dominant and therefore considered in Section 2.2; or catch has been below the recent harvest levels. Additional information on interim harvest specifications for species that were considered but rejected under this alternative is in Section 2.1.3.

The sub-options under Alternative 2 consider establishing a lower sablefish optimum yield (OY) north of 36° N. lat. for the start of 2011 as an interim measure to prevent conservation concerns with issuance of trawl fishery QP and with calculating the primary sablefish fishery tier limits for 2011. All sablefish OY alternatives apportion the coastwide biomass north and south of 36° N. lat. since all commercial

allocations are currently based on the proportion of the harvestable surplus of sablefish north of 36° N. latitude.

The no action alternative would keep in place the same sablefish OY that was in place in 2010 (Table 2-1). A coastwide sablefish stock assessment was prepared in 2007. The 2010 coastwide acceptable biological catch (ABC) of 9,217 was based on the 2007 stock assessment with an FMSY proxy of F45%. The 40-10 harvest policy was applied to the coastwide ABC and then apportioned between the northern and southern areas with 72% going to the area north of 36° N. lat. and 28% going to the area south of 36° N. lat. This resulted in a sablefish OY for the area north of 36° N. lat. of 6,471 mt. For additional information on the 2010 sablefish harvest specifications, see the EIS from the 2009-2010 harvest specifications and management measures (PFMC and NMFS 2009).

Table 2-3. Detailed Alternative 2a, 2b, and 2c - 2011 sablefish ACLs (mt) that vary by methods for apportioning the estimated coastwide biomass (N and S = north and south of 36° N. latitude).

2011 ABC = 8,418				
	Apportionment Method		40-10 OY Harvest Control 8,110	
	North/South Proportions	Basis	**N ACL**	S ACL
Alternative 2a	72/28	2003-06 survey	**5,839**	2,271
Alternative 2b (PPA)	68/32	2003-08 survey	**5,515**	2,595
Alternative 2c	64/36	2003-08 survey (variance weighted)	**5,190**	2,920

Alternatives 2a-2b are all based on a 2011 coastwide ABC of 8,418 mt. A different ABC is used as the basis for the action alternatives than for the no action alternative because the Scientific and Statistical Committee (SSC) has recommended an overfishing limit for 2011 of 8,808 for sablefish, coastwide. This overfishing limit is reduced as a precautionary measure for scientific uncertainty and to reduce the risk of overfishing. The resulting ABC for 2011 is 8,418 mt.

2.1.2.1 Alternative 2a

Alternative 2a is an action alternative to take the new ABC for 2011 and using the same North/South apportionment method (of 72/28) as under the no action alternative. The resulting 2011 sablefish OY for north of 36° N. lat. is 5,839 mt.

2.1.2.2 Alternative 2b Preferred

Alternative 2b is an action alternative to take the new ABC for 2011 and use a different North/South apportionment method (of 68/32) that incorporates the two most recent years of survey data. The resulting 2011 sablefish OY for north of 36° N. lat. is 5,515 mt.

2.1.2.3 Alternative 2c

Alternative 2c is an action alternative to take the new ABC for 2011 and use a different North/South apportionment method (of 64/36) that incorporates the two most recent years of survey data and is weighted for variance in the estimates. The resulting 2011 sablefish OY for north of 36° N. lat. is 5,190 mt.

2.1.3 Alternatives Considered but Rejected from Further Analysis

One alternative was considered that would revise the 2010 OYs to make the harvest level consistent with the harvest levels proposed for 2011 (e.g. the 2011 ACLs) for all groundfish species (Table 2-1). The basis of the 2011 ACLs are described in the draft Environmental Impact Statement (EIS) (PFMC and NMFS 2010b) and in the proposed rule for the 2011-2012 harvest specifications and management measures (75 FR 67810). There are many species of groundfish for which the proposed 2011 harvest levels are higher than those that were in place for 2010. For those species, implementing higher harvest levels before they have been approved by the Secretary of Commerce could actually cause conservation issues and therefore does not meet the purpose and need. Implementing higher harvest levels in this interim final rule could force restrictions to fishery management measures to lower catch later in the year if: (1) catch early in the year is higher than anticipated, or (2) the final harvest specifications for 2011 are lower than described in the proposed rule (75 FR 67810). At its November 2-9, 2010 meeting, the Council requested that NMFS consider changes to recreational fishery management measures off Washington, Oregon and California that are designed to accompany proposed 2011 harvest levels. This alternative would also have considered those changes to recreational fishery management measures. However, revising the 2010 OYs to make the harvest level consistent with the harvest levels proposed for 2011 does not meet the purpose and need for all groundfish species. Therefore, a second action alternative is considered in Section 2.1.2 that would implement the harvest levels proposed for 2011 for only some of the groundfish species, where those harvest levels meet the purpose and need.

Under Alternative 2, NMFS considered revising the 2010 OYs to make the harvest level consistent with the harvest levels proposed for 2011 for several species, but for all but sablefish north, those species were determined not to meet the purpose and need. These species specific considerations are described below.

The proposed 2011 ACL for petrale sole is considerably lower than the 2010 OY. While petrale sole are generally fished the most in winter months, e.g. early in the year, they are almost exclusively caught in the limited entry non-whiting trawl fishery. Petrale sole is an IFQ species, and under the trawl rationalization program, petrale sole will be issued quota pounds for the start of 2011. The harvest level upon which to base the interim quota pounds is described in Section 2.2.

The proposed 2011 ACL for minor nearshore rockfish north of 40° 10’ N. lat. is also lower than the 2010 OY. The non-trawl fisheries for nearshore species are less seasonal, with effort more evenly distributed throughout the year. Average catch in recent years under very similar management measures that will be in place at the start of 2011 has been lower than the 2010 OY and nearer to the lower proposed 2011 ACL. Therefore, there is little risk that, if the harvest level for minor nearshore rockfish north of 40° 10’

N. lat. is lowered during 2011, overfishing will occur or that nearshore fisheries will have to be severely restricted to keep catch below the final 2011 harvest level.

2.2 Initial Issuance of Quota Pounds

There are three action alternatives analyzed in this section. The alternatives consider basing the quota pound calculations for the start of 2011 on either: (1) different harvest levels or (2) releasing only a portion of quota pounds; or (3) a combination of both.

Table 2-4. Summary of the Alternatives

Initial Issuance of Quota Pounds			
Alt. 1 No Action	Alt. 2	Alt. 3 –Preferred	Alt. 4 Considered but Rejected; See Section 2.2.4
Issue 100% QP; based on 2010 harvest levels for all QP species	Issue only a % of QP; based on 2010 harvest levels for all QP species	Issue 100 % of QP; based on the lowest harvest specification from either 2010 OYs or the proposed 2011 ACLs (where lower than 2010 OYs) for all QP species	Issue 100% of QP; based on proposed 2011 ACLs (harvest levels) for all QP species

2.2.1 Alternative 1/No Action:

Alternative 1 is the no action alternative, which would, consistent with the current provisions of the groundfish FMP, release 100% of the quota pounds for groundfish species, based on the 2010 OYs for all species. The quota pounds would be calculated based on the 2010 OYs and harvest specifications. The 2010 OYs are summarized in the first column of Table 2-5.

2.2.2 Alternative 2

Alternative 2 is an action alternative to release only a percentage of the quota pounds based on the 2010 OYs for groundfish species. The quota pounds would be calculated based on the 2010 OYs and harvest specifications. A percentage amount may be included to facilitate comparison with the other alternatives and, where appropriate, qualitative information may be provided if issuing a larger or smaller percentage may have different effects on the environment.

2.2.3 Alternative 3 –Preferred

Alternative 3 is an action alternative to release 100% of the quota pounds based on either the 2010 OYs or the proposed 2011 ACLs or ACTs in those instances where proposed harvest levels for the trawl sector for IFQ species in 2011 were lower than 2010 OYs, with a few adjustments to prevent over-issuing quota pounds. Table 2.2 (below) identifies which OYs and ACLs will be used to calculate quota pounds at the start of the 2011 fishing season under Alternative 3, subject to adjustments.

Table 2-5 . 2010 OYs (mt) and proposed 2011 ACLs (mt). Overfished stocks in CAPS; shaded cells indicate the tonnage that will be used to calculate QP under Alternative 3, the Preferred Alternative, subject to adjustments.

Stock	Alternative 1 OYs	Alternative 4 ACLs
	2010 OY	**2011 ACL**
BOCACCIO S. of 40°10' N lat.	288	**263**
CANARY	105	**102**
COWCOD S. of 40°10' N lat.	4 a/	**4**
DARKBLOTCHED	330 b/	**298**
PACIFIC OCEAN PERCH	200	**180**
WIDOW	**509**	600
YELLOWEYE	**14 b/**	20 c/
PETRALE SOLE	1,200	**976**
Lingcod – coastwide	4,829	**4,432 d/**
Pacific Cod	**1,600**	1,600
Pacific whiting - coastwide	193,935	**96,968 e/**
Sablefish (coastwide)	NA	NA
Sablefish N. of 36º N lat.	6,471	**5,515**
Sablefish S. of 36º N lat.	**1,258**	1,298
Chilipepper S. of 40°10' N lat.		**1,981**
Splitnose S. of 40°10' N lat.	**461**	1,461
Yellowtail N. of 40°10' N lat.	4,562	**4,364**
Shortspine Thornyhead (coastwide)	NA	NA
Shortspine Thornyhead - N. of 34º27' N lat.	1,591	**1,573**
Shortspine Thornyhead - S. of 34º27' N lat.	410	**405**
Longspine Thornyhead (coastwide)	NA	NA
Longspine Thornyhead - N. of 34º27' N lat.	2,175	**2,119**
Dover Sole	**16,500**	25,000
English Sole	**9,745**	19,761

Stock	Alternative 1 OYs	Alternative 4 ACLs
	2010 OY	2011 ACL
Arrowtooth Flounder	**10,112**	15,174
Starry Flounder	**1,077**	1,352
Minor Rockfish North	2,283	**2,227**
Minor Shelf Rockfish North	**968**	968
Minor Slope Rockfish North	**1,160**	1,160
Minor Rockfish South	**1,990**	2,341
Minor Shelf Rockfish South	**714**	714
Minor Slope Rockfish South	**626**	626
Other Flatfish	**4,884**	4,884

a/ The 4 mt cowcod OY is the harvest specification, as modified by the April 22, 2010 court order in NRDC v. Locke, Case 3:01-cv-00421-JL, that was in place at the end of 2010. However, the April 22, 2010 court order in NRDC v. Locke, Case 3:01-cv-00421-JL, noted that the record may indicate that a harvest specification of 3 mt may be more appropriate.

b/ The 330 mt for darkblotched rockfish OY and the 14 mt for yelloweye rockfish OY are the harvest specifications, as modified by the April 22, 2010 court order in NRDC v. Locke, Case 3:01-cv-00421-JL, that were in place at the end of 2010. Additionally, the yelloweye rockfish allocation to the trawl fishery in 2010 was .6 mt. For 2011, the Council recommended a yelloweye rockfish allocation of .3 mt to the trawl sector at its November 2010 meeting.

c/ The Council-proposed 2011 ACL for yelloweye rockfish is 20 mt with a 17 mt ACT. QP under this alternative would be based on the ACT of 17 mt.

d/ At its November 2010 meeting, the Council recommended that NMFS combine the 2011 lingcod ACLs from North of 42° N. lat. (2,330 mt) and South of 42° N. lat. (2,102 mt) to calculate quota pounds for the beginning of 2011. 4,432 mt is the sum of the northern and southern ACLs.

e/ Under the regulations implementing the trawl rationalization program, in years where the Pacific whiting harvest specification is not known by January 1, NMFS issues quota pounds based on the shorebased trawl allocation multiplied by the lower end of the range of potential harvest specifications, and issues additional quota pounds as appropriate once the final harvest specification is known. 50 C.F.R. §660.140(d)(1)(ii)(B)(2). The 2011 harvest specification for Pacific whiting has not been finalized and will not be known by January 1, 2011. However, the DEIS for the 2011 harvest specifications considered a range of Pacific whiting ACLs from 96,968 mt to 290,903 mt (PFMC and NMFS 2010b); NMFS would issue quota pounds based on the lower end of this range.

Alternative 3 would use a combination of 2010 harvest levels for some species and 2011 harvest levels for other species to calculate the 2011 quota pounds with a few adjustments to prevent over-issuing quota pounds. This alternative would not implement any 2011 harvest specifications that were proposed on November 3, 2010, but would use those proposed harvest levels for some species to adjust the calculation of quota pounds for the rationalized trawl fishery, including Council recommendations for any changes in the allocation to the trawl sector for each IFQ species. In particular, while this alternative would use the 2010 OY for yelloweye rockfish, it would calculate quota pounds based on the Council's recommendation that the trawl allocation be initially set at 0.3 mt, as opposed to the 0.6 mt allocation that was recommended in June 2010 under a proposed 2011 yelloweye rockfish OY of 20 mt. Similar adjustments would be made for other IFQ species for which the Council recommended changes in allocations (e.g., petrale sole, yellowtail). In addition, for the issuance of quota pounds for cowcod, this alternative would use the more conservative amount of 3 mt identified in the April 22, 2010 court order in NRDC v. Locke, Case 3:01-cv-00421-JL, in order to avoid the risk of over-issuing quota pounds. For all IFQ species, if the final 2011 harvest specifications are greater than those used for initial calculation of quota pounds, NMFS would issue quota pounds for the difference.

2.2.4 Alternatives Considered but Rejected from Further Analysis

NMFS considered, but rejected, Alternative 4, which would have released 100% of the quota pounds, based on the proposed 2011 harvest specifications and management measures. This alternative would not have implemented the 2011 harvest specifications that were proposed, but rather would have used those proposed harvest levels or ACLs to calculate quota pounds for the rationalized trawl fishery. This option was rejected because the issuance of quota pounds based on proposed 2011 harvest specifications for IFQ species where the 2011 ACLs or ACTs are higher than the 2010 OYs does not fit the purpose and need for this action. Moreover, the final EIS for the 2011-2012 harvest specifications and management measures will not be completed prior to January 1, 2011; NMFS is rejecting adoption of this option absent this comprehensive identification and evaluation of the 2011 harvest specification alternatives, and absent thorough review and consideration by the public.

2.3 Calculation of Pacific Halibut IBQ Pounds

In the first year of the trawl rationalization program, Pacific halibut IBQ pounds are specified to be issued based on a calculation where a QS permit owner's IBQ would be multiplied by the total trawl mortality bycatch limit for halibut, which is 15 percent of the total constant exploitation yield, not to exceed 130,000 pounds. The expressed intent of the Council for this calculation was to reduce halibut mortality that has been observed in recent years in the trawl fishery by approximately 50%. . At its November 2010 meeting, the Council and NMFS received the most recent total mortality information from the Northwest Fishery Science Center (NWFSC). In this report of 2009 total mortality from groundfish fisheries, it was estimated that the mortality of halibut increased in the limited entry trawl sector (and only the limited entry trawl sector) in 2009. This increase in halibut mortality was unexpected, as there had been a decreasing trend in halibut mortality for all sectors of the groundfish fishery prior to receiving this most recent observer data. Given this most recent information, the exact method of calculating halibut IBQ pounds to achieve the Council's intended 50% reduction is important. Under proposed regulations implementing this provision (75 FR 53380, August 31, 2010), developed

prior to the NWFSC report, the calculation of the trawl mortality bycatch limit would include both legal (length 32" and over) and sublegal (under 32") halibut; however, an alternate interpretation of Amendment 21 discussed at the November 2010 Council meeting holds that the calculation of the total trawl mortality bycatch limit includes legal-sized halibut only. NMFS is considering which interpretation to implement for 2011, as the Council considers a trailing action to resolve this ambiguity in Amendment 21 for future years.

There is one action alternative analyzed in this section. The alternatives consider basing the Pacific halibut IBQ pound calculations for the start of 2011 on either: (1) the allocation formula in the previously proposed implementing regulations or (2) Council recommended allocation from its November 2010 meeting.

Table 2-6. Summary of the Alternatives

Calculation of Pacific Halibut IBQ Pounds	
Alt. 1 No Action	Alt. 2
130,000 pounds or 15% of the 2010 total constant exploitation yield (all sizes of halibut, net weight)	130,000 pounds of legal-sized halibut

2.3.1 Alternative 1 – No Action

Alternative 1 is the no action alternative, where the amount of halibut IBQ pounds issued to the trawl fleet each year is determined based on the proposed regulations implementing this provision (75 FR 53380, August 31, 2010) for calculation of the trawl mortality bycatch limit. Under that formula, the lesser of 130,000 pounds or 15% of the 2010 total constant exploitation yield (TCEY) of Pacific halibut would be allocated for trawl bycatch of all sizes of halibut, net weight. To determine the amount of round weight bycatch mortality, the amount of the allocation would be converted from net weight to round weight by dividing the net weight by 0.75 (a conversion factor used by the IPHC). Under the 2010 TCEY of 820,000 pounds, the trawl allocation under this alternative would be 164,000 pounds (820,000 x 0.15 ÷ 0.75).

2.3.2 Alternative 2 –Preferred

Alternative 2 is an action alternative to apply the Council recommended allocation from its November 2010 meeting for calculation of the total trawl mortality bycatch limit. Under this alternative, 130,000 pounds would be allocated for trawl bycatch of legal sized halibut, net weight. This alternative applies the alternate interpretation for calculation of the total trawl mortality bycatch limit identified by the Council at its November 2010 meeting and deviates from Amendment 21 in that 130,000 pounds is greater than 15% of the 2010 TCEY of Pacific halibut, but more closely reflects the Council's expressed intent to reduce halibut mortality by 50%. To determine the amount of round weight bycatch mortality for all sizes of halibut, the amount of the allocation would be converted from net weight to round

weight by dividing the net weight by 0.75 and from legal sized to legal and sublegal sized by dividing the net weight by 0.62, a conversion factor based on the proportion of legal-sized halibut from the NWFSC report for 2009. Under the emergency rule, the trawl allocation would be 279,570 pounds (130,000 ÷ 0.75 ÷ 0.62).

2.4 RCAs and Landing Allowances

There are two action alternatives analyzed in this section. The alternatives consider changes to the current trip limit tables (Tables 1 (North) and 1 (South) to part 660, subpart D) to: (1) determine an appropriate RCA structure for a rationalized fishery and (2) consider implementing trip limits for non-TIQ groundfish species.

Table 2-7. Summary of the Alternatives

Alt. 1 No Action	Alt. 2 –Preferred	Alt. 3 –Preferred
Same Trawl RCA structure as in 2010; Same trawl fishery trip limits as in 2010.	Remove the entire current trip limit tables and then establish a trawl RCA for the rationalized fishery.	Remove the current trip limits, which are the same as those that were in place for 2010, and replace them with incidental landing allowances for non-IFQ species and Pacific whiting.

2.4.1 Alternative 1 – No Action

Alternative 1 is the no action alternative, which would make no changes to the current regulations at Tables 1 (North) and 1 (South) to part 660, subpart D, which are the same as those that were in place for the trawl fishery in 2010.

2.4.2 Alternative 2 –Preferred

Alternative 2 is an action alternative to establish a trawl RCA for the rationalized fishery at Tables 1 (North) and 1 (South) to part 660, subpart D.

Table 2-8: Trawl RCA boundaries, coastwide, for 2011 under Alternative 2.

<table>
<tr><th>Rockfish Conservation Area (RCA)</th><th>JAN-FEB</th><th>MAR-APR</th><th colspan="2">MAY-AUG</th><th>SEPT-OCT</th><th>NOV-DEC</th></tr>
<tr><td>North of 48°10' N. lat.</td><td>shore - modified 200 fm line</td><td>shore - 200 fm line</td><td colspan="2">shore - 150 fm line</td><td>shore - 200 fm line</td><td>shore - modified 200 fm line</td></tr>
<tr><td>48°10' N. lat. - 45°46' N. lat.</td><td rowspan="2">75 fm line - modified 200 fm line</td><td rowspan="2">75 fm line - 200 fm line</td><td>75 fm line - 150 fm line</td><td>100 fm line - 150 fm line</td><td rowspan="2">75 fm line - 200 fm line</td><td rowspan="2">75 fm line - modified 200 fm line</td></tr>
<tr><td>45°46' N. lat. - 40°10' N. lat.</td><td>75 fm line - 200 fm line</td><td>100 fm line - 200 fm line</td></tr>
</table>

South of 40°10' N. lat.	100 fm line - 150 fm line

2.4.3 Alternative 3 –Preferred

Alternative 3 is an action alternative to implement landing allowances for non-IFQ species and for Pacific whiting outside the primary whiting season at Tables 1 (North) and 1 (South) to part 660, subpart D.

Table 2-9: Landing allowances for non-IFQ species and Pacific whiting, coastwide, for 2011 under Alternative 3.

North of 40°10' N. lat.	
Minor nearshore rockfish & Black rockfish	300 lb/ month
Whiting	
midwater trawl	Before the primary whiting season: CLOSED. -- During the primary season: mid-water trawl permitted in the RCA. See §660.131 for season and trip limit details. -- After the primary whiting season: CLOSED.
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.
Cabezon	
North of 46°16' N. lat.	Unlimited
46°16' N. lat. - 40°10' N. lat.	50 lb/ month
Shortbelly	Unlimited
Spiny dogfish	60,000 lb/ month
Longnose skate	Unlimited
Other Fish [5/]	Unlimited
South of 40°10' N. lat.	
Longspine thornyhead	
South of 34°27' N. lat.	24,000 lb/ 2 months
Minor nearshore rockfish & Black rockfish	300 lb/ month
Whiting	

midwater trawl	Before the primary whiting season: CLOSED. -- During the primary season: mid-water trawl permitted in the RCA. See §660.131 for season and trip limit details. -- After the primary whiting season: CLOSED.
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.
Cabezon	50 lb/ month
Shortbelly	Unlimited
Spiny dogfish	60,000 lb/ month
Longnose skate	Unlimited
California scorpionfish	Unlimited
Other Fish	Unlimited

2.5 Potential Delay in Trawl Rationalization Implementation

The final regulatory package to implement Amendments 20 and 21 to the Pacific Coast Groundfish Fishery Management Plan, which would establish a catch share program for the limited entry trawl fishery, is the program components rule, which is scheduled for completion in December, 2010. This regulatory package, which is on a tight timeline to meet the target implementation date of January 2011, focuses on the remaining program details necessary to implement the program, including: measures applicable to gear switching for the individual fishing quota program, observer programs, retention requirements, equipment requirements, catch monitors, catch weighing requirements, coop permits/agreements, first receiver site licenses, quota share accounts, vessel accounts, further tracking and monitoring components, and economic data collection requirements.

At the November 2010 Council meeting, the Council discussed the remote possibility of a delay in the publication of the final rule implementing the program components necessary to initiate the trawl rationalization program. Two alternatives (described below) exist if this circumstance arises.

2.5.1 Alternative 1 – No Action

The no action alternative would have the trawl fishery open on January 1, 2011 with trip limits in place. This would be consistent with the manner in which the fishery has been managed to date.

2.5.2 Alternative 2 - Preferred

Based on advice from the Council in November 2010, the preferred alternative if these circumstances arise is to delay the start of the trawl fishery for approximately two weeks until the program components rule to implement the trawl rationalization program is effective.

Chapter 3. **Affected Environment**

The biological and socioeconomic resources that may be affected by the proposed actions are described in other Council/NMFS documents. Historical catch and management information for each groundfish stock can be found in Volume 1 of the 2008 Status of the Pacific Coast Groundfish Fishery stock assessment and fishery evaluation (SAFE document) (PFMC 2008). This information is updated in the 2011 and 2012 biennial specifications DEIS (PFMC and NMFS 2010) which provides a summary of new stock status information from assessments conducted in 2009 and 2010, as well as new management information. This information is hereby incorporated by reference to this EA and is summarized below.

Managed Species

More than 90 fish species are managed under the Pacific Coast groundfish FMP. These groundfish include: 60-plus rockfish, including all genera and species from the family *Scorpaenidae* (*Sebastes, Scorpaena, Sebastolobus, and Scorpaenodes*) occurring in waters off Washington, Oregon, and California; 12 flatfish species, 6 roundfish species; and 6 miscellaneous fish species that include sharks, skates, grenadiers, rattails, and morids. Rockfishes make up the majority of species managed under the Pacific Coast Groundfish FMP. Most rockfishes share general life history characteristics, which include slow growth rates, bearing live young, and large but infrequent recruitment events. These life history characteristics contribute to relatively low average productivity that may reduce their ability to withstand heavy exploitation (Parker et al., 2000), especially during periods of unfavorable environmental conditions.

Roundfish managed under the Pacific Coast Groundfish FMP include lingcod, cabezon, kelp greenling Pacific cod, sablefish and Pacific hake (whiting).

The species managed under the Pacific Coast groundfish FMP are distributed throughout the EEZ and occupy diverse habitats at all stages in their life history. In addition, many of the stocks have geographic ranges that extend beyond the U.S. EEZ into Canadian or Mexican waters. The life history traits of the groundfish species have important implications on stock assessment and how the stocks are managed. This is because fishing alters population abundance of the target species, and can have affects on life-history traits and population dynamics that may also affect the yield. For each groundfish species, detailed information on habitat utilization patterns, fisheries that harvest the species, geographic range, migrations and movements, reproduction, growth and development, and trophic interactions are fully described in Appendix B2 to the final EIS titled “The Pacific Coast Groundfish Fishery Management Plan, EFH Designation and Minimization of Adverse Impacts (NMFS 2005). In addition to life history, historical catch, and management information for each groundfish stock can be found in the Status of the Pacific Coast Groundfish Fishery (SAFE document) Volume, Description of the Fishery (PFMC 2008).

Socioeconomics

From a socioeconomic perspective, commercial groundfish fisheries are important to coastal communities along the west coast. Recreational groundfish fisheries are also important to coastal

communities (PFMC, NMFS 2010). Revenues correlate with harvest levels. Lower harvest levels typically mean lover revenues for fishermen.

Protected Species

For protected species, NMFS has issued a number of biological opinions under the ESA associated with the groundfish FMP, concluding 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. Similarly, fishing activities currently conducted under the groundfish FMP are unlikely to have adverse impacts on marine mammals. West coast groundfish fisheries are considered Category III fisheries under the MMPA, indicating a remote likelihood of or no known serious injuries or mortalities to marine mammals.

3.1 Environmental Consequences for Interim Harvest Specifications

3.1.1 Effects on the Biological Environment

None of the alternatives is expected to change the type of gear used in the fishery, the areas that the fishery occurs, the seasonality of the fishery, or the geographical location of the fishery. Therefore, any of the alternatives, including the no-action, would not result in any direct or indirect effects on the physical environment, including effects on trophic interactions (phytoplankton production), or the migration and spawning habitat.

Direct effects on the biological environment (stock biomass, stock recruitment, or life history) resulting from fishery management actions primarily include changes in species mortality levels that may affect the stock biomass. The total allowable catch levels for individual groundfish species or species groups are established during the biennial specification and management measure process. In this instance, the specifications and management measures for 2011 and 2012 will not be in place by January 1, 2011. In this situation, the groundfish FMP specifies rolling l over the previous years' harvest specifications and management measures, which would mean carrying forward with 2010 OYs established under the 2009-2010 harvest specifications and management measures as modified by the April 22, 2010 court order in NRDC v. Locke, Case 3:01-cv-00421-JL. Therefore, under the No Action alternative (Alternative 1), the 2010 sablefish OY would remain in place until it is superseded by the final 2011 harvest specifications. No significant impacts on the environment are expected.

Under Alternative 2a, the sablefish OY is apportioned between the North and South using survey information from 2003-2006. This Alternative uses the same North/South apportionment as the No Action alternative, and is just updated with the new ABC. Under this alternative, the North/South apportionment will not be based on the best, and most recent, scientific information available. Alternative 2a results in a 2011 OY that is approximately 11 percent lower than the No Action alternative. No significant impacts on the environment are expected.

Under Alternative 2b, the preferred alternative, the sablefish OY is apportioned between the North and South using survey information from 2003-2008. This Alternative uses a North/South apportionment that incorporates the most recent years of survey information (2007-2008) and is also updated with the new ABC. Alternative 2b results in a 2011 OY that is approximately 17 percent lower than the No Action alternative. No significant impacts on the environment are expected.

Under Alternative 2c, the sablefish OY is apportioned between the North and South using survey information from 2003-2008, weighted by the variance of estimated biomass by year and area. This alternative is also updated with the new ABC. Alternative 2c results in a 2011 OY that is approximately 25 percent lower than the No Action alternative. No significant impacts on the environment are expected.

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

Non-groundfish species interactions: There would be no direct biological impacts on the non-groundfish species as a result of the alternatives because the actions do not: change the gears used to harvest groundfish species, change the fishing season, or change the geographical location of the fishery.

Salmonids: There would be no direct biological impacts on salmonids as a result of the alternatives as they do not: change current Biological Opinion thresholds, change the gears used to harvest groundfish species, change the fishing season, or change the geographical location of the fishery.

Marine Mammals: None of the alternatives are expected to affect the incidental mortality levels of marine mammals, because the alternatives do not change fishing intensity or fishing effort, the gear type used, the fishing season, or the geographical location of the fishery.

Seabirds: None of the alternatives are expected to affect the incidental mortality levels of seabirds, because none of the alternatives change fishing intensity (effort), the gear type used, the fishing season, or the geographical location of the fishery.

Endangered Species: For the non-whiting fisheries, salmon are a prohibited species. Under the alternatives considered, there would be no direct biological impacts on salmonids as a result of the alternatives, because they do not: establish harvest levels for Pacific whiting, identify Biological Opinion thresholds, change the gears used to harvest Pacific whiting, change the fishing season, or change the geographical location of the fishery.

3.1.3 Effects on the Socioeconomic Environment

Coastal communities are affected by ex-vessel revenue due to commercial fishery landings. Recreational fisheries provide both market and non-market benefits. Catches and landings may be affected by changes in the status of the resource and management measures that may constrain commercial and recreational fishing opportunity. In addition, commercial and recreational fisheries are often an important part of a community's social and touristic identity. Coastal development can compete with existing fisheries infrastructure for waterfront access and real estate.

Alternative 1, the No Action alternative, would begin 2011 under the 2010 sablefish OY for north of 36 N. lat. of 6,471 mt. During 2010, the average estimated ex-vessel price per pound for sablefish was $2.37 (PSMFC November 2010). Therefore, this alternative could result in ex-vessel revenues of approximately 48 million dollars.

Alternative 2a lowers the amount of sablefish available to the coastal communities in the area north of 36° N. lat. by 632 mt, or approximately 11 percent from the No Action alternative. During 2010, the average estimated ex-vessel price per pound for sablefish was $2.37 (PSMFC November 2010). Therefore, this alternative could result in a reduction in ex-vessel revenues of approximately 3.3 million dollars from the No Action alternative. This OY alternative lowers the sablefish OY because of a change in how the ABC is calculated.

Alternative 2b lowers the amount of sablefish available to the coastal communities in the area north of 36° N. lat. by 956 mt, or approximately 17 percent from the No Action alternative. Therefore, this alternative could result in a reduction in ex-vessel revenues of approximately 5 million dollars from the No Action alternative. However, this alternative is lower than Alternative 2 only because of the North/South catch apportionment, where a larger portion of the coastwide OY would be available south and a smaller portion would be available north. Therefore, the reductions in ex-vessel revenue are likely a large overestimate, as the catch will likely just be shifted to the area south of 36° N. lat. and ex-vessel revenues would be generated from those landings in the south.

Alternative 2c lowers the amount of sablefish available to the coastal communities in the area north of 36° N. lat. by 1,281 mt, or approximately 25 percent from the No Action alternative. Therefore, this alternative could result in a reduction in ex-vessel revenues of approximately 6.7 million dollars from the No Action alternative. However, this alternative is lower than Alternatives 2 and 3 only because of the North/South catch apportionment, where a larger portion of the coastwide OY would be available south and a smaller portion would be available north. Therefore, the reductions in ex-vessel revenue are likely a large overestimate, as the catch will likely just be shifted to the area south of 36° N. lat. and ex-vessel revenues would be generated from those landings in the south.

3.2 Environmental Consequences for Issuance of Quota Pounds

3.2.1 Effects on the Biological Environment

None of the alternatives is expected to change the type of gear used in the fishery, the areas that the fishery occurs, the seasonality of the fishery, or the geographical location of the fishery. Therefore, any of the alternatives, including the no-action, would not result in any direct or indirect effects on the physical environment, including effects on trophic interactions (phytoplankton production), or the migration and spawning habitat.

Direct effects on the biological environment (stock biomass, stock recruitment, or life history) resulting from fishery management actions primarily include changes in species mortality levels that may affect the stock biomass. The total allowable catch levels for individual groundfish species or species groups are established during the biennial specification and management measure process. In this instance,

the specifications and management measures for 2011 and 2012 will not be in place by January 1, 2011. Current practice under the groundfish FMP is to roll over the previous years' harvest specifications and management measures, which in this case would mean carrying forward with 2010 OYs established under the 2009-2010 harvest specifications and management measures as modified by the April 22, 2010 court order in NRDC v. Locke, Case 3:01-cv-00421-JL.

Under Alternative 1, the No Action alternative, there is a risk that final OYs or ACLs in 2011 will be exceeded for species whose proposed harvest levels in 2011 are lower than the harvest levels that are in place for 2010. This is particularly the case for species where most of the mortality is taken by the trawl fishery; few options would be available later in the year to restrict fishing opportunities for trawl-dominant species to prevent exceeding the final OYs or ACLs, other than total trawl fishery closure. Additionally, under this alternative, the OYs or ACLs for the affected groundfish species will not be based on the best, and most recent, scientific information available.

Under Alternative 2, there is a risk that final OYs or ACLs in 2011 would be exceeded for some species, even where a percentage less than 100% of the quota pounds is issued to initiate the rationalized trawl fishery. Additionally, under this alternative, the OYs or ACLs for the affected groundfish species will not be based on the best, and most recent, scientific information available.

Under Alternative 3, the preferred alternative, which releases 100% of the quota pounds based on the 2010 OYs or the proposed 2011 ACLs or ACTs in those instances where proposed harvest levels for the trawl sector for IFQ species in 2011 were lower than 2010 OYs, the effects on the biological environment, if any, will be minimized. No significant impacts on the environment are expected.

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

Non-groundfish species interactions: There would be no direct biological impacts on the non-groundfish species as a result of the alternatives because the actions do not: change the gears used to harvest groundfish species, change the fishing season, or change the geographical location of the fishery.

Salmonids: There would be no direct biological impacts on salmonids as a result of the alternatives as they do not: change current Biological Opinion thresholds, change the gears used to harvest groundfish species, change the fishing season, or change the geographical location of the fishery.

Marine Mammals: None of the alternatives are expected to affect the incidental mortality levels of marine mammals, because the alternatives do not change fishing intensity or fishing effort, the gear type used, the fishing season, or the geographical location of the fishery.

Seabirds: None of the alternatives are expected to affect the incidental mortality levels of seabirds, because none of the alternatives change fishing intensity (effort), the gear type used, the fishing season, or the geographical location of the fishery.

Endangered Species: In the Pacific whiting trawl fishery, and to some extent in other sectors of the groundfish fishery, salmon are incidentally caught over a broad range from northern California to Washington. For the non-whiting fisheries, salmon are a prohibited species. For the Pacific whiting trawl fishery, the fishery affects many of the ESA listed Chinook stocks. Pacific whiting trawl activities are subject to ESA review and constraint with the goal being to reduce mortality and improve the status of the species to the point where the survival and recovery of the species is reasonably assured. To that end, the Pacific whiting trawl fishery is managed to stay within their respective take limits as defined in the associated ESA Section 7 Biological Opinion incidental take statements. Adequate monitoring is required to ensure that activities are operating within their respective take limits. Adequate monitoring is not discretionary. To avoid negative biological consequences that may result to a species if the prescribed take limits are exceeded, there is a collective obligation of all activities to be managed within the defined limits considered necessary for the species' survival and recovery. Under the alternatives considered, there would be no direct biological impacts on salmonids as a result of the alternatives, because they do not: establish harvest levels for Pacific whiting, identify Biological Opinion thresholds, change the gears used to harvest Pacific whiting, change the fishing season, or change the geographical location of the fishery.

3.2.3 Effects on the Socioeconomic Environment

Coastal communities are affected by ex-vessel revenue due to commercial fishery landings. Catches and landings may be affected by changes in the status of the resource and management measures that may constrain fishing opportunity. In addition, fisheries are often an important part of a community's social and touristic identity. Coastal development can compete with existing fisheries infrastructure for waterfront access and real estate.

Under Alternative 1, the No Action alternative, 100% of the QP, based on the 2010 OYs, would be released in the interim period until the final 2011 harvest specifications are implemented. For some species for which the final 2011 harvest level may be lower than in 2010, the rationalized trawl fishery would receive total QP that could: (1) preclude fishing for such species in other non-trawl sectors (e.g. sablefish); or (2) exceed the final 2011 harvest specifications when they are implemented later in the year (e.g. petrale sole). This could force NMFS to pull back QP for such species, or implement other management measures to reduce the catch of the species in all groundfish fisheries (trawl and non-trawl) that impact that species. In both of these scenarios communities could suffer if vessels are forced to cease fishing.

Alternative 2 would release only a percentage of the QP in the interim period until the final 2011 harvest specifications are implemented. If the percentage of QP released is low, for some species where the harvest levels are very low (e.g. yelloweye rockfish), the rationalized trawl fishery may reach the threshold of catch of their QP for these species early in the year and be forced to cease fishing. If the percentage of the QP released is high, for some species for which the final 2011 harvest level may be lower than in 2010 (e.g. petrale sole), the rationalized trawl fishery may receive total QP that could exceed the final 2011 harvest specifications when they are implemented later in the year. This could force NMFS to pull back QP for such species, or implement other management measures to reduce the catch of the species in all groundfish fisheries that impact that species. In both of these scenarios,

where the percentage of QP released is too high or too low, communities could suffer if vessels are forced to cease fishing. However, if the percentage of QP issued was carefully calculated to prevent such instances, the socioeconomic impacts may be very similar to Alternative 3.

The Alternative 3 would release 100% of the quota pounds based on either the 2010 OYs or the proposed 2011 ACLs or ACTs, whichever is the lower of the harvest levels. This may keep the released QP artificially low for some species for the interim, but is anticipated to meet the purpose and need to prevent conservation concerns and prevent the need to pull back QP later in the year. It is anticipated that this alternative will release enough QP for fishermen to begin their fishing year under the new rationalization program, and prevent negative socioeconomic impacts from fishers having too little QP and having to tie up their boats early in the year, or having too high QP and having to tie up their boats later in the year.

3.3 Environmental Consequences for Calculation of Pacific Halibut IBQ Pounds

3.3.1 Effects on the Biological Environment

None of the alternatives are expected to change the type of gear used in the fishery, the areas that the fishery occurs, the seasonality of the fishery, or the geographical location of the fishery. Therefore, any of the alternatives, including the no-action, would not result in any direct or indirect effects on the physical environment, including effects on trophic interactions (phytoplankton production), or the migration and spawning habitat.

Direct effects on the biological environment (stock biomass, stock recruitment, or life history) resulting from fishery management actions primarily include changes in species mortality levels that may affect the stock biomass. The total constant exploitation yield (TCEY) for Pacific halibut is established annually by the International Pacific Halibut Commission (IPHC). None of the Alternatives are anticipated to increase the total mortality of Pacific halibut and therefore is not anticipated to have any direct effects to the biological environment. Alternative 2 would increase the total poundage of Pacific halibut mortality that may be allocated to the rationalized trawl fishery; however, the TCEY is not anticipated to be exceeded because the rest of the mortality will be taken in other fisheries, where management measures are in place to prevent the remaining TCEY from being exceeded.

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

Non-groundfish species interactions: There would be no direct biological impacts on the non-groundfish species as a result of the alternatives because the actions do not: change the gears used to harvest groundfish species, change the fishing season, or change the geographical location of the fishery.

Salmonids: There would be no direct biological impacts on salmonids as a result of the alternatives as they do not: change current Biological Opinion thresholds, change the gears used to harvest groundfish species, change the fishing season, or change the geographical location of the fishery.

Marine Mammals: None of the alternatives are expected to affect the incidental mortality levels of marine mammals, because the alternatives do not change fishing intensity or fishing effort, the gear type used, the fishing season, or the geographical location of the fishery.

Seabirds: None of the alternatives are expected to affect the incidental mortality levels of seabirds, because none of the alternatives change fishing intensity (effort), the gear type used, the fishing season, or the geographical location of the fishery.

Endangered Species: For the non-whiting groundfish fisheries, salmon are a prohibited species. Under the alternatives considered, there would be no direct biological impacts on salmonids as a result of the alternatives, because they do not: establish harvest levels for Pacific whiting, identify Biological Opinion thresholds, change the gears used to harvest Pacific whiting, change the fishing season, or change the geographical location of the fishery.

3.3.3 Effects on the Socioeconomic Environment

Coastal communities are affected by ex-vessel revenue due to commercial fishery landings. Catches and landings may be affected by changes in the status of the resource and management measures that may constrain commercial fishing opportunity. In addition, fisheries are often an important part of a community's social and touristic identity. Coastal development can compete with existing fisheries infrastructure for waterfront access and real estate.

Under Alternative 1, the No Action alternative, the total weight of Pacific halibut that would be allowed to be used as IBQ pounds in the rationalized trawl fishery would be 164,000 pounds, all sizes, round weight. This equates to an approximately 70% reduction from the recent trawl mortality of Pacific halibut of 540,000 lb (round weight, all sizes).

In the rationalized fishery, vessels without IBQ pounds to cover their incidental catch of Pacific halibut will be forced to stop fishing for groundfish and quota for target species will either go unharvested or be shifted to areas of the coast where incidental catch rates are lower for species for which quota availability is limited. This may have a devastating impact for some communities both through the impact on the trawl fishery and fisheries and businesses dependent on the infrastructure and workforce used to support the trawl industry. The trawl catch share program is expected to cause a substantial reorganization and redistribution of fishing activity on the west coast. These disruptions are believed to be acceptable in light of the great economic and conservation benefits expected to result from the rationalization of the trawl industry. However, an unanticipated excessive constraint at the start of the program, such as might occur under No Action (Alternative 1), could seriously exacerbate economic and social disruption beyond what is necessary. It may be that in future years a reduction in trawl halibut bycatch mortality will be achieved, but attempting to achieve such a reduction in the first year of the program would be an unnecessary risk with potentially far reaching adverse consequences.

Alternative 2 would increase the total weight of Pacific halibut that would be allowed to be used as IBQ pounds in the rationalized trawl fishery in 2011to more closely approximate a 50% reduction from recent mortality in the trawl fisheries.

3.4 Environmental Consequences for RCAs and Landing Allowances

3.4.1 Effects on the Biological Environment

None of the alternatives are expected to change the type of gear used in the fishery. The large-scale, depth-based area restrictions that are imposed by the RCAs can change the areas that the fishery occurs and can affect the seasonality of the fishery and the geographical location of the fishery. However, none of the alternatives make large-scale changes to the existing boundaries of the trawl fishery RCA. The alternatives that consider trip limits or incidental landing allowances for the groundfish trawl fishery are not expected to change gears used, areas fished, seasonality, or the location of the fishery. Therefore, any of the alternatives, including the no-action, would not result in any direct or indirect effects on the physical environment, including effects on trophic interactions (phytoplankton production), or the migration and spawning habitat.

Direct effects on the biological environment (stock biomass, stock recruitment, or life history) resulting from fishery management actions primarily include changes in species mortality levels that may affect the stock biomass. Changes to fish retention limits, or "trip limits" and area restrictions are indirect ways to control fishing mortality. None of these alternatives modify the total fishing mortality that is allowed in the groundfish trawl fishery. Therefore, any of the alternatives, including the no-action, would not result in any direct or indirect effects on the biological environment.

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

Non-groundfish species interactions: There would be no direct biological impacts on the non-groundfish species as a result of the alternatives because the actions do not: change the gears used to harvest groundfish species, change the fishing season, or change the geographical location of the fishery.

Salmonids: There would be no direct biological impacts on salmonids as a result of the alternatives as they do not: change current Biological Opinion thresholds, change the gears used to harvest groundfish species, change the fishing season, or change the geographical location of the fishery.

Marine Mammals: None of the alternatives are expected to affect the incidental mortality levels of marine mammals, because the alternatives do not change fishing intensity or fishing effort, the gear type used, the fishing season, or the geographical location of the fishery.

Seabirds: None of the alternatives are expected to affect the incidental mortality levels of seabirds, because none of the alternatives change fishing intensity (effort), the gear type used, the fishing season, or the geographical location of the fishery.

Endangered Species: For the non-whiting groundfish trawl fisheries, salmon are a prohibited species. Under the alternatives considered, with the exception of Pacific whiting, there would be no direct biological impacts on salmonids as a result of the alternatives, because they do not: establish harvest levels for Pacific whiting, identify Biological Opinion thresholds, change the gears used to harvest Pacific whiting, change the fishing season, or change the geographical location of the fishery. For Pacific

whiting, Alternative 3 does impose trip limits, but in a manner consistent with current trip limits in existence outside the primary season, consistent with the Biological Opinion for salmon.

3.4.3 Effects on the Socioeconomic Environment

Coastal communities are affected by ex-vessel revenue due to commercial fishery landings. Catches and landings may be affected by changes in the status of the resource and management measures that may constrain fishing opportunity. In addition, fisheries are often an important part of a community's social and touristic identity. Coastal development can compete with existing fisheries infrastructure for waterfront access and real estate.

Under Alternative 1, the No Action alternative, the same species or stock complex-specific trip limits and trawl RCA boundaries would be in place as in 2010. The RCA boundaries under the No Action alternative could provide undue restrictions under a rationalized fishery by closing some areas to control effort. Individual accountability under the rationalized fishery has a goal to prevent the need of NMFS to force area closures upon the industry unless absolutely necessary. The trip limits under the No Action alternative contain species or species complex-specific trip limits for both IFQ and non-IFQ species. The trip limits for the IFQ species do not allow the primary functions of the rationalized fishery to apply: individual accountability and flexibility for fishermen to prosecute their QP as they choose, based on that accountability. Also, applying trip limits to IFQ species would create confusion on behalf of the public, industry, managers, and enforcement agents and would likely require significant time and effort to understand how they would operate together (trip limits and QP).

Alternative 2 would implement a trawl RCA that is slightly modified from the No Action alternative. It would keep some fishing areas open seaward of the RCA that are known areas where petrale sole aggregate. Though some fishers may choose not to fish their QP for petrale sole, those that do will be able to catch their QP of petrale sole more efficiently during winter months with the petrale sole aggregation areas, or "petrale cut-outs", open.

Alternative 3 would impose trip limits for groundfish species for which there are not quota pounds. Under the No Action alternative, there would be trip limits for all groundfish species: IFQ species and non-IFQ species alike. This would be very confusing for the public, and could limit landings with trip limits rather than meeting the goals and objectives for a rationalized fishery, where individual accountability plays a large role. Alternative 3 would establish trip limits for non-IFQ species and for Pacific whiting outside of the primary whiting season dates. These limits would allow for incidental catch of these non-IFQ species and Pacific whiting to be retained, up to the trip limit amount, and sold if a market is available for them. This may provide additional opportunities to generate revenue and increase marketable landings in the rationalized trawl fishery.

3.5 Environmental Consequences for Potential Delay in Trawl Rationalization Implementation

3.5.1 Effects on the Biological Environment

Under the no action alternative, the trawl fishery would be open on January 1, 2011 with trip limits in place. Under the preferred alternative, the trawl fishery would open when the program components rule is final, initiating the trawl rationalization program.

Neither of the alternatives is expected to change the type of gear used in the fishery, the areas that the fishery occurs, or the geographical location of the fishery. Although a delay in the initiation of the trawl fishery, under the preferred alternative, would modify the seasonality of the fishery, it would not result in any direct or indirect effects on the physical environment, including effects on trophic interactions (phytoplankton production), or the migration and spawning habitat.

Direct effects on the biological environment (stock biomass, stock recruitment, or life history) resulting from fishery management actions primarily include changes in species mortality levels that may affect the stock biomass. The total allowable catch levels for individual groundfish species or species groups are established during the biennial specification and management measure process. In this instance, the specifications and management measures for 2011 and 2012 will not be in place by January 1, 2011. Current practice under the groundfish FMP is to roll over the previous years' harvest specifications and management measures, which in this case would mean carrying forward with 2010 OYs established under the 2009-2010 harvest specifications and management measures as modified by the April 22, 2010 court order in NRDC v. Locke, Case 3:01-cv-00421-JL.

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

Non-groundfish species interactions: There would be no direct biological impacts on the non-groundfish species as a result of the alternatives because the actions do not: change the gears used to harvest groundfish species, significantly change the fishing season, or change the geographical location of the fishery.

Salmonids: There would be no direct biological impacts on salmonids as a result of the alternatives as they do not: change current Biological Opinion thresholds, change the gears used to harvest groundfish species, significantly change the fishing season, or change the geographical location of the fishery.

Marine Mammals: Neither of the alternatives are expected to affect the incidental mortality levels of marine mammals, because the alternatives do not change fishing intensity or fishing effort, the gear type used, significantly change the fishing season, or the geographical location of the fishery.

Seabirds: Neither of the alternatives are expected to affect the incidental mortality levels of seabirds, because neither of the alternatives change fishing intensity (effort), the gear type used, change the fishing season significantly, or the geographical location of the fishery.

Endangered Species: For the non-whiting groundfish trawl fisheries, salmon are a prohibited species. Under the alternatives considered, with the exception of Pacific whiting, there would be no direct biological impacts on salmonids as a result of the alternatives, because they do not: establish harvest levels for Pacific whiting, identify Biological Opinion thresholds, change the gears used to harvest Pacific whiting, significantly change the fishing season, or change the geographical location of the fishery. For Pacific whiting trawl fishery does not begin until April of each year, so there would be no material impacts on endangered species under either alternative.

3.5.3 Effects on the Socioeconomic Environment

Coastal communities are affected by ex-vessel revenue due to commercial fishery landings. Catches and landings may be affected by changes in the status of the resource and management measures that may constrain fishing opportunity. In addition, fisheries are often an important part of a community's social and touristic identity. Under the no action alternative, socioeconomic impacts would remain consistent with previous fishery management scenarios. There would be a transition period, where fishers would first operate for a short period of time under a trip limit structure, and would then transition to the rationalized trawl fishery. Under this scenario, there would be a data lag associated with whatever was landed during trip limit period. NMFS would have to issue a lower percent of quota pounds at the start of the rationalized fishery to minimize the potential of any overharvesting of groundfish species for the year.

Under the preferred alternative, a trawl season closure (until the program components rule is final), there would be minimal, if any, socioeconomic impacts to the trawl fleet. The impacts of a potential 2 week closure (January 1-January 14) appear minimal based on 2008 ex-vessel revenues. In 2008, during this period, less than 1% ($2,072,000) of the total 2008 revenues ($31,791,000) were generated during this period (see table 3-1). Moreover, under the trawl rationalization program, trawlers would not lose their economic opportunity because they would be able to fish for their allocated quota pounds once the rationalized fishery is in place. Over the course of the year, there would be no lost opportunity to harvest groundfish.

Table 3-1: 2008 non-whiting trawl ex-vessel revenues.

			2008 Non-Whiting Trawl Revenues $1000			
	Jan 1-14	Jan 15-31	Jan 1-31	Jan 1–Dec 31	Jan 1-14 %	Jan 1-31 %
CA	205	494	699	9796	2%	7%
OR	53	1171	1224	20008	0%	6%
WA	0	149	149	1987	0%	7%
Total	258	1814	2072	31791	1%	7%

A modest delay in the initiation of the trawl fishery under the rationalization program would also provide additional opportunity for the observers and catch monitors to be ready. Additionally, IFQ first receivers would have additional time to obtain site licenses and be ready to accept deliveries of IFQ species at shoreside processing facilities.

Chapter 4. **Cumulative Effects**

Actions considered for cumulative effects include:

External Actions:

- Stock assessments: Stock assessments are prepared under the auspices of the Council according to published terms of reference. NMFS and other agency scientists may prepare some stock assessments and assist with some Council stock assessments. Stock assessments provide information on stock status and are the basis for developing conservation measures.
- Conservation measures established by the Council.
- Harvest specifications and management measures established through the biennial specifications process: The biennial process has been discussed above in relation to direct and indirect effects but may be considered external to the proposed action. This process may be used to set catch limits relative to conservation objectives (e.g., OY) and related management measures.
- Protected species measures: Other applicable law (ESA, MMPA, and others) addresses incidental take of protected species in groundfish FMP fisheries. These measures also indirectly affect fishing opportunity and thus target species harvests.

Ongoing Trends:

- Change in the use of ocean areas: habitat protection measures (e.g., MPAs) and offshore projects (e.g., wind and wave power, offshore aquaculture) limiting the area open to fisheries.
- Changes to coastal economies and land use: population increase in coastal areas and related growth in non-fishery-related economic activities and land use.
- Increased demand for protein affecting real prices: Population growth and rising living standards globally is likely to increase demand for fishery products. This could lead to price increases unless aquaculture increases supply at lower cost than wild-caught fish (and consumers consider the two products substitutable).
- Increased consumer awareness affecting purchasing decisions: Certification and consumer awareness programs may affect buying decisions. Consumers may become more aware of or form opinions about how effectively a fishery is managed both in terms of the status of target stocks and the effect of a particular fishery on other resources (e.g., protected species). Consumer awareness may have a marginal effect on demand for specific products (based on source) over the long term.
- Changes in stock status of exploited species: Stock status is a function of fishing mortality and other, non-anthropogenic ("natural") sources of mortality such as climate forcing effects on stock recruitment and stock productivity, and trophic effects on growth and mortality.
- Changes in stock status of protected species: Additional species may be listed under the ESA or changed from threatened to endangered status, which could result in additional mitigation measures for groundfish fisheries pursuant to section 7 consultations. Under the MMPA, revised estimates of a stock's potential biological removal (PBR) could prompt mitigation measures for groundfish fisheries. Conversely, if a population recovers it may be de-listed, allowing changes to mitigation measures.

Cyclical and ongoing climate change will affect stock productivity in the northeast Pacific: Cyclical events (ENSO, PDO) and long-term climate change affects the relative productivity of different marine organisms with attendant ecosystem effects.

4.1 Cumulative Effects of Alternatives for Interim Harvest Specifications

All of the action alternatives are designed to reduce the harvest of sablefish north of 36° N. lat. on an interim basis until NMFS makes its final decision on the final 2011 harvest specifications for sablefish north of 36° N. lat.

Under Alternatives 2a-2c, the OY for sablefish north of 36° N. lat. is reduced incrementally based on the considerations described in Chapter 2. As the OY is lowered, it decreases the amount of sablefish that may be harvested during the interim period between January 1, 2011 and when NMFS implements the final harvest specifications for sablefish north of 36° N. lat. However, most of the fishing effort for sablefish north of 36° N. lat. is in spring and summer months. Therefore, if the interim OY is set too low, there will still be harvest opportunities to catch additional sablefish later in 2011 to achieve but not exceed the final 2011 OY for sablefish north of 36° N. lat. However, if the interim OY is set too high, and catch between January and May 2011 is higher than anticipated, then restrictions may be necessary later in the year.

Under all of the alternatives, including the no action alternative, management measures that control the catch of sablefish can be modified during the year to respond to the most recent fishery information and achieve but not exceed the final 2011 harvest specifications for sablefish north of 36° N. lat. Therefore, none of the alternatives, including the no action alternative, would result in cumulative impacts to the managed fisheries.

4.2 Cumulative Effects of Alternatives for Issuing Quota Pounds

None of the alternatives, including the no action alternative, would result in cumulative impacts to the managed fisheries because under every alternative, the 2011 fishery will eventually have quota pounds issued that are based on releasing 100% of the final trawl allocation from the final 2011 OYs. This rule considers alternative interim mechanisms to issue quota pounds for the first four months of the 2011 fisheries, in a manner that meets the purpose and need.

4.3 Cumulative Effects of Alternatives for Calculation of Pacific Halibut IBQ Pounds

Both of the alternatives, including the no action alternative, are designed to reduce Pacific halibut bycatch mortality in the rationalized trawl fishery. Alternative 1, the No Action alternative, would reduce mortality by approximately 70 percent from the observed bycatch mortality of Pacific halibut in this fishery in 2009. Alternative 2 would reduce Pacific halibut bycatch to more closely reflect the Council's intent of approximately 50 percent from the observed bycatch mortality of Pacific halibut in this fishery in 2009. None of the alternatives, including the no action alternative, would result in cumulative impacts to the managed fisheries because under every alternative, the level of bycatch of Pacific halibut in the trawl fishery will be reduced from the level that was observed in previous years. In

addition, the increase in the amount of Pacific halibut allocated to the trawl fishery for 2011 is not anticipated to exceed the TCEY for Pacific halibut.

4.4 Cumulative Effects of Alternatives for RCAs and Landing Allowances

None of the alternatives, including the no action alternative, would result in cumulative impacts to the managed fisheries because they are interim in nature and will only be in place for approximately 4-5 months of 2011.

Alternative 2 would make modest revisions to the RCA boundaries that were in place for 2010, however the RCA boundaries in Alternative 1 from January through May are identical to those that would be in place in the No Action alternative. This action alternative is primarily clarifying in nature, and is not anticipated to have any cumulative impacts to the fishery.

Alternative 3 would make modest revisions to the stock specific trip limits for some non-IFQ species and would remove all of the outdated trip limits for species which will be issued quota pounds as described in Section 2.2.3 of this EA. The primary substantive change to trip limits from the No Action alternative are to impose a more restrictive landing limit for cabezon off Oregon and California. This landing limit is intended to keep catch of cabezon at a lower level during the interim until the final 2011 harvest specifications for cabezon are established later in 2011. This action alternative is primarily clarifying in nature, and is not anticipated to have any cumulative impacts to the fishery.

4.5 Cumulative Effects of Alternatives for Potential Delay in Trawl Rationalization Implementation

Neither of the alternatives would result in cumulative impacts to managed species, because under either scenario, harvests will be monitored and the impacts on target as well as overfished species will be accounted for as part of the current management program.

Chapter 5. **List of Preparers**

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Chapter 6. **Acronyms and Glossary**

Acronym	Definition
ABC	Acceptable biological catch. The ABC is a scientific calculation of the sustainable harvest level of a fishery and is used to set the upper limit of the annual total allowable catch. It is calculated by applying the directly-estimated (or proxy) harvest rate that produces maximum sustainable yield to the estimated exploitable stock biomass (the portion of the fish population that can be harvested).
B_{MSY}	The biomass that allows maximum sustainable yield to be taken.
$B_{unfished}$	Estimated unfished biomass
EA	Environmental Assessment
EFH	Essential Fish Habitat
EFP	Exempted Fishing Permit
EIS	Environmental Impact Statement
FMP	Fishery Management Plan
FR	*Federal Register*
GMT	Groundfish Management Team
IBQ	Individual bycatch quota
IPHC	International Pacific Halibut Commission
lb	Pounds
LE	Limited entry fishery
PFMC	Pacific Fishery Management Council
mt	metric tons
NMFS	National Marine Fisheries Service
NOAA	National Oceanic & Atmospheric Administration; The parent agency of National Marine Fisheries Service

OA	Open access fishery
OY	Optimum Yield
POP	Pacific Ocean perch
QP	Quota pounds
RCA	Rockfish Conservation Area
SAFE	Stock Assessment and Fishery Evaluation
SPR	Spawning biomass per recruit
STAR Panel	Stock Assessment Review Panel. A panel set up to review stock assessments for particular fisheries. In the past there have been STAR panels for sablefish, rockfish, squid, and other species
Status quo	Same as the “No Action” alternative
SSC	Scientific and Statistical Committee

Chapter 7. **Literature Cited**

NMFS (National Marine Fisheries Service). November 2010. Proposed rule for 2011-2012 Biennial Harvest Specifications and Management Measures; Amendment 16-5; and Amendment 23 (75 FR 67810, November 3, 2010).

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NMFS. 2010. Inseason adjustments to Pacific Coast groundfish fishery management measures; Pacific whiting harvest specifications and tribal allocation; request for comments. 75 FR 23620, May 4, 2010

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INTERIM MEASURES FOR THE PACIFIC COAST GROUNDFISH FISHERIES, BEGINNING IN 2011, INCLUDING ESTABLISHMENT OF SABLEFISH HARVEST SPECIFICATIONS, RELEASE OF QUOTA POUNDS FOR THE RATIONALIZED TRAWL FISHERY, ESTABLISHMENT OF TRIP LIMITS AND ROCKFISH CONSERVATION AREA CONFIGURATIONS, AND HALIBUT INDIVIDUAL BYCATCH QUOTA POUND CALCULATIONS

DECEMBER, 2011

The National Oceanic and Atmospheric Administration Administrative Order 216-6 (May 20, 1999) contains criteria for determining the significance of the impacts of a proposed action. In addition, the Council on Environmental Quality regulations at 40 C.F.R. §1508.27 state that the significance of an action should be analyzed both in terms of "context" and "intensity." Each criterion listed below is relevant to making a finding of no significant impact and has been considered individually, as well as in combination with the others. The significance of this action is analyzed based on the NAO 216-6 criteria and CEQs context and intensity criteria. These include:

1) Can the proposed action reasonably be expected to jeopardize the sustainability of any target species that may be affected by the action?

Response: The proposed action would not jeopardize the sustainability of any target species affected by the action. This is because the proposed action would lower the Optimum Yield (OY) for sablefish north of 36° N. latitude as compared to levels under the No-Action Alternative. Additionally, the proposed action would also release quota pounds for target species that are based on the lower harvest level that was considered for 2010 or 2011. Lowering the harvest level at or below the level under the No-action Alternative would result in a larger biomass of a species in the ocean when compared to expected biomass levels under the No-action Alternative. Therefore, the harvest level under the Proposed Action would not likely jeopardize the sustainability of any target species.

2) Can the proposed action reasonably be expected to jeopardize the sustainability of any non-target species?

Response: The proposed action would not jeopardize the sustainability of any non-target species affected by the action. This is because the proposed action would release quota pounds for non-target IFQ species, including overfished species, which are based on the lower harvest level that was considered for 2010 or 2011 (i.e., at a harvest level equal to or lower than the No-action Alternative harvest level). The proposed action would also release Pacific halibut individual bycatch quota pounds that increase the trawl fishery allocation from the No-action Alternative; however, total impacts from all fisheries are not anticipated to exceed the total constant exploitation yield. Therefore, even with the increase in the trawl fishery allocation, overall

harvest levels of Pacific halibut are not anticipated to increase. The proposed action would also implement landing allowances for non-IFQ species, most of which are not target species in the trawl fishery. These landing allowances are designed to allow landings of incidental catch, maintained at sustainable levels, and are not anticipated to result in overfishing. Therefore, the proposed action is not anticipated to increase impacts to non-target species or to jeopardize the sustainability of any non-target species as a result of overfishing. Routine inseason management actions can be taken during the year to keep anticipated impacts within the final 2011 harvest specifications, including anticipated impacts to non-target species.

3) Can the proposed action reasonably be expected to cause substantial damage to the ocean and coastal habitats and/or essential fish habitat as defined under the Magnuson-Stevens Act and identified in FMPs?

Response: The proposed action would not cause damage to the ocean, coastal habitats, or essential fish habitat. The proposed action would implement interim restrictions to the Pacific coast groundfish fishery to reduce the harvest impacts to some species. Therefore, the effect of the proposed action could potentially reduce impacts to the ocean, coastal habitats, or essential fish habitat. The proposed action would also release Pacific halibut individual bycatch quota pounds that increase the trawl fishery allocation from the No-action Alternative; however, total impacts from all fisheries are not anticipated to exceed the total constant exploitation yield. Therefore, even with the increase in the trawl fishery allocation, overall harvest levels of Pacific halibut are not anticipated to increase, and so the effect of the proposed action would not damage the ocean, coastal habitats, or essential fish habitat compared to the No-action Alternative.

The area affected by this action in the Pacific Coast groundfish fisheries has been identified as EFH for the Pacific Coast Groundfish FMP. This final action would not likely result in an increase in fishing activity because it implements interim restrictions to harvest levels or keeps harvest levels the same as under the No-action Alternative. Amendment 19 to the Pacific Coast Groundfish FMP established a comprehensive strategy to conserve EFH, including its identification, designation of habitat areas of particular concern, and the implementation of measures to minimize, to the maximum extent practicable, adverse impacts to EFH from fishing in the groundfish fisheries. NMFS published the final rule to implement Amendment 19 on May 11, 2006 (71 FR 27408). The proposed action is consistent with the measures established to minimize impacts to EFH. The proposed action, in the context of the fishery as a whole, will not have an adverse impact on Pacific coast groundfish EFH.

4) Can the proposed action be reasonably expected to have a substantial adverse impact on public health or safety?

Response: The proposed action would have no impact on public health or safety. The proposed action would make relatively minor regulatory adjustments to the Pacific coast groundfish fishery, but would otherwise allow use of the same gears and fishing techniques as are currently employed. The Pacific coast groundfish fishery operates off the west coast without any substantial adverse impact on public health or safety, and the proposed action would not alter any activities that are regulated by public health or safety laws.

5) Can the proposed action reasonably be expected to adversely affect endangered or threatened species, marine mammals, or critical habitat of these species?

Response: The proposed action would have no direct effect on endangered or threatened species, marine mammals, or critical habitat of those species. The proposed action would make relatively minor regulatory adjustments to the Pacific coast groundfish fishery, but would otherwise allow use of the same gears and fishing techniques as are currently employed. Consequently, any impacts associated with use of gear and fishing techniques would not likely change. NMFS has reinitiated consultation on the fishery, including impacts on green sturgeon, eulachon, marine mammals, and turtles. When implementing the overarching regulations that pertain to the Pacific coast groundfish fishery, NMFS concluded that, consistent with Sections 7(a)(2) and 7(d) of the Endangered Species Act, the regulations would not jeopardize any listed species, would not adversely modify any designated critical habitat, and would not result in any irreversible or irretrievable commitment of resources that would have the effect of foreclosing the formulation or implementation of any reasonable and prudent alternative measures.

6) Can the proposed action be expected to have a substantial impact on biodiversity and/or ecosystem function within the affected area (e.g., benthic productivity, predator-prey relationships, etc.)?

Response: The proposed action would have no impact on biodiversity of ecosystem function within the affected area. This is because the proposed action would make relatively minor regulatory adjustments to the Pacific coast groundfish fishery, but would otherwise allow use of the same gears and fishing techniques as are currently employed. Consequently, any impacts associated with use of gear and fishing techniques would not likely change. The proposed action would implement interim restrictions to the Pacific coast groundfish fishery to reduce the harvest impacts to some species. Therefore the impact of the proposed action could potentially reduce impacts on biodiversity and/or ecosystem function.

7) Are significant social or economic impacts interrelated with natural or physical environmental effects?

Response: The proposed action would implement interim restrictions to the Pacific coast groundfish fishery to reduce the harvest impacts to some species. Consequently, the proposed action may reduce short-term revenue in all sectors of the Pacific coast groundfish fishery while the interim restrictions are in place. No long-term effects are anticipated from the proposed action, which is anticipated to be in place for less than 6 months until it is superseded by future action(s). Any potential future action would be evaluated under NEPA with separate decisions following each step.

8) Are the effects on the quality of the human environment likely to be highly controversial?

Response: The analyses in the EA and the effects of the action are not controversial. The Pacific Fishery Management Council (Council) received public comments, primarily from industry members, and made recommendations on moving forward in a manner consistent with public comment. The proposed action is consistent with the recommendations of the Council.

The authors of the EA used the best available scientific information in developing the analysis of impacts, including socioeconomic impacts, of the proposed action.

9) Can the proposed action reasonably be expected to result in substantial impacts to unique areas, such as historic or cultural resources, park land, prime farmlands, wetlands, wild and scenic rivers or ecologically critical areas?

Response: The proposed action, as part of the Pacific coast groundfish fishery, would occur in the marine environment and has no direct effect on the biophysical component of the terrestrial environment. No unique areas would be affected. No activities have been identified in association with the Pacific coast groundfish fishery that would result in adverse effects to historical, archaeological, paleontological, or cultural resources, park land, prime farmlands, wetlands, wild and scenic rivers, essential fish habitat, or ecologically critical areas. For more information on the effects of the proposed action on EFH, see the Response to Question 3.

10) Are the effects on the human environment likely to be highly uncertain or involve unique or unknown risks?

Response: The effects on the human environment from the proposed action are neither unique nor unknown. This proposed action would make minor adjustments to fishery management measures that have been analyzed previously under NEPA (PFMC and NMFS 2009, PFMC and NMFS 2010a, PFMC and NMFS 2010b). No unique or unknown risks were identified in these environmental reviews. Further, no unique or unknown risks were identified during the development of alternatives for the proposed action or under scoping for the analyses of effects related to these alternatives.

11) Is the proposed action related to other actions with individually insignificant, but cumulatively significant impacts?

Response: The proposed action is not anticipated to have cumulatively significant impacts. The proposed action would make relatively minor adjustments to the Pacific coast groundfish fishery regulations, which would not result in any cumulative, significant impact to the human environment. These adjustments are related to four other actions that were analyzed under NEPA, and are consistent with the cumulative analyses under these reviews: 1) Rationalization of the Pacific coast groundfish limited entry trawl fishery and FMP Amendment 20 FEIS (PFMC and NMFS 2010a); 2) Allocation of harvest opportunity between sectors of the Pacific coast groundfish fishery and FMP Amendment 21 FEIS (PFMC and NMFS 2010b); 3) Proposed acceptable biological catch and optimum yield specifications and management measures for the 2009-2010 Pacific coast groundfish fishery FEIS (PFMC and NMFS 2009); and 4) Proposed harvest specifications and management measures for the 2011-2012 Pacific coast groundfish fishery DEIS (PFMC and NMFS 2010c).

12) Is the proposed action likely to adversely affect districts, sites, highways, structures, or objects listed in or eligible for listing in the National Register of Historic Places or may cause loss or destruction of significant scientific, cultural or historical resources?

Response: There are no activities associated with the proposed action that would result in adverse effects to historic places eligible for the National Register, nor cause the destruction or loss of significant scientific, cultural or historical resources.

13) Can the proposed action reasonably be expected to result in the introduction or spread of a non-indigenous species?

Response: Activities under the proposed action will not involve the transport of non-indigenous species. The fishing vessels participating in the proposed action would not increase the risk of introduction through ballast water or hull fouling. Disposition of the catch does not include any translocation of living marine resources, nor use of any nonindigenous species as bait.

14) Is the proposed action likely to establish a precedent for future actions with significant effects or represents a decision in principle about a future consideration?

Response: The proposed action would implement emergency interim measures in the Pacific coast groundfish fishery in response to a delay in implementation of final 2011 harvest specifications and management measures beyond January 2011. Implementation of the trawl rationalization program is scheduled for January 2011. This interim measure is a relatively unique situation, and would be unlikely to occur in a similar manner in the future. Any future interim actions of this nature would be subject to review and recommendation for approval/disapproval by the Pacific Council and NMFS consistent with this framework. Any potential future action would be evaluated under NEPA with separate decisions taken on proceeding at each step. For these reasons the action does not establish a precedent for future actions with significant effects nor does it represent a decision in principal about a future consideration.

15) Can the proposed action reasonably be expected to threaten a violation of Federal, State, or local law or requirements imposed for the protection of the environment?

Response: The proposed action will not threaten a violation of Federal, State, or local law or requirements imposed for the protection of the environment. Activities under the proposed action will be consistent with Federal, State, or local laws.

16) Can the proposed action reasonably be expected to result in cumulative adverse effects that could have a substantial effect on the target species or non-target species?

Response: The proposed action is not expected to result in cumulative adverse impacts. None of the alternatives, including the No-action Alternative for the four decision points, is anticipated to have any cumulative impacts, adverse or otherwise.

DETERMINATION

In view of the information presented in this document and the analysis contained in the 2010 final EA, it is hereby determined that the proposed action will not significantly impact the quality of the human environment. In addition, all beneficial and adverse impacts of the proposed action

have been addressed to reach the conclusion of no significant impacts. Accordingly, preparation of an EIS for this action is not necessary.

William W. Stelle, Jr.
Regional Administrator, NOAA Fisheries,
Northwest Region

12-16-2010
Date

REFERENCE DOCUMENTS

PFMC (Pacific Fishery Management Council) and NMFS (National Marine Fisheries Service). 2009. Proposed Acceptable Biological Catch and Optimum Yield Specifications and Management Measures for the 2009-2010 Pacific Coast Groundfish Fishery Final Environmental Impact Statement Including Regulatory Impact Review and Initial Regulatory Flexibility Analysis. Pacific Fishery Management Council, Portland, OR. January 2009.

PFMC and NMFS. 2010a. Rationalization of the Pacific Coast Groundfish Limited Entry Trawl Fishery; Final Environmental Impact Statement Including Regulatory Impact Review and Initial Regulatory Flexibility Analysis. Pacific Fishery Management Council, Portland, OR. June 2010.

PFMC and NMFS. 2010b. Allocation of Harvest Opportunity Between Sectors of the Pacific Coast Groundfish Fishery; Final Environmental Impact Statement Including Regulatory Impact Review and Initial Regulatory Flexibility Analysis. Pacific Fishery Management Council, Portland, OR. June 2010.

PFMC and NMFS. 2010c. Proposed Harvest Specifications and Management Measures for the 2011-2012 Pacific Coast Groundfish Fishery and Amendment 16-5 to the Pacific Coast Groundfish Fishery Management Plan to Update Existing Rebuilding Plans and Adopt a Rebuilding Plan for Petrale Sole; Draft Environmental Impact Statement Including Regulatory Impact Review and Initial Regulatory Flexibility Analysis. Pacific Fishery Management Council, Portland, OR. August 2010.