

PACIFIC COAST GROUND FISH FISHERY MANAGEMENT PLAN

**FOR THE CALIFORNIA, OREGON, AND
WASHINGTON GROUND FISH FISHERY**

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Changes to the FMP since Amendment 4 (July 1993)

Current Chapters	Previous Chapters (July 1993 Version)	Summary of Amendment Changes
Chapter 1 Introduction	Chapter 1 Introduction	Updated by Amendment 18
Chapter 2 Goals and Objectives	Chapter 2 Goals and Objectives	Amendments and additions, no substantial change in organization. (Amendments 12, 13, 16-1, 17, 18, 24, and 30.)
Chapter 3 Areas and Stocks Involved	Chapter 3 Areas and Stocks Involved	Amendments and additions, no substantial change in organization. (Amendment 16-1.) Specification of Ecosystem Component (EC) species added under Amendment 24. EC species shared by all four West Coast FMPs added under Amendment 25. Re-designated big skate as an actively managed species under Amendment 27. Designated shortbelly rockfish as an EC species under Amendment 29. Stocks of black, canary, copper, quillback, squarespot, vermillion, vermillion/sunset rockfishes; Dover, petrale, and rex soles; lingcod, Pacific spiny dogfish, sablefish, and shortspine thornyhead were defined under Amendment 31. Stocks of chilipepper, redbanded, roughey/blackspotted, widow, yellowtail, yelloweye rockfishes, and English sole were defined under Amendment 35. Under Amendment ##: blackspotted, canary, chilipepper, redbanded, roughey, squarespot, vermillion, sunset, widow, yellowtail, and yelloweye rockfishes; Dover, petrale, flathead, and rex soles; lingcod, Pacific spiny dogfish, sablefish, and shortspine thornyhead were identified as in need of conservation and management in the EEZ -though stocks were not redefined. Big skate, longnose skate, Pacific cod, Pacific hake, Pacific sanddab, California scorpionfish, longspine thornyhead, bocaccio, cowcod, Pacific ocean perch, and aurora, bank,

Current Chapters	Previous Chapters (July 1993 Version)	Summary of Amendment Changes
		blackgill, , darkblotched, greenspotted, greenstriped, redstripe, sharpchin, shortraker, silvergray, splitnose, starry, and yellowmouth rockfishes were identified as in need of conservation and management in the EEZ and their stocks were defined under Amendment 3x -as shown in Table 3-3 and Table 3-4. Table 3-5 was speciated to show specific EC species Under Amendment ##: Black, blue, copper, deacon, and quillback rockfishes, cabezon, and kelp greenling were identified as in need of conservation and management in the EEZ and their stocks were defined un-as shown in Table 3-3 and Table 3-4. Bronzespotted, flag, greenblotched, Mexican, rosy, speckled, and tiger rockfishes, butter, curlfin, rock, and sand soles, and starry flounder were identified as EC species under, as shown in Table 3-5. Black (CA), blue (CA), black and yellow, brown, calico, copper (CA), chameleon, China, dwarf-red, freckled, grass, gopher, half-banded, harlequin, honeycomb, light dusky, olive, pink, pinkrose, pygmy, swordspine, and treefish rockfishes, cabezon (CA/OR), kelp greenling (CA/OR), and leopard shark were identified as not in need of conservation and management in the EEZ and removed from the FMP. The title “Section 3.4” was added to specify shared EC species section.
Chapter 4 Optimum Yield	Chapter 4 Optimum Yield	Substantially changed and expanded by Amendment 16-1, which moved and revised material on determining OFL, OY, precautionary thresholds, and rebuilding overfished species that was in Chapter 5 into this chapter. Amendments 16-2 and 16-3 add rebuilding plan summaries to section 4.5.4. Amendment 16-4 revises rebuilding plans in section 4.5.4. Substantially changed and expanded by Amendment 23, which provided material on specifying OFLs, redefined ABCs, ACLs, and ACTs. Amendment 30 to specify 2,000 mt

Current Chapters	Previous Chapters (July 1993 Version)	Summary of Amendment Changes
		threshold for shortbelly rockfish to trigger Council review of fishery Amendment 33 added rebuilding parameters and plans for yelloweye rockfish and California quillback rockfish to section 4.6.3.
Chapter 5 Specification and Apportionment of Harvest Levels	Chapter 5 Specification and Apportionment of Harvest Levels	Substantially changed by Amendment 16-1, which moved material to Chapter 4, as noted above. Discussion of DAH, DAP, JVP, and TALFF deleted. (Also, Amendments 12, 13, 17, and 18.) Substantially changed by Amendment 23, which incorporated new National Standard 1 guidelines and mandates of the 2006 reauthorization of the Magnuson-Stevens Act. Default harvest control rule process added under Amendment 24.
Chapter 6 Management Measures	Chapter 6 Management Measures	Substantially reorganized and changed by Amendment 18 and 19. (Also Amendments 10, 11, 13, 16-1, 17, 20, 21, 21-1, 21-2, 21-3, 21-4, 23, 24, 25, 27, 28, 29, and 30.) Chapter 6 changed to reflect Amendment 28: 1) Elimination of the trawl RCA off Oregon and California, 2) changed configuration of EFH closed areas, and 3) Closure to bottom contact fishing deeper than 3500m. Formal allocations for lingcod south of 40°10' N lat., Minor Slope Rockfish south of 40°10' N lat., petrale sole, and widow rockfish removed from the FMP under Amendment 29. Amendment 30 amended language to Seasons (6.8.1), Rockfish Conservation Areas (6.8.2), and language describing the function and use of Block Area Closures (6.8.3). Amendment 32 removed CCAs for non-trawl and recreational fishing and added new groundfish exclusion areas (GEAs) (6.8.10). Amendment 33 revised Table 6-1 to show removal of formal allocation of shortspine thornyhead. Amendment 34 removed list of GEAs from FMP (6.8.10)
	Chapter 7 Experimental Fisheries	Renumbered Chapter 8
	Chapter 8 Scientific Research	Renumbered Chapter 9

Current Chapters	Previous Chapters (July 1993 Version)	Summary of Amendment Changes
Chapter 7 Essential Fish Habitat		New Chapter created by Amendment 19 from substantially revised material previously in Chapter 6. Updated to reflect new EFH conservation area configuration under Amendment 28, and to remove review/revision process from FMP text. Amendment 32 added new non-trawl bottom contact groundfish and non-tribal directed commercial halibut EFHCAs.
Chapter 8 Experimental Fisheries		Renumbered and revised by Amendment 18.
Chapter 9 Scientific Research		Renumbered, no other changes.
	Chapter 9 Restrictions on Other Fisheries	Deleted with material incorporated into Chapter 6.
Chapter 10 Procedures for Reviewing State Regulations	Chapter 10 Procedures for Reviewing State Regulations	Background section revised by Amendment 18.
	Chapter 11 Appendices	Published under separate cover.
	Chapter 12 Management Measures that Continue in Effect with Implementation of Amendment 4	Deleted with material incorporated into Chapter 6.
	Chapter 13 References	Moved to an unnumbered section at the end of the document.
Chapter 11 Groundfish Limited Entry	Chapter 14 Groundfish Limited Entry	Renumbered; Amendment 15 modification to section 11.2.12, current section 11.5 inserted as new. Revisions under Amendment 20 including the removal of Amendment 15 text in section 11.2.12. Changed and expanded by Amendment 21.
References		Previously Chapter 13
Guide to Appendices		Previously Chapter 11 contained descriptive information brought forward from the original FMP. This material moved to Appendix A. Three new appendices (B-D) were added by Amendment 19. Appendix E by Amendment 20. Amendment 33 removed Appendix F, in part, to the SAFE document. Relevant rebuilding information added to Section 4.6.3 Amendment 28 re-organized some Appendices. Appendices B.2, B.3, and B.4 were merged to provide life

Current Chapters	Previous Chapters (July 1993 Version)	Summary of Amendment Changes
		history, habitat information, and information on habitat suitability modeling in one appendix. Appendix B.5 was eliminated, replaced by the Council's Research and Data Needs Document, which incorporates research needs identified during the Amendment 28 process. Appendix C Part 1 was archived and is available on the Council's website. Appendix C Part 2 was updated with recent information and renamed Part 1.

A note on other annotations: Amended parts of the FMP subsequent to Amendment 4, which substantially revised the original FMP, are denoted at the end of chapters or sections by amendment number.

LIST OF ACRONYMS AND ABBREVIATIONS

ABC	Acceptable biological catch
ACL	Annual catch limit
ACT	Annual catch target
AM(s)	Accountability measure(s)
BAC	Block Area Closure
BC EFHCA	Bottom contact essential fish habitat conservation area
BT EFHCA	Bottom trawl essential fish habitat conservation area
CCA	Cowcod Conservation Area
CDFG	California Department of Fish and Game
CPUE	Catch per unit of effort
CRCZ	Columbia River Conservation Zone
CRFS	California Recreational Fisheries Survey
CV	Catcher vessel
DAH	Domestic annual harvest
DAP	Domestic annual processing
DSCS	Deep sea coral and sponge
EC	Ecosystem component
EEZ	Exclusive economic zone
EFH	Essential fish habitat
EFHCA	Essential fish habitat conservation area
EFP	Exempted fishing permit
EIS	Environmental Impact Statement
ESA	Endangered Species Act
FMP	Fishery management plan
FMU	Fishery management unit
GAP	Groundfish Advisory Subpanel
GCA	Groundfish Conservation Area
GEA	Groundfish Exclusion Areas
GFA	Groundfish fishing area
GIS	Geographic information system
GMT	Groundfish Management Team
HAPC	Habitat Area of Particular Concern
HCR	Harvest control rule
HG	Harvest guideline
HSP	Habitat suitability probability
HUD	Habitat Use Database
IFQ	Individual fishing quota
IFQ	Individual fishing quota
INPFC	International North Pacific Fisheries Commission
JV	Joint-venture
JVP	Joint-venture processing
KRCZ	Klamath River Conservation Zone
LE	Limited entry
Magnuson-Stevens Act	Magnuson-Stevens Fishery Conservation and Management Act
MARPOL	International Convention for the Prevention of Pollution from Ships
MBTA	Migratory Bird Treaty Act
MFMT	Maximum fishing mortality threshold
MHHW	Mean higher high water level
MLR	Minimum landing requirement

MMPA	Marine Mammal Protection Act
MPA	Marine protected area
MRFSS	Marine Recreational Fisheries Statistical Survey
MSST	Minimum stock size threshold
MSY	Maximum sustainable yield
NEPA	National Environmental Policy Act
NMFS	National Marine Fisheries Service
ODFW	Oregon Department of Fish and Wildlife
OFL	Overfishing limit
ORBS	Ocean Recreational Boat Survey (Oregon Department of Fish and Wildlife)
OSP	Washington Department of Fish and Wildlife Ocean Sampling Program
OY	optimum yield
PacFIN	Pacific Fishery Information Network
POP	Pacific ocean perch
PRA	Paperwork Reduction Act
PSMFC	Pacific States Marine Fisheries Commission
RCA	Rockfish Conservation Area
RecFIN	Recreational Fisheries Information Network
SAFE	Stock Assessment and Fishery Evaluation
SDC	Status determination criteria
SEBS	Shore and Estuary Boat Survey (Oregon Department of Fish and Wildlife)
Secretary	U.S. Secretary of Commerce
SFA	Sustainable Fisheries Act
SPR	Spawning biomass per recruit
SSC	Scientific and Statistical Committee
STT	Salmon Technical Team
U&A	Usual and Accustomed Area (Tribal)
USFWS	U.S. Fish and Wildlife Service
VMS	Vessel monitoring system
YRCA	Yelloweye Rockfish Conservation Area

CHAPTER 3 AREAS AND STOCKS INVOLVED

The management regime of this FMP applies to:

1. The U.S. EEZ of the northeast Pacific ocean that lies between the U.S.-Canada border (as specified in Federal Register, Volume 42, Number 44, March 7, 1977, page 12938) and the U.S.-Mexico border (Figure 3-1).
2. All foreign and domestic commercial and recreational vessels which are used to fish for groundfish in the management area
3. Groundfish species of this fishery management unit (FMU) (Table 3-1).
4. All groundfish stocks comprising this FMU (Table 3-2).

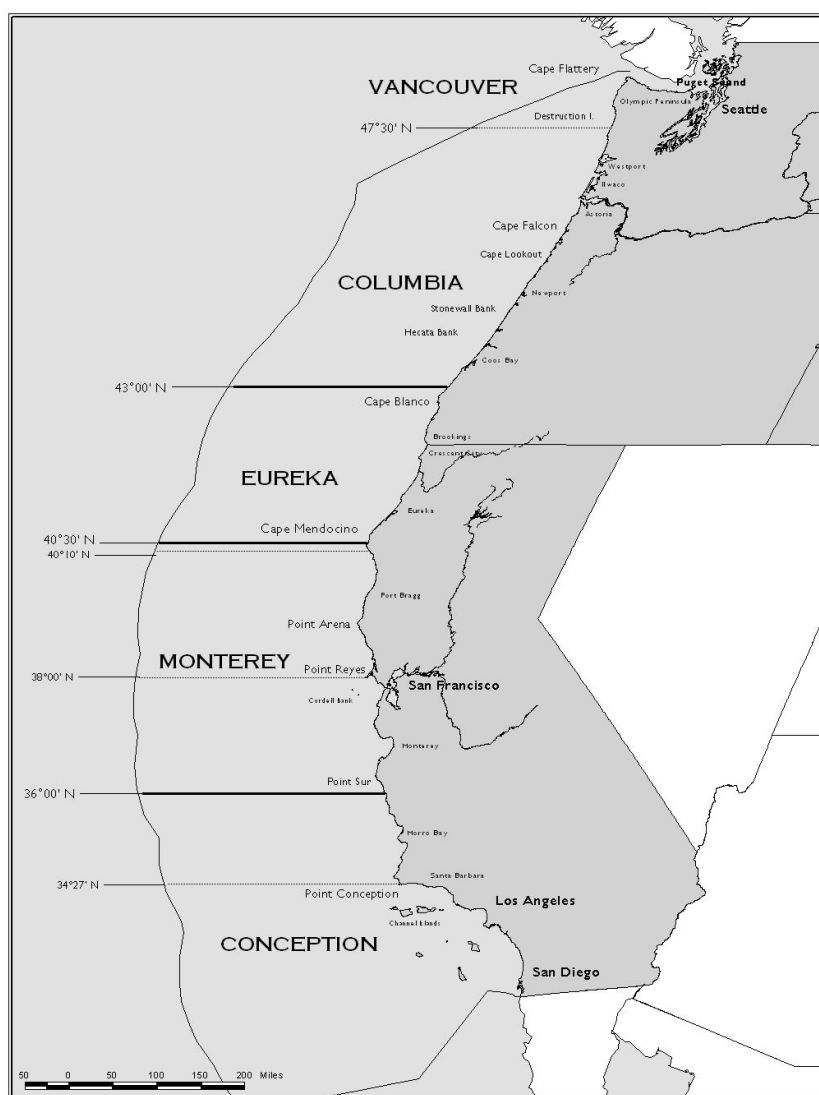


Figure 3-1. International North Pacific Fisheries Commission (INPFC) statistical areas in the U.S. exclusive economic zone seaward of Washington, Oregon, and California.

Management Areas. Upon consideration of stock distribution and domestic and foreign historical catch statistics, the following statistical areas (Figure 3-1) have been determined by the Pacific Fishery Management Council (Council) to be the most convenient administrative and biological management areas. These areas are based on International North Pacific Fisheries Commission (INPFC) statistical areas, but in some cases have been modified slightly. The areas are, from south to north:

Conception - Southern boundary of EEZ to 36°00' N latitude
 Monterey - 36°00' N latitude to 40°30' N latitude
 Eureka - 40°30' N latitude to 43°00' N latitude
 Columbia - 43°00' N latitude to 47°30' N latitude
 Vancouver - 47°30' N latitude to northern boundary of the EEZ

These areas may be modified or deleted and additional statistical reporting and management areas may be added, modified, or deleted if necessary to refine information or management of a species or species group. Changes will be implemented in accordance with the procedures in Chapters 5 and 6.

3.1 Species Managed by this Fishery Management Plan

This Council manages a total of 46 species, which comprises the sharks, skates, roundfish, rockfishes, and flatfish as show in Table 3-1.

Table 3-1. Common and scientific names of species (and region, where applicable) actively managed in this FMP.

Common Name	Scientific Name
ELASMOBRANCHS	
Big skate	<i>Raja binoculata</i>
~~Leopard shark~~	~~<i>Triakis semifasciata</i>~~
Longnose skate	<i>Raja rhina</i>
Pacific Spiny dogfish	<i>Squalus suckleyi</i>
ROUND FISH	
Kelp greenling – WA	<i>Hexagrammos decagrammus</i>
Lingcod	<i>Ophiodon elongatus</i>
Pacific cod	<i>Gadus macrocephalus</i>
Pacific whiting (hake)	<i>Merluccius productus</i>
Sablefish	<i>Anoplopoma fimbria</i>
SCORPAENIDS	
Cabazon – WA	<i>Scorpaenichthys marmoratus</i>
California scorpionfish	<i>Scorpaena gutatta</i>
ROCKFISHES	
Aurora rockfish	<i>Sebastes aurora</i>
Bank rockfish	<i>S. rufus</i>
Black rockfish OR, WA	<i>S. melanops</i>
~~Black and yellow rockfish~~	~~<i>S. chrysomelas</i>~~
Blackgill rockfish	<i>S. melanostomus</i>
Blackspotted rockfish	<i>S. melanostictus</i>
Blue rockfish OR, WA	<i>S. mystinus</i>

Common Name	Scientific Name
Bocaccio	<i>S. paucispinis</i>
~~Bronzespotted rockfish~~	~~<i>S. gilli</i>~~
~~Brown rockfish~~	~~<i>S. auriculatus</i>~~
~~Calico rockfish~~	~~<i>S. dallii</i>~~
Canary rockfish	<i>S. pinniger</i>
~~Chameleon rockfish~~	~~<i>S. phillipsi</i>~~
Chilipepper rockfish	<i>S. goodei</i>
~~China rockfish~~	~~<i>S. nebulosus</i>~~
Copper rockfish OR, WA	<i>S. caurinus</i>
Cowcod	<i>S. levis</i>
Darkblotched rockfish	<i>S. crameri</i>
Deacon rockfish OR, WA	<i>S. diaconus</i>
~~Dusky rockfish~~	~~<i>S. eiliatus</i>~~
~~Dwarf red rockfish~~	~~<i>S. rufinanus</i>~~
~~Flag rockfish~~	~~<i>S. rubrivinctus</i>~~
~~Freckled rockfish~~	~~<i>S. lentiginosus</i>~~
~~Gopher rockfish~~	~~<i>S. carnatus</i>~~
~~Grass rockfish~~	~~<i>S. rastrelliger</i>~~
~~Greenblotched rockfish~~	~~<i>S. rosenblatti</i>~~
Greenspotted rockfish	<i>S. chlorostictus</i>
Greenstriped rockfish	<i>S. elongatus</i>
~~Halfbanded rockfish~~	~~<i>S. semieinctus</i>~~
~~Harlequin rockfish~~	~~<i>S. variegatus</i>~~
~~Honeycomb rockfish~~	~~<i>S. umbrosus</i>~~
~~Kelp rockfish~~	~~<i>S. atrovirens</i>~~
~~Mexican rockfish~~	~~<i>S. macdonaldi</i>~~
~~Olive rockfish~~	~~<i>S. serranoides</i>~~
~~Pink rockfish~~	~~<i>S. eos</i>~~
~~Pinkrose rockfish~~	~~<i>S. simulator</i>~~
~~Pygmy rockfish~~	~~<i>S. wilsoni</i>~~
Pacific ocean perch	<i>S. alutus</i>
Quillback rockfish	<i>S. maliger</i>
Redbanded rockfish	<i>S. babcocki</i>
Redstripe rockfish	<i>S. proriger</i>
Rosethorn rockfish	<i>S. helvomaculatus</i>
~~Rosy rockfish~~	~~<i>S. rosaceus</i>~~
Roughey rockfish	<i>S. aleutianus</i>
Sharpchin rockfish	<i>S. zacentrus</i>
Shortraker rockfish	<i>S. borealis</i>
Silvergray rockfish	<i>S. brevispinis</i>
~~Speckled rockfish~~	~~<i>S. ovalis</i>~~
Splitnose rockfish	<i>S. diploproa</i>
Squarespot rockfish	<i>S. hopkinsi</i>

Common Name	Scientific Name
Sunset rockfish	<i>S. crocotulus</i>
Starry rockfish	<i>S. constellatus</i>
Stripetail rockfish	<i>S. saxicola</i>
~~Swordspine rockfish~~	~~<i>S. ensifer</i>~~
~~Tiger rockfish~~	~~<i>S. nigrocinctus</i>~~
~~Treefish~~	~~<i>S. serriiceps</i>~~
Vermilion rockfish	<i>S. miniatus</i>
Widow rockfish	<i>S. entomelas</i>
Yelloweye rockfish	<i>S. ruberrimus</i>
Yellowmouth rockfish	<i>S. reedi</i>
Yellowtail rockfish	<i>S. flavidus</i>
THORNYHEADS	
Longspine thornyhead	<i>Sebastolobus altivelis</i>
Shortspine thornyhead	<i>S. alascanus</i>
FLATFISHES	
Arrowtooth flounder	<i>Atheresthes stomias</i>
~~Butter sole~~	~~<i>Isopsetta isolepis</i>~~
~~Curlfin sole~~	~~<i>Pleuronichthys decurrens</i>~~
Dover sole	<i>Microstomus pacificus</i>
English sole	<i>Parophrys vetulus</i>
Flathead sole	<i>Hippoglossoides elassodon</i>
Pacific sanddab	<i>Citharichthys sordidus</i>
Petrale sole	<i>Eopsetta jordani</i>
Rex sole	<i>Glyptocephalus zachirus</i>
~~Rock sole~~	~~<i>Lepidopsetta bilineata</i>~~
~~Sand sole~~	~~<i>Psettichthys melanostictus</i>~~
~~Starry flounder~~	~~<i>Platichthys stellatus</i>~~

3.2 Stocks Managed under this Fishery Management Plan

The Council geographically delineates (i.e., defines) stocks of managed groundfish species. Table 3-2 describes the stock and its boundaries. Stock definitions are based on the best scientific information available, taking into consideration the goals and objectives of the FMP and other requirements. The Council may review, and potentially adjust, a stock definition based on new information. Updating the defined stocks would require an FMP amendment.

Table 3-2. Groundfish stocks within the fishery management unit (FMU) of the Pacific Coast Groundfish FMP and their boundaries, as amended through @Amendment 3x.

Stock	Species Scientific Name	Stock Boundaries
ELASMOBRANCHS		
Pacific Spiny Dogfish	<i>Squalus suckleyi</i>	Pacific West Coast
Big Skate	<i>Raja binoculata</i>	Pacific West Coast
Longnose Skate	<i>Raja rhina</i>	Pacific West Coast
Scorpaenids		

Stock	Species Scientific Name	Stock Boundaries
Cabazon – Washington	<i>Scorpaenichthys marmoratus</i>	North of 46°16' N. lat.
California Scorpionfish	<i>Scorpaena guttata</i>	South of 42° N. lat.
ROCKFISHES		
Aurora Rockfish	<i>Sebastes aurora</i>	Pacific West Coast
Bank Rockfish	<i>S. rufus</i>	Pacific West Coast
Black Rockfish – Washington	<i>S. melanops</i>	North of 46°16' N. lat.
Black Rockfish - Oregon	<i>S. melanops</i>	46°16' N. lat. to 42° N. lat.
~~Black Rockfish – California~~	~~<i>S. melanops</i>~~	~~South of 42° N. lat.~~
Blackgill Rockfish	<i>S. melanostomus</i>	Pacific West Coast
Blue Rockfish – Washington	<i>S. mystinus</i>	North of 46°16' N. lat.
Blue Rockfish – Oregon	<i>S. mystinus</i>	46°16' N. lat. to 42° N. lat.
Bocaccio	<i>S. paucispinis</i>	Pacific West Coast
Canary Rockfish	<i>S. pinniger</i>	Pacific West Coast
Chilipepper Rockfish	<i>S. goodei</i>	Pacific West Coast
Copper Rockfish North	<i>S. caurinus</i>	North of 42° N. lat.
~~Copper Rockfish South~~	~~<i>S. caurinus</i>~~	~~South 42° N. lat.~~
Cowcod	<i>S. levis</i>	South of 42° N. lat.
Darkblotched Rockfish	<i>S. crameri</i>	Pacific West Coast FMU
Deacon Rockfish – Washington	<i>S. diaconus</i>	North of 46°16' N. lat.
Deacon Rockfish – Oregon	<i>S. diaconus</i>	46°16' N. lat. to 42° N. lat.
Greenspotted Rockfish	<i>S. chlorostictus</i>	Pacific West Coast
Greenstriped Rockfish	<i>S. elongatus</i>	Pacific West Coast
Pacific Ocean Perch	<i>S. alutus</i>	Pacific West Coast
Quillback Rockfish - Washington	<i>S. maliger</i>	North of 46°16' N. lat.
Quillback Rockfish - Oregon	<i>S. maliger</i>	46°16' N. lat. to 42° N. lat.
Quillback Rockfish - California	<i>S. maliger</i>	South of 42° N. lat.
Redbanded Rockfish	<i>S. babcocki</i>	Pacific West Coast
Redstripe Rockfish	<i>S. proriger</i>	Pacific West Coast
Rosethorn Rockfish	<i>S. helvomaculatus</i>	Pacific West Coast
Rougheye/Blackspotted Rockfish	<i>S. aleutianus</i> / <i>S. melanostictus</i>	Pacific West Coast
Sharpchin Rockfish	<i>S. zacentrus</i>	Pacific West Coast
Shortraker Rockfish	<i>S. borealis</i>	Pacific West Coast
Silvergray Rockfish	<i>S. brevispinis</i>	Pacific West Coast
Splitnose Rockfish	<i>S. diploproa</i>	Pacific West Coast
Squarespot Rockfish	<i>S. hopkinsi</i>	Pacific West Coast
Starry Rockfish	<i>S. constellatus</i>	South of 42° N. lat.
Stripetail Rockfish	<i>S. saxicola</i>	Pacific West Coast
Vermilion Rockfish	<i>S. miniatus</i>	North of 42° N. lat.
Vermilion/Sunset Rockfish	<i>S. miniatus</i> / <i>S. crocotulus</i>	South 42° N. lat.
Widow Rockfish	<i>S. entomelas</i>	Pacific West Coast

Stock	Species Scientific Name	Stock Boundaries
Yelloweye Rockfish	<i>S. ruberrimus</i>	Pacific West Coast
Yellowmouth Rockfish	<i>S. reedi</i>	Pacific West Coast
Yellowtail Rockfish <i>North</i>	<i>S. flavidus</i>	North of 40°10' N. lat.
Yellowtail Rockfish <i>South</i>	<i>S. flavidus</i>	South of 40°10' N. lat.
THORNYHEADS		
Longspine Thornyhead	<i>Sebastolobus altivelis</i>	Pacific West Coast
Shortspine Thornyhead	<i>Sebastolobus alascanus</i>	Pacific West Coast
ROUNDFISHES		
Kelp greenling – CA, OR	<i>Hexagrammos decagrammus</i>	North of 46°16' N. lat.
Lingcod <i>North</i>	<i>Ophiodon elongatus</i>	North of 40°10' N. lat.
Lingcod <i>South</i>	<i>Ophiodon elongatus</i>	South of 40°10' N. lat.
Pacific Hake	<i>Merluccius productus</i>	Pacific West Coast
Pacific Cod	<i>Gadus macrocephalus</i>	Pacific West Coast
Sablefish	<i>Anoplopoma fimbria</i>	Pacific West Coast
FLATFISHES		
Arrowtooth Flounder	<i>Atheresthes stomias</i>	Pacific West Coast
Dover Sole	<i>Microstomus pacificus</i>	Pacific West Coast
English Sole	<i>Parophrys vetulus</i>	Pacific West Coast
Flathead Sole	<i>Hippoglossoides elassodon</i>	Pacific West Coast
Pacific Sanddab	<i>Citharichthys sordidus</i>	Pacific West Coast
Petrale Sole	<i>Eopsetta jordani</i>	Pacific West Coast
Rex Sole	<i>Glyptocephalus zachirus</i>	Pacific West Coast

3.3 Ecosystem Component Species

The species in Table 3-3 are designated Ecosystem Component Species (see section 4.4.4 for more details).

Table 3-3. Groundfish species designated as Ecosystem Component Species.

Common Name	Scientific Name
ELASMOBRANCHS	
Arhynchobatidae “soft nose skates”	
Alaska skate	<i>Bathyraja parmifera</i>
Aleutian skate	<i>B. aleutica</i>
Bering skate	<i>B. interrupta</i>
Deepsea skate	<i>B. abyssicola</i>
Fine-spined skate	<i>B. microtrachys</i>
Pacific white skate	<i>B. spinosissima</i>
Roughtail/black skate	<i>B. trachura</i>
Sandpaper skate	<i>B. kincaidii</i>
Broad skate	<i>Amblyraja badia</i>
California skate	<i>Raja inornata</i>
Spotted ratfish	<i>Hydrolagus colliei</i>

Common Name	Scientific Name
Soupfin shark	<i>Galeorhinus zyopterus</i>
MACROURIDAE	
Abyssal grenadier	<i>Coryphaenoides armatus</i>
California grenadier	<i>Nezumia stelgidolepis</i>
Filamented grenadier	<i>C. filifer</i>
Ghostly grenadier	<i>C. leptolepis</i>
Giant grenadier	<i>Albatrossia pectoralis</i>
Pacific grenadier	<i>C. acrolepis</i>
Popeye grenadier	<i>C. cinereus</i>
Shoulderspot grenadier	<i>Coelrinchus scaphopsis</i>
Smooth grenadier	<i>Nezumia liolepis</i>
Softhead grenadier	<i>Malacocephalus laevis</i>
Yaquina grenadier	<i>C. yaquinae</i>
ROCKFISHES	
Bronzespotted rockfish	<i>Sebastes gilli</i>
Flag rockfish	<i>S. rubrivinctus</i>
Greenblotched rockfish	<i>S. rosenblatti</i>
Mexican rockfish	<i>S. macdonaldi</i>
Rosy rockfish	<i>S. rosaceus</i>
Shortbelly rockfish	<i>S. jordani</i>
Speckled rockfish	<i>S. ovalis</i>
Tiger Rockfish	<i>S. nigrocinctus</i>
FLATFISHES	
Butter sole	<i>Isopsetta isolepis</i>
Curlfin sole	<i>Pleuronichthys decurrens</i>
Rock Sole	<i>Lepidopsetta bilineata</i>
Sand Sole	<i>Psettichthys melanostictus</i>
Starry Flounder	<i>Platichthys stellatus</i>
MORIDS	
Finescale codling/Pacific flatnose	<i>Antimora microlepis</i>

3.4 Shared Ecosystem Component Species

Table 3-4 lists EC species shared between all four of the Council's FMPs, including the Groundfish FMP. No directed commercial fisheries may begin for any Shared EC Species until and unless the Council has had an adequate opportunity to both assess the scientific information relating to any proposed directed fishery and consider potential impacts to existing fisheries, fishing communities, and the greater marine ecosystem.

Table 3-4. Common and scientific names of EC species shared between all four of the Council's FMPs.

Common Name	Scientific Name
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Round herring	<i>Etrumeus teres</i>
Thread herring	<i>Opisthonema libertate</i> , <i>O. medirastre</i>
Mesopelagic fishes	Families: Myctophidae, Bathylagidae, Paralepididae, and Gonostomatidae
Pacific sand lance	<i>Ammodytes hexapterus</i>
Pacific saury	<i>Cololabis saira</i>
Silversides	Atherinopsidae
Smelts	Osmeridae
Pelagic squids	Families: Cranchiidae, Gonatidae, Histioteuthidae, Octopoteuthidae, Ommastrephidae except Humboldt squid (<i>Dosidicus gigas</i>), Onychoteuthidae, and Thysanoteuthidae

[Amended: 11, 16-1, 24, 25, 27, 31, 35 @3x, @3y]

