

## SCOPING FOR ESSENTIAL FISH HABITAT AND AREA MODIFICATIONS ACTIONS

At its April 2015 meeting, the Pacific Fishery Management Council (Council) is scheduled to determine the scope of actions, subject areas, and management measures to be included in a Fishery Management Plan (FMP) and/or regulatory amendment for matters related to essential fish habitat (EFH) and fishing area modifications. These actions fall into two general categories: actions relating to the EFH review that was initiated in December 2010, and omnibus management measure changes related to fishing area closures. Specifically, omnibus management measures include fishing area modifications for vessels participating in the shorebased individual fishing quota (IFQ) program and an area closure on the US/Mexico border intended to reduce cowcod mortality. Table 4 includes the items under consideration, description of the subject area and management measure, purpose, and pathway for implementation (e.g., FMP amendment, appendix update, or regulatory amendment).

In considering the scope of action, the Council could consider only including those subject areas or management measures that have a strong habitat nexus. For example, if an area modification is primarily aimed at reducing species mortality, it could be considered along with EFH changes, but potentially implemented through a separate analysis and action. In addition, the Council could consider recommending alternative regulatory pathways for deep sea coral and sponge protections, via MSA discretionary authority (303(b)) to protect deep sea coral and sponge habitats. The Council could also package items based on the pathway for implementation. For example, one package could be specific to updating FMP appendices, one package could contain matters that require regulatory amendments, and a third package for matters that require FMP amendments.

### **EFH MODIFICATIONS, BY EFH SUBJECT AREA**

EFH actions/subject areas are generally organized around the required elements described in the EFH regulatory guidance (50 CFR§600.815). These are:

- Description and Identification
- MSA fishing activities that may adversely affect EFH, including appropriate conservation measures (e.g., area or gear restrictions) to minimize adverse effects on EFH
- Non-MSA fishing activities that may adversely affect EFH
- Non-fishing activities that may adversely affect EFH
- Conservation and enhancement
- A description of major prey species and their habitats
- Identification of habitat areas of particular concern (HAPCs)
- Research and information needs
- Review and revision process

In some cases, these have been combined in Table 4 for the sake of efficiency during the amendment (or other action) process. For example, MSA and non-MSA fishing activities are similar in description and effect, and thus the description of the fisheries and the effects on habitat are considered together here.

## **EFH Measures to Consider for the EFH Package**

### *Pacific Coast Groundfish EFH Description and Identification: Habitat Components*

The EFH regulatory guidance (50 cfr § 600.815) requires that FMPs include detailed descriptions of habitat requirements by life stage, for each species managed under an FMP, including the physical, chemical, and biological characteristics of EFH. The EFH review compiled a significant amount of new and newly-available information regarding groundfish habitat use, biogenic and physical substrate maps, and species-habitat associations. In addition, there are groundfish species for which detailed habitat descriptions are not included in the groundfish FMP or its appendices. Description of EFH habitat components are in the Groundfish FMP Appendix B, which can be modified without an FMP amendment.

### *Pacific Coast Groundfish EFH Description and Identification: Spatial Extent*

FMPs must identify the specific geographic location or extent of habitats described as EFH, and must include maps of the geographic locations or geographic boundaries of EFH (50 CFR § 600.815(a)(1)). The current spatial extent of groundfish EFH is described as all waters and substrate in depths less than or equal to 3,500 meters, to MHHW; seamounts in depths greater than 3,500m; and HAPCs not already identified by the above criteria. One of the public proposals contains recommendations for amending the overall spatial extent of GF EFH, and the Phase 2 Report recommends consideration of eliminating HAPCs that are in waters deeper than 3500m and not on specific seamounts.

The spatial extent of groundfish EFH is contained in the FMP. Any modifications to the spatial extent would require an FMP amendment.

### *Fishing Activities that may Adversely Affect EFH*

FMPs must include an evaluation of the potential adverse effects of fishing. The evaluation should consider the effects of each fishing activity on each type of habitat found within EFH, and must describe each fishing activity in detail. The evaluation should give special attention to adverse effects on HAPCs and should identify for possible designation as HAPCs EFH that is particularly vulnerable to fishing activities. The evaluation should consider the establishment of research closure areas or other measures to evaluate the impacts of fishing activities on EFH.

An important distinction is that for MSA-managed fishing activities, FMPs can include restrictions to benefit EFH, while for non-MSA fishing activities, any restrictions must be implemented via a different regulatory pathway. For MSA-managed fishing activities, Councils must act to prevent, mitigate, or minimize any adverse effects from fishing, to the extent practicable, if there is evidence that those effects are more than minimal and not temporary. This may include fishing equipment restrictions, time/area closures, and/or harvest limits. For fishing activities not managed under the MSA (e.g., state-managed fisheries), FMPs must identify potential adverse effects. FMPs may include recommendations to avoid, minimize, or compensate for the adverse effects identified (any such recommendations would be included in the Conservation and Enhancement section). Potential adverse impacts of both MSA and non-MSA fishing activities are described in Appendix C of the Groundfish FMP.

All six public proposals address adverse effects of fishing activities, and all make recommendations for modifying (expanding or reducing) the EFH conservation. The Phase 2 Report recommends applying conservation measures to MSA fishing activities, and recommending conservation measures for non-MSA fishing activities.

The description of fishing activities (both MSA and non-MSA), contained in Appendix C to the Groundfish FMP, can be updated or modified without an FMP amendment. However, any restrictions on fishing activities (e.g., time/area closures or gear restrictions) would likely require an FMP regulatory amendment.

#### *Non-fishing Activities that may Adversely Affect EFH*

FMPs must identify non-fishing activities that may adversely affect EFH. Appendix D to the Groundfish FMP contains descriptions for 24 non-fishing activities and associated conservation measures. The Phase 1 Report contains four new non-fishing activities and recommended conservation measures, as potential additions to Appendix D, which can be updated without an FMP amendment.

#### *Cumulative Impacts Analysis*

FMPs should analyze, to the extent feasible and practicable, how the cumulative impacts of fishing and non-fishing activities influence function of EFH on an ecosystem or a watershed scale. Much of the cumulative impacts analysis would be included as part of analyses conducted under NEPA.

#### *Conservation and Enhancement*

FMPs must identify actions to encourage the conservation and enhancement of EFH. These actions can address adverse effects from non-MSA fishing activities, non-fishing activities, and cumulative impacts. FMPs are required to include such measures to avoid, minimize, or compensate for the identified adverse effects, especially in HAPC areas. Currently, the FMP includes conservation recommendations for non-fishing activities that may adversely affect EFH (Appendix D), which could be updated without an FMP amendment. The FMP also describes non-MSA fishing activities, which could be updated without an FMP amendment. Any minimization measures that are recommendations to other state or federal agencies, or merely descriptive in nature, could be updated without an FMP amendment.

#### *Prey Species*

FMPs should list the major prey species for the species in the FMU, and discuss the location of the prey species' habitat. Fishing or non-fishing actions that reduce the availability of prey species may be considered adverse effects on EFH, if the actions reduce the quality of EFH. While prey are not considered EFH by themselves, prey species can be considered components of the water or substrate that create EFH, much in the same way that temperature, salinity, or submerged aquatic vegetation can contribute to water or substrate being EFH. The NMFS Office of Habitat Conservation issued a guidance memorandum in 2006, clarifying how prey (among other EFH elements) should be addressed in FMPs (NMFS 2006).

The EFH review Phase 1 Report includes new information on prey species, and one public proposal recommends adding information and analysis of prey items, dependence, and prey habitat, including greater specificity of prey. Prey species are currently described in Appendix B3 of the Groundfish FMP, and can be updated without an FMP amendment.

#### *Habitat Areas of Particular Concern*

FMPs should identify specific types or areas of EFH habit areas of particular (HAPC), based on four considerations: 1) the importance of the ecological function provided by the habitat, 2) The extent to which the habitat is sensitive to human-induced environmental degradation, 3) whether, and to what extent, development activities are, or will be stressing the habitat type, and 4) the rarity of the habitat type.

The GF FMP identifies five categories of HAPC: canopy kelp, seagrass, estuaries, rocky reefs, and areas of interest. Canopy kelp and seagrass are biological habitats that can be spatially ephemeral in nature, and therefore difficult to map. Estuaries and rocky reefs are more permanent in nature and spatially discrete, and therefore more easily delineated on a map. Areas of interest are spatially-discrete (and therefore more easily mapped), have unique geological and ecological characteristics, and may include features of the other four HAPCs.

Although there is no additional regulatory requirement inherent in designation of HAPCs, Councils should give special consideration to the importance of HAPCs in developing any minimization or conservation measures such as fishing activity restrictions, non-MSA fishing recommendations, or non-fishing conservation recommendations.

In some cases, but not all, HAPCs are spatially concurrent with Pacific Coast groundfish EFH conservation areas, which have fishing restrictions associated with them. Several of the public proposals include recommendations for designating additional HAPCs, and the Phase 2 Report recommends consideration of updated HAPC maps and consideration of new HAPCs based on new information.

Pacific Coast groundfish HAPCs are described in the FMP. Therefore, any revisions would require an FMP amendment.

#### *Research and Information Needs*

FMPs should contain prioritized recommendations for research that the Council and NMFS view as necessary to improve upon the description and identification of EFH, the identification of threats to EFH for fishing and non-fishing activities, and for the development of conservation and enhancement measures. One public proposal includes recommendations on information and research needs, and the Essential Fish Habitat Review Committee (EFHRC) developed a set of research and information needs in its Phase 1 Report.

Currently, research recommendations are included in the Groundfish FMP, and therefore would require an FMP amendment to modify them. However, research recommendations are often included as an appendix, and therefore easier to update based on newly-identified research needs. In the future, the groundfish FMP's research needs could be removed from the FMP itself, into an appendix. The Council's research and data needs document could include relevant research needs identified during EFH reviews.

#### *Review and Revision of EFH Components*

FMPs must include a process for reviewing and revising EFH, based on new or newly-available information, and periodic reviews should occur at least every five years. The Council typically initiates EFH reviews no later than five years after the completion of the previous review, including completion and final approval of all resulting regulatory or procedural actions.

The Groundfish FMP includes a process to guide periodic EFH reviews, including consideration of new and newly-available information. This includes a specified process for considering new HAPCs, outside of regular periodic reviews. Changes to the process for reviewing groundfish EFH, including the process for considering modified HAPCs, would require an FMP amendment.

## **FISHING AREA MODIFICATIONS**

In September 2014, under the Omnibus Regulation Change Priorities agenda item, the Council recommended removing certain area management restrictions for vessels participating in the shorebased IFQ program and creating a rockfish conservation area (RCA) around 60 Mile Bank (item numbers 47 and 66, respectively in [Agenda Item J.1.a, Attachment 1, September 2014](#)). These items were later recommended to be packaged with the EFH amendment scoping ([Agenda Item I.6.a, Supplemental Joint Council/NMFS Staff Report, September 2014](#)).

### **Area Modification Measures to Consider Including in the Package**

#### *Comprehensive Trawl Rockfish Conservation Area (RCA) Adjustments*

RCAs are areas closed to fishing by particular gear types (e.g., trawl and non-trawl RCA), bounded by lines approximating particular depth contours. RCA boundaries have expanded and contracted over time (Appendix A, Table 1), primarily to control overfished species bycatch while maximizing catch of target species. The Council has also considered RCA modifications to control catch of non-overfished species (e.g., spiny dogfish, longnose skate, and rougheye rockfish). Bottom trawling for groundfish is prohibited in the trawl RCA which may have also provided habitat benefits.

The proposed RCA modifications are intended to promote attainment of the optimal yield (National Standard 1), increase efficiency in utilization of the resource (National Standard 5), minimize costs (National Standard 7), and increase benefits to communities (National Standard 8). Under this measure, the Council should consider whether the rationalized fishery structure provides sufficient bycatch controls (National Standard 9) and whether the Council's habitat objectives are achieved, if RCAs are reduced or eliminated. Impacts to habitat as a result of the proposed action would vary based on the types of gear allowed in newly opened areas (e.g., large or small footrope gears). In 2014, the [GAP](#) ranked RCA adjustments as the second omnibus priority management measure, after widow rockfish reallocation. This measure was also included as in the 2011 [TRREC](#) report.

In April, helpful guidance from the Council would include the anticipated scope of action to be considered under this management measure. Figures 1 and 2 contain selected RCA areas from 48°10' N. latitude to 40°10' N. including information on EFH conservation areas and substrate types. Similar figures to the remaining areas of the coast are anticipated to be provided as a supplemental report.

In 2013, the Council recommended implementing a 100 fm shoreward boundary and 150 fm seaward trawl RCA boundary in the area between 45°46' and 40°10' N. latitude. An [Environmental Assessment](#) prepared by the National Marine Fisheries Service (NMFS) indicated that bottom trawling activities had not occurred in this area since September 2004, which had likely resulted in habitat recovery. NMFS also noted that Fishery Management Plans are required to describe and identify EFH measures to minimize adverse effects on EFH caused by fishing to the extent practicable and to address the "practicable" elements of Section 303(a)(7) of the Magnuson Stevens Act ([Agenda Item F.4.a, Attachment 1, June 2014](#)). Such matters had not been completed in 2013 and resultantly, the seaward RCA boundary remained at 200 fm between 45°46' and 40°10' N. latitude. With the advent of the Phase 1 Report, the Council may now have sufficient information to propose and analyze the impacts of this action. This analysis might be considered the narrowest of the scope of action for RCA adjustments.

The Council has also indicated the desire to revisit the purpose and function of the existing trawl RCA, now that the fishery has been rationalized. That is, vessels participating in the shorebased IFQ program have 100 percent observer coverage and are individually accountable for catch of

IFQ species. The scope of action could include coastwide removal of the RCA with specific, localized closures for habitat areas of interest (e.g., more similar to the Yelloweye and Cowcod Conservation Areas).

Helpful guidance from the Council would include whether the removal of the RCA should be considered on a coastwide scale or if there are specific areas of high overfished species bycatch or habitat areas of interest that should remain closed. For example, should modifications to the RCA north of Cape Alava, which has been closed since 2008 due to canary and yelloweye rockfish bycatch, be considered in the range of alternatives brought forward in September?

The Council might also provide guidance on the scope of gear restrictions for the remaining closed areas (if any). For example, should the remaining closed areas apply only to trawl gears or all gear types utilized in the shorebased IFQ program (i.e., trawl and fixed gears)?

*Year-Round Midwater Non-Whiting Fishery*

Since 2011, midwater fishing within the trawl RCA and EFH conservation areas during the primary whiting season dates has been allowed for vessels targeting non-whiting species (e.g., yellowtail and widow rockfish). Table 1 summarizes information on the existing midwater gear regulations. Table 2 provides information on participation and catch in this fishery.

A year-round season has been proposed to promote attainment of the OY (National Standard 1), increase efficiency in utilization of the resource (National Standard 5), minimize costs (National Standard 7), and benefits to communities (National Standard 8). Under this measure, the Council should consider whether the rationalized fishery structure provides sufficient bycatch controls (National Standard 9) and whether the Council’s habitat objectives are achieved. Some redistribution of impacts to EFH and habitat impacts might be expected, compared to status quo, if year-round opportunities are provided.

In 2014, the [GAP](#) ranked this measure as a second omnibus priority management measure, after widow rockfish reallocation. This measure was also included as a priority task by the [TRREC](#) in 2011. The 2012 [Gear Workshop Report](#) also included this recommendation with an option for the change to be restricted to 40°10 N. lat.

**Table 1. Summary of existing midwater gear regulations.**

Area	Area Restrictions
North of 40°10' N. lat.	None, including within the RCA and EFH areas, during primary whiting season
South of 40°10' N. lat.	Prohibited shoreward of the RCA (currently 100 fm)  During primary whiting season, fishing within the RCA is allowed

**Table 2. Summary data from 2001 to 2013 for vessels targeting non-whiting species with midwater trawl gear.** <sup>a/</sup>

Year	# Vessels	# Trips	Yellowtail Catch (mt)	Widow Catch (mt)	Yellowtail ACL (mt)	Widow ACL (mt)
2013	6	23	391	214	4,378	1,500
2012	7	17	239	9	4,371	600
2011	5	5	11	12	4,364	600

a/ Non-whiting trips are defined as those where the species composition is less than 50% Pacific whiting by weight. Data derived from the PacFIN VDRFD table.

Several anticipated actions in 2015 may influence the level of participation and catch in the midwater non-whiting fishery. On February 17, NMFS issued a proposed rule to change the season opening date in the shorebased IFQ Program for midwater trawl fisheries targeting whiting and non-whiting (see [NMFS Public Notice, February 17](#)). This action moves the season start date a month earlier off Washington and Oregon, and a month and half later off northern California (north of 40°30' N. lat.). NMFS is also expected to issue a whiting cleanup rule that further clarifies the regulations for the midwater non-whiting fishery ([Agenda Item J.4.a, Attachment 1, November 2014](#)). Such clarifications may lead to a greater understanding of the existing opportunities and influence both participation and catch levels. Furthermore, the 2015-2016 ACLs for widow and yellowtail rockfish are larger than in the period 2011-2014.

The Council should also consider the relationship between providing for a year-round midwater fishery and the reconsultation on ESA-listed salmon (see Agenda Item E.3). In 2014, Chinook salmon catch in the midwater fisheries (whiting and non-whiting) exceeded the 11,000 threshold established in regulation and in an Endangered Species Act biological opinion for Chinook salmon. Approximately 14,395 Chinook salmon were caught in midwater fisheries with 798 caught by vessels targeting non-whiting species. NMFS initiated a reconsultation on ESA-listed salmon, and the process is anticipated to be completed in the winter of 2015, which is prior to the anticipated final action for the EFH and Area Modifications action (estimated in June or September 2016).

Helpful guidance from the Council would include whether the year-round season should be considered coastwide or only north of 40°10' N. latitude.

*Small Footrope Requirement Shoreward of the RCA*

Regulations governing bottom trawl gears include footrope diameter restrictions. For example, small footrope gear is restricted to a footrope diameter of 8 inches (20 cm) or smaller, including any rollers, bobbins, or other material encircling or tied along the length of the footrope (see regulatory definitions at 660.11). Diameter restrictions originated as a rockfish bycatch reducing measure (see Section 6.6.1.2 of the FMP). In 2006, Amendment 19 required the use of small footrope gear shoreward of the 100 fm depth contour as a mandatory EFH protection measure (see FMP Section 6.6.1.1).

Removing the small footrope requirement is proposed to promote attainment of the OY (National Standard 1), increase efficiency in utilization of the resource (National Standard 5), minimize costs (National Standard 7), and benefit communities (National Standard 8). Under this measure, the Council should consider whether the rationalized fishery structure provides sufficient bycatch controls (National Standard 9) and whether the Council's habitat objectives are achieved.

Helpful guidance from the Council would include whether the removal of the small footrope requirement should be considered on a coastwide scale, or if specific habitat areas of interest should remain closed to large footrope gears. Additionally, if the trawl RCA is restructured, as described earlier in the document, the distinction “shoreward of the RCA” may no longer be relevant (for example, if there are areas of the coast with no RCA).

*60 Mile Bank in California*

Table 3 contains a summary of the existing commercial fixed gear and recreational fishery depth regulations in Southern California, which are designed to reduce overfished species interactions. These existing regulations do not, however, prohibit fishing in the area known as the 60 Mile Bank (Figure 3). Based on anecdotal information, the 60 Mile Bank may be an area of high cowcod bycatch. Cowcod encountered during commercial and recreational fishing operations must be discarded. In the recreational fishery, surface mortality rates for the demersal guild and depth-based discard mortality rates associated with the use of descending device discard are used to estimate cowcod discard mortality (see Section 1.2 in the [Status of the Pacific Coast Groundfish Fishery](#)). In the commercial fishery, all discarded cowcod are assumed to die. In 2014, the [GAP](#) ranked this measure as a fourth omnibus priority management measure.

The primary purpose of this measure is to reduce cowcod bycatch and promote rebuilding by prohibiting fishing in an area that is expected to have high bycatch (National Standard 9). The purpose could be achieved by establishing coordinates in regulation further defining the 60 fm RCA line, or creating an area closed to fishing around the 60 Mile Bank. Prohibiting fixed gears, both recreational and commercial, in the newly proposed closed area would provide some habitat benefits.

**Table 3. Summary of existing commercial fixed gear and recreational fishery depth regulations in Southern California.**

Sector	Area	Open Dates	Area Closed
Recreational	South of 34°27' N. lat.	March 1 to December 31	Seaward of 60 fm, Western and Eastern CCAs
Commercial	South of 40°10' N. lat.	Year-round	60 to 100 fm, Western and Eastern CCAs

**Area Modification Measures to Consider Removing from the EFH Package**

The description of omnibus item #47 was broad and included recommendations from the Trawl Rationalization Regulatory Evaluation Committee (TRREC, [Agenda Item E.7.b, Supplemental TRREC Report, November 2011](#)) and Gear Workshop Report ([Agenda Item I.5.a, Attachment 4, November 2012](#)). There were two items contained in the description of item #47 that may not have a strong link to the EFH and area modifications package. As such, the Council may wish to consider moving these items to another regulatory package currently scheduled for Council action or to the omnibus list for future prioritization.

*Fishing in more than one IFQ management area*

The TRREC recommended that gear movement and fishing across IFQ management areas in the shorebased IFQ program be evaluated ([Agenda Item E.7.b, Supplemental TRREC Report, November 2011](#)). The Gear Workshop Report focused only on the ability to move gear across management lines ([Agenda Item I.5.a, Attachment 4, November 2012](#)). Movement of gear is scheduled to be evaluated under Agenda Item I.1 Regulations for Vessel Movement Monitoring

(VMM). The primary impact of allowing fishing in more than one area is related to catch accounting and enforcement (i.e., can fishermen and the monitoring system keep track of catch by IFQ management area). The habitat impacts of allowing fishing in more than one area are likely to be the same as status quo since the same legal gears would be used. This measure is primarily an efficiency measure for vessels that fish in areas close to management lines. As such, this measure might be best considered in another package. Placement of this issue in the VMM package would be one approach; however, fishing in more than one area is more complex than the other issues in the VMM package. Increasing the complexity and scope of the VMM package may affect the VMM implementation timeline, which should be taken into before making such a decision.

*Eliminate the selective flatfish trawl gear (SFFT) requirement, shoreward of RCA*

This action would eliminate the requirement to use SFFT north of 40°10' N. latitude, shoreward of the RCA (there is no requirement for its use in the south). The basis for the recommendation is to provide for new net configurations and designs, including effective placement of flexible grates to exclude non-target species (e.g., Pacific halibut). The [2012 Gear Workshop](#) report recommended that the definition of SFFT and all language referring to it be removed from the regulations. As such, this action may have little relationship to habitat impacts, given that SSFT is a small footrope gear and in the absence of the SSFT requirement, small footrope gear would still be required. This item may be more appropriate to consider under the Gear Regulations Updates, which is scheduled for Council consideration and adoption of a range of alternatives in September 2015.

**CLEAN UP ACTIONS TO CORRECT MINOR MISTAKES, CLARIFY INTENT, ETC**

Invariably, minor mistakes find their way into final products, and we anticipate making corrections and improvements to the FMP, as necessary, via the amendment process. In some cases, relatively minor changes can help the user interpret and understand the FMP's intent. For example, we currently use a mix of meters and fathoms to describe depth; using fathoms throughout will provide consistency and clarity. In other cases, the location of certain features (e.g., the location of Potato Bank) are incorrect. Both such cases represent minor corrections that can be implemented during this action.

**Table 4.** Table of items/issues to be consider for inclusion in an FMP amendment, Regulatory Amendment, and/or other action: Groundfish Essential Fish Habitat and Area Modifications

<b>Item</b>	<b>Description</b>	<b>Purpose</b>	<b>Pathway</b>
1. Description and Identification <sup>1</sup> : Habitat Components	This refers to description and identification of <u>habitat components</u> for all managed GF species, based on habitat needs by life stage.	EFH must be described for several FMP species that do not yet have EFH described for them. The Council concluded that the EFH review compiled enough new and newly available information to warrant further consideration of revisions to habitat descriptions and life stage summaries.	Appendix B may be revised outside of an FMP amendment
2. Description and Identification: Spatial Extent	This refers to the description and identification <sup>2</sup> of the <u>spatial extent</u> of GF EFH. Currently, the spatial extent of GF EFH is described as all waters and substrate in depths less than or equal to 3,500 meters, to MHHW; seamounts in depths greater than 3,500m; and HAPCs not already identified by the above criteria.	EFH regulations require spatial delineation of EFH. The Council concluded that the EFH review compiled sufficient new and newly-available information to warrant further consideration of revisions to the spatial extent of EFH.	Revisions to spatial extent of EFH will require an FMP amendment
3. Adverse effects of fishing (MSA and non-MSA) and minimization measures (i.e., spatial or temporal closed areas)	The Groundfish FMP includes evaluation of federally-managed fishing activities that may adversely affect EFH, and includes measures to minimize those effects to the extent practicable. For non federally-managed fishing activities, the FMP describes the impacts but is not required to include minimization measures.	EFH regulations require evaluation of potential adverse effects of MSA fishing activities, and minimization of adverse effects to the extent practicable. FMPs must also identify non-MSA fishing activities that may adversely affect EFH. The Council concluded that the EFH review	Appendix C (description of fishing activities) may be revised without an FMP amendment, although fishing activity or area

<sup>1</sup> Typically, “description and identification” includes both spatial designation as well as detailed descriptions of habitat needs by life stage. They are broken out here into two categories.

Item	Description	Purpose	Pathway
		compiled sufficient new or newly-available information to warrant further consideration of revisions to the evaluation of MSA fishing activities, adverse effects, and potential minimization measures, as well as further identification of non-MSA fishing activities.	restrictions may require an FMP amendment
4. Non-fishing effects and conservation measures	Appendix D to the Groundfish FMP describes non-fishing activities that may adversely affect EFH, and develop conservation recommendations to avoid, minimize, or compensate such activities (see “Conservation and Enhancement”). Conservation Recommendations are typically used by NMFS during EFH consultations.	FMPs must describe known and potential effects of any non-fishing activities that may adversely affect EFH. The Phase 1 Report includes descriptions for four new non-fishing activities and associated conservation measures, and the Council concluded that the EFH review compiled enough new information to warrant further consideration of revisions to the non-fishing impacts section.	Appendix D of GF FMP
5. Cumulative impacts analysis	The Groundfish FMP’s EIS for Amendment 19 includes analysis of cumulative impacts, including the existing and potential effects of fishing and non-fishing activities, and their influence on the functioning of EFH on an ecosystem or a watershed scale. This cumulative impacts analysis is typically conducted as part of the NEPA process and document development, rather than within the FMP itself.	Both NEPA and the EFH regulations require cumulative impacts analysis, in order to address the incremental effects of actions when added to other past, present, and reasonably foreseeable actions. Cumulative effects are analyzed in the NEPA process and therefore could possibly be removed as a stand-alone action.	NEPA analysis
6. Conservation and Enhancement	The conservation and enhancement measures section of an FMP is designed to contain any minimization measures identified in the non-	The purpose of conservation and enhancement measures is to ensure that impacts to EFH from non-MSA	TBD

Item	Description	Purpose	Pathway
	MSA fishing section, the non-fishing impacts section, and the cumulative effects section. The Groundfish FMP does not currently include any conservation measures outside of the MSA fishing restrictions and the non-fishing impacts information.	fishing activities, non-fishing activities, and cumulative impacts are adequately addressed, including potential conservation measures. FMPs are required to include such measures to avoid, minimize, or compensate for the identified adverse effects, especially in HAPC areas.	
7. Prey species	To the extent that prey species contribute to the value of waters and substrate as EFH, FMPs include descriptions of major prey items for each managed species, including the prey's habitat. Groundfish prey items are currently described in Appendix B3 of the FMP, as part of the life history descriptions of managed groundfish species.	The EFH regulatory guidance states that FMPs should list the major prey species for managed species, and should discuss the location of the prey species' habitat. The presence of prey items can make waters and substrate function as feeding habitat. It follows that activities causing an adverse effect to identified prey items should be minimized to the extent practicable.	Appendix B3 of GF FMP
8. Habitat Areas of Particular Concern	HAPCs are areas or components within EFH that are particularly important, based on four considerations: 1) ecological importance, 2) sensitivity to human-induced environmental degradation, 3) whether development activities may stress the habitat, and 4) rarity of the habitat. The GF FMP identifies five categories of HAPC: canopy kelp, seagrass, estuaries, rocky reefs, and areas of interest.	Recognizing that EFH is often described broadly and encompasses large geographic areas, the EFH regulatory guidance provides a way to highlight particularly important habitat that should be given special consideration in the context of evaluating fishing and non-fishing impacts.	Changes to HAPCs require FMP amendment
9. Research and Information Needs	Research recommendations that will improve the identification and description of EFH, potential threats from fishing or other activities, and conservation and enhancement	The EFH regulatory guidance states that FMPs should include prioritized research recommendations, to improve the description and	Currently in the FMP, therefore requiring an FMP amendment to

Item	Description	Purpose	Pathway
	measures, are typically included in FMPs. The GF FMP currently includes research recommendations.	identification of EFH, in order to identify potential threats from fishing and non-fishing activities, and to further refine conservation and enhancement measures	modify them. However, an FMP amendment could move research recommendation to an appendix
10. Review and Revise Process	A process to guide periodic EFH reviews, including consideration of new and newly-available information, is included in the GF FMP. This includes a specified process for considering new HAPCs, outside of regular periodic reviews.	The EFH regulatory guidance states that FMPs should outline a process the Council will follow to review and update EFH information. Utilizing new and newly-available information to identify and describe EFH elements will assist the Council in determining the optimal application of protective measures.	Amending the review/revision process requires an FMP amendment
11. Comprehensive Trawl RCA Adjustments (#47)	RCAs were implemented to promote rebuilding of overfished rockfish species and have been used to protect a complex of species. RCA closures have also provided habitat benefits. This measure would reduce or remove areas closed to trawl gears by the existing trawl RCA. Remaining closed areas could be classified as IFQ RCA closures (i.e., apply to all gears used in the shorebased IFQ program).	These modifications are intended to promote attainment of the OY (NS1), increase efficiency in utilization of the resource (NS5), minimize costs (NS7), and benefit communities (NS8). Under this measure, the Council should consider whether the rationalized fishery structure provides sufficient bycatch controls (NS9) and whether the Council's habitat objectives are achieved.	Regulatory amendment, update descriptions of the purpose in FMP
12. Allow year-round midwater non-whiting fishery (#47)	A midwater non-whiting fishery, which is limited to the primary whiting season dates, has reemerged. This measure would reestablish a year-round fishery, including fishing within in the RCA and EFH Conservation Areas.		Regulatory amendment; update fishery description in FMP

<b>Item</b>	<b>Description</b>	<b>Purpose</b>	<b>Pathway</b>
13. Remove small footrope restrictions shoreward of the RCA (#47)	This action would allow the use of large footrope gear shoreward of the RCA		Regulatory and FMP amendment
14. Close the 60-mile Bank to reduce cowcod bycatch (#66)	Establish coordinates in regulation further defining the 60 fm line or create an area closed to fishing around the 60 Mile Bank	The primary purpose of the action is close an area that is expected to have high cowcod bycatch to promote rebuilding (NS9). Implementing a closed area is also expected to provide habitat benefits.	Regulatory amendment, update descriptions in FMP
15. Fishing in more than one IFQ area	Allow shorebased IFQ vessels to fish in more than one IFQ area	These modifications are intended to promote attainment of the OY (NS1), increase efficiency in utilization of the resource (NS5), minimize costs (NS7), and benefit communities (NS8).	Consider in another package, as appropriate
16. Eliminate the SFFT requirement shoreward of the RCA	Eliminate the SFFT requirement shoreward of the RCA north of 40°10' N. latitude		

### Sources

Trawl Rationalization Regulatory Evaluation Committee (TRREC) – TRREC Report: [Agenda Item E.7.b, Supplemental TRREC Report, November 2011](#).

Gear Workshop Report: [Agenda Item I.5.a, Attachment 4, November 2012](#).

Groundfish Management Measures for Council Consideration (Omnibus Regulation Priorities): [Agenda Item J.1.a, Attachment 1, September 2014](#).

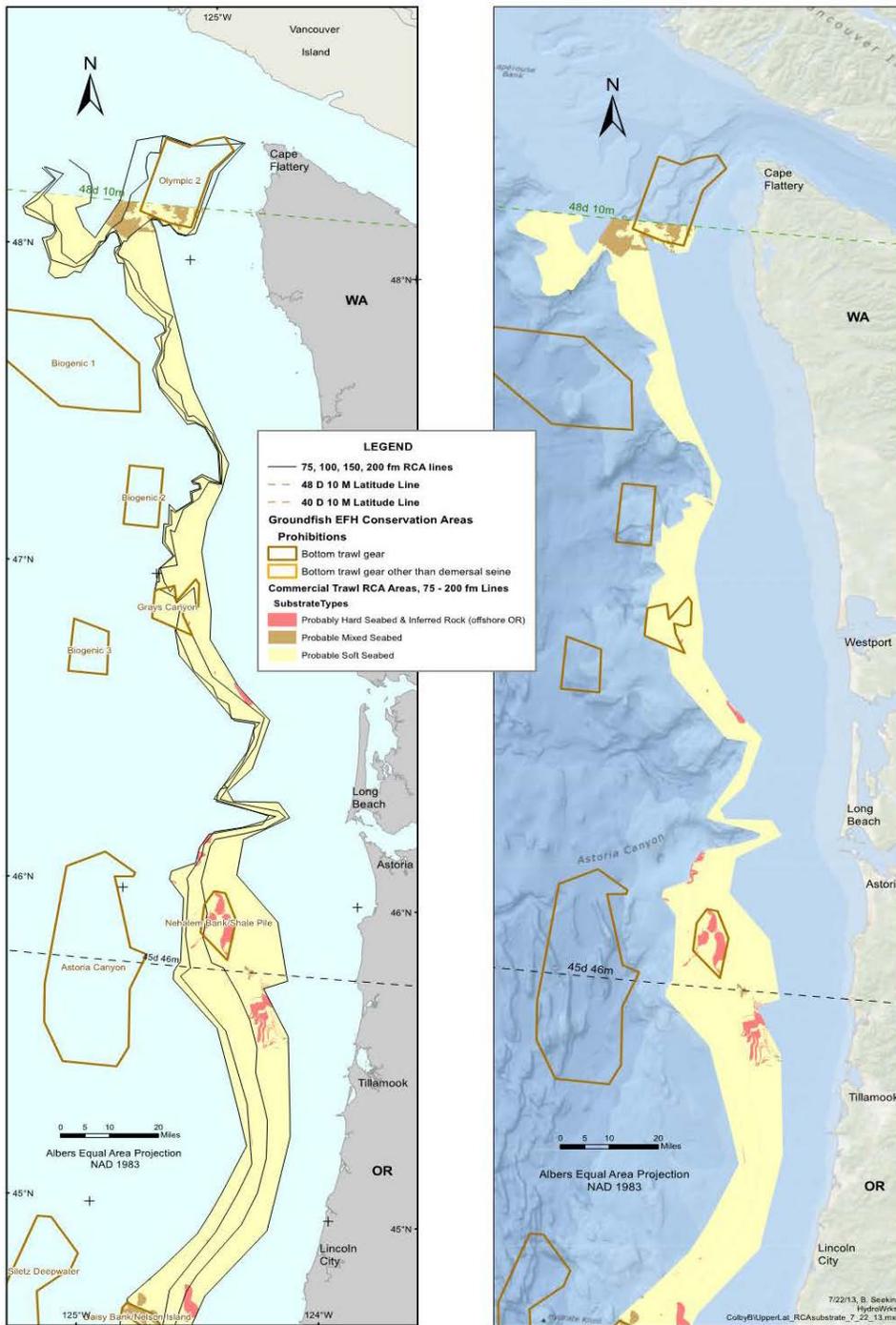
Groundfish Advisory Subpanel (GAP) Report on Omnibus Regulation Change Priorities: [Agenda Item J.1.c, Supplemental GAP Report, September 2014](#)

EFH Review [Phase 1 Report](#): Agenda Item H6b, EFHRC Report 1, September 2012.

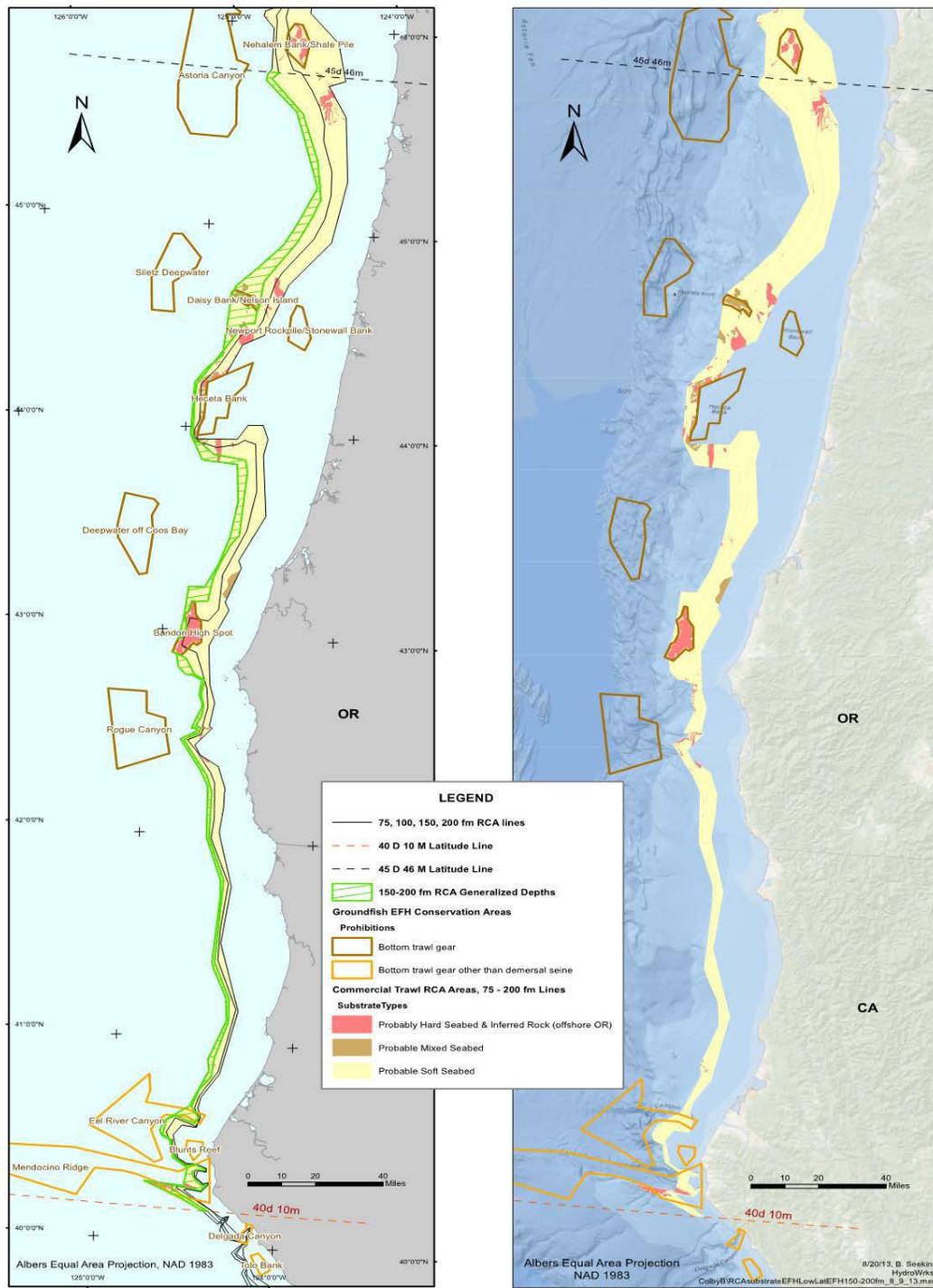
EFH Review [NMFS Synthesis Report](#), April, 2013.

EFH Review [NMFS Synthesis Report](#) Appendices, April, 2013.

EFH Review [Phase 2 Report](#): Agenda Item D2b, EFHRC Report, March 2014.



**Figure 1.** Selected RCA areas from 48°10' N. latitude to 45°46' N. latitude including information on EFH conservation areas and substrate types. Interval by fathom area is represented in 75, 100, 150, and 200 fathom lines (excerpted from [Final Environmental Assessment \(EA\) for Bottom Trawl Rockfish Conservation Areas \(RCA\)](#)).



**Figure 2.** Selected RCA areas from 45°43' N. latitude to 40°10' N. latitude including information on EFH conservation areas and substrate types. Interval by fathom area is represented in 75, 100, 150, and 200 fathom lines (excerpted from [Final Environmental Assessment \(EA\) for Bottom Trawl Rockfish Conservation Areas \(RCA\)](#)).

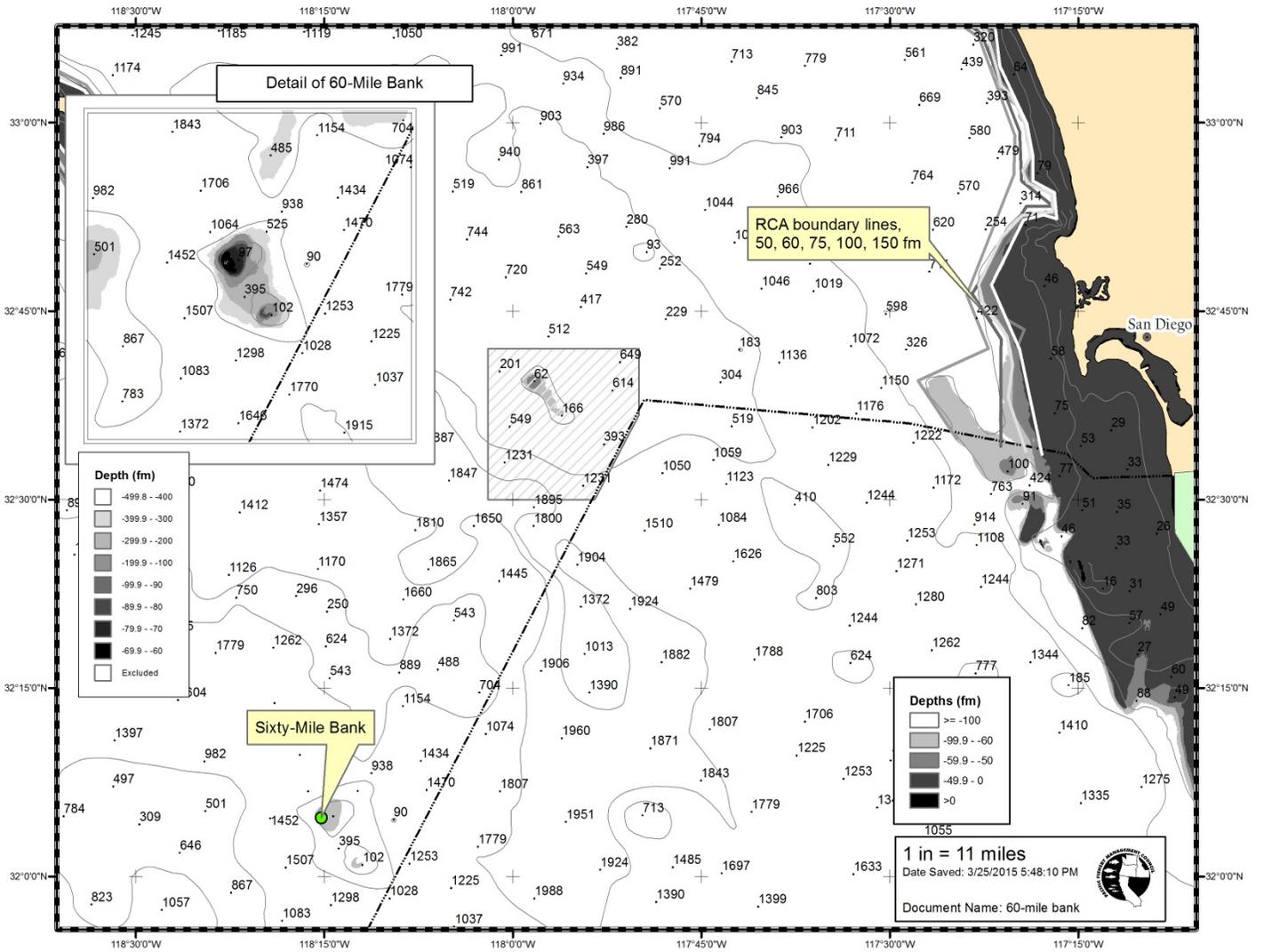


Figure 3. 60-Mile Bank off southern California.

# Appendix A. Historical Trawl RCA Configurations.

**Table 1. Limited entry trawl RCA depth boundaries by year and month, 2002 - 2015, including inseason changes.**

Year	Area	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
2015a	North of 48°10'	0 - m200		0 - 200			0 - 150			0 - 200		0 - m200	
	48°10' - 45°46'						100 - 150						
	45°46' - 40°10'						100 - m200						
	40°10' - 34°27'						100 - 150						
	South 34°27' (mainland)						0 - 150						
2014a	North of 48°10'	0 - m200		0 - 200			0 - 150			0 - 200		0 - m200	
	48°10' - 45°46'						100 - 150						
	45°46' - 40°10'	100 - m200					100 - 200					100 - m200	
	40°10' - 34°27'						100 - 150						
	South 34°27' (mainland)						0 - 150						
2013a	North of 48°10'	0 - m200		0 - 200			0 - 150			0 - 200		0 - m200	
	48°10' - 45°46'	75 - m200		75 - 150			100 - 150				75 - 150		
	45°46' - 40°10'			75 - 200			100 - 200					75 - m200	
	40°10' - 34°27'						100 - 150						
	South 34°27' (mainland)						0 - 150						
2012a	North of 48°10'	0 - m200		0 - 200			0 - 150			0 - 200		0 - m200	
	48°10' - 45°46'	75 - m200		75 - 150			100 - 150				75 - 150		
	45°46' - 40°10'			75 - 200			100 - 200					75 - m200	
	40°10' - 34°27'						100 - 150						
	South 34°27' (mainland)						0 - 150						
2011a	North of 48°10'	0 - m200		0 - 200			0 - 150			0 - 200		0 - m200	
	48°10' - 45°46'	75 - m200		75 - 200		75 - 150	100 - 150			75 - 150			
	45°46' - 40°10'					75 - 200	100 - 200			75 - 200		75 - m200	
	40°10' - 34°27'						100 - 150						
	South 34°27' (mainland)						0 - 150						
2010a	North of 48°10'	0 - m200		0 - 200			0 - 150			0 - 200		0 - m200	0 - 250
	48°10' - 45°46'	75 - m200		75 - 200		75 - 150	100 - 150			75 - 200		75 - m200	75 - 250
	45°46' - 40°10'					75 - 200	100 - 200						
	40°10' - 34°27'						100 - 150						
	South 34°27' (mainland)						0 - 150						
2009a	North of 48°10'	0 - m200		0 - 200			0 - 150			0 - 200		0 - m200	
	48°10' - 45°46'	75 - m200		75 - 200		75 - 150	100 - 150			75 - 200		75 - m200	
	45°46' - 40°10'					75 - 200	100 - 200						
	40°10' - 34°27'						100 - 150						
	South 34°27' (mainland)						0 - 150						
2008a	North of 48°10'	0 - m200		0 - 200			0 - 150			0 - 200		0 - m200	
	48 10 - 46 38 17			60 - 200			60 - 150			75 - 150			
	46 38 17 - 46 16	75 - m200			60 - 200		60 - 150			75 - 200		75 - m200	
	46 16 - 45 46			75 - 200			75 - 150			75 - 200			
	45 46 - 43 20 83						75 - 200						
	43 20 83 - 42 40 50	0 - m200					0 - 200					0 - m200	
	42 40 5 - 40 10	75 - m200		75 - 200			60 - 200			75 - 200		75 - m200	
	40 10 - 34 27						100 - 150						
	South 34 27 (mainland)						0 - 150						
	South 34 27 (islands)						0 - 150						
2007a	North of 48°10'						0 - 150			0 - 200	75 - 200		
	48°10' - 46°03'						75 - 150			75 - 200			
	46°03' - 46°16'						60 - 150			60 - 200			
	46°16' - 45°03'	75 - m250		75 - 250			75 - 150			75 - 200		75 - m200	
	45°03' - 43°20'						75 - 200						
	43°20' - 42°40'						0 - 200				75 - 200		
	42°40' - 40°10'						75 - 200						
	40°10' - 38°	100 - m200								100 - 150		100 - m200	
	38° - 34°27'									100 - 150			
	South 34°27' (mainland)									0 - 150			
South 34°27' (islands)									0 - 150				
2006a	North 40 10	75 - m200			75 - 200			100 - 250		75 - 250		75 - m250	
	40 10 - 38							100 - 200		100 - 250			
	38 - 34 27	75 - 150			100 - 150					100 - 150		75 - 150	
	South 34 27 (mainland)												
	South 34 27 (islands)									0 - 150			
2005a	North 40 10	75 - m200						100 - 200				0 - 250	
	40 10 - 38				100 - 200			100 - 150				0 - 200	
	38 - 36												
	36 - 34 27	75 - 150						100 - 150				50 - 200	
	South 34 27 (mainland)												
South 34 27 (islands)									0 - 150			0 - 200	
2004	North 40 10	75 - m200		60 - 200		60 - 150		75 - 150				0 - 250	
	40 10 - 38											0 - 200z	
	38 - 36												
	36 - 34 27			75 - 150z				100 - 150z		75 - 150z		0 - 150	
	South 34 27 (mainland)												
South 34 27 (islands)									0 - 150				
2003	North 40 10	100 - m250		100 - 250		50 - 200		75 - 200		50 - 200			
	40 10 - 38	50 - m250		60 - 250									
	38 - 34 27	50 - 150		60 - 150				60 - 200					0 - m200
	South 34 27 (mainland)			100 - 150				100 - 200					
	South 34 27 (islands)			0 - 150				0 - 200					
2002	North 40 10	Within DBCA - CLOSED TO TRAWLING, September - December, special footrope requirements outside DBCA											

mThe "modified" depth line is modified to exclude certain patrol area areas from the RCA.

aSelective flatfish trawl required shoreward of the RCA north of 40 10