

PACIFIC COAST GROUND FISH FISHERY MANAGEMENT PLAN

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

**PACIFIC FISHERY MANAGEMENT COUNCIL
7700 NE AMBASSADOR PLACE, SUITE 101
PORTLAND, OR 97220
(503) 820-2280
(866) 806-7204
WWW.PCOUNCIL.ORG**



This document is published by the Pacific Fishery Management Council; current National Oceanic and Atmospheric Administration Award Number NA15NMF4410016.

DRAFT

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 | <p>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.</p> <p>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.</p> <p>Stocks of chilipepper, redbanded, rougheye/blackspotted, widow, yellowtail, yelloweye rockfishes, and English sole were defined under Amendment 35.</p> <p>Species and stocks listed in Table 3-2 were identified as in need of conservation and management under Amendment TBD Stocks of arrowtooth flounder, aurora rockfish, bank rockfish, big skate, blackgill rockfish, bocaccio rockfish, California scorpionfish, cowcod, darkblotched rockfish, flathead sole, greenspotted rockfish, greenstriped rockfish, harlequin rockfish, longnose skate, longspine thornyhead, Pacific cod, Pacific hake, Pacific ocean perch , Pacific sanddab, redstripe rockfish , rosethorn rockfish, sharpchin rockfish ,</p> |

| Current Chapters | Previous Chapters (July 1993 Version) | Summary of Amendment Changes |
|---|---|--|
| | | shortraker rockfish , silvergray rockfish, splitnose rockfish , starry rockfish, striptail rockfish, and yellowmouth rockfish were defined and EC species were specified in Table 3-3 |
| 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 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 |

| Current Chapters | Previous Chapters (July 1993 Version) | Summary of Amendment Changes |
|---|---|--|
| | | 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 |
| 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. |

| Current Chapters | Previous Chapters (July 1993 Version) | Summary of Amendment Changes |
|-------------------------------------|--|--|
| 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 | | <p>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.</p> <p>Amendment 33 removed Appendix F, in part, to the SAFE document. Relevant rebuilding information added to Section 4.6.3</p> <p>Amendment 28 re-organized some Appendices. Appendices B.2, B.3, and B.4 were merged to provide life 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.</p> |

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.

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).

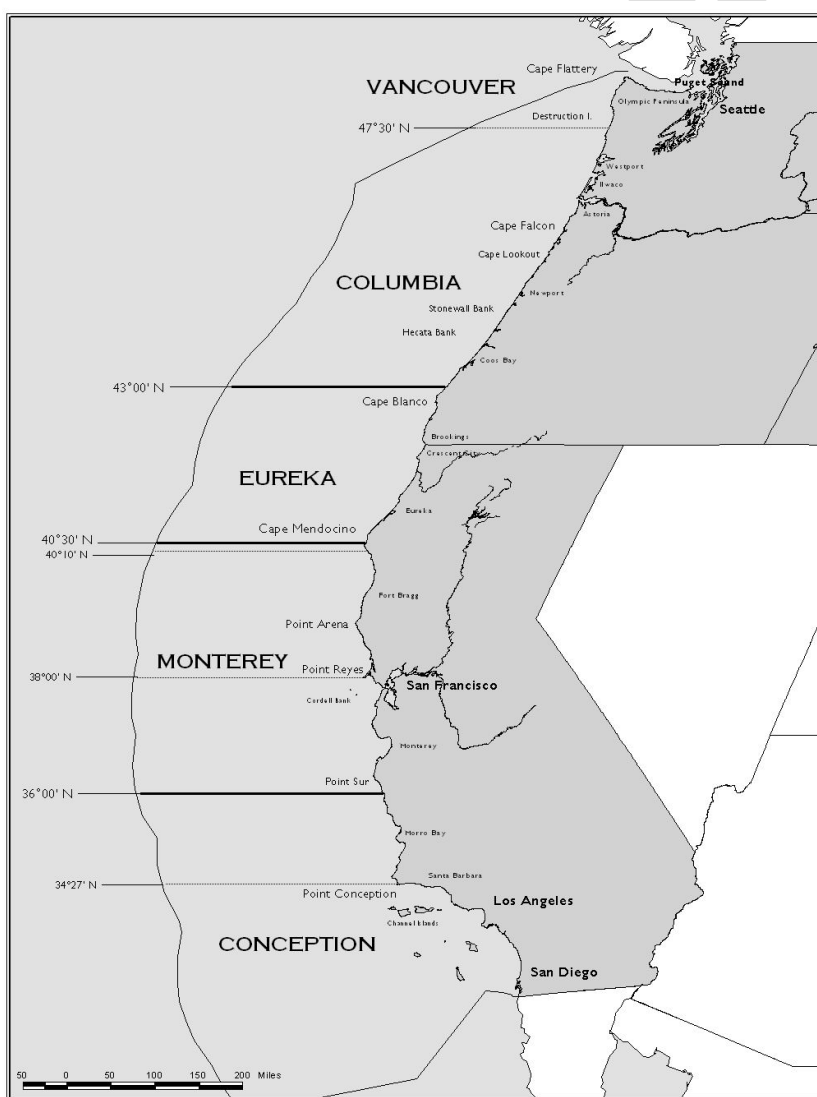


Figure 3-1. International North Pacific Fisheries Commission (INPFC) statistical areas in the U.S. exclusive economic zone seaward of Washington, Oregon, and California.

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 the following species of groundfish show in Table 3-1.

Table 3-1. Common and scientific names of species 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 | <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 | |
| Cabezon | <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 | <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 | <i>S. mystinus</i> |
| Bocaccio | <i>S. paucispinis</i> |

| Common Name | Scientific Name |
|------------------------|--------------------------|
| 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 | <i>S. caurinus</i> |
| Cowcod | <i>S. levis</i> |
| Darkblotched rockfish | <i>S. crameri</i> |
| Deacon rockfish | <i>S. diaconus</i> |
| Dusky rockfish | <i>S. ciliatus</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. semicinctus</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> |
| Rougheye 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> |
| Sunset rockfish | <i>S. crocotulus</i> |

| Common Name | Scientific Name |
|-----------------------|-----------------------------------|
| 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. sericeus</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 requires 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 TBD.

| Stock | Species Scientific Name | Stock Boundaries |
|-------------------------|--------------------------|------------------------|
| ELASMOBRANCHS | | |
| Pacific Spiny Dogfish | <i>Squalus suckleyi</i> | Pacific West Coast FMU |
| Big Skate | <i>Raja binoculata</i> | Pacific West Coast FMU |
| Longnose Skate | <i>Raja rhina</i> | Pacific West Coast FMU |
| SCORPAENIDS | | |
| California Scorpionfish | <i>Scorpaena guttata</i> | California |

| Stock | Species Scientific Name | Stock Boundaries |
|--|---|-------------------------------|
| ROCKFISHES⁺ | | |
| Aurora Rockfish | <i>Sebastes aurora</i> | Pacific West Coast FMU |
| Bank Rockfish | <i>S. rufus</i> | Pacific West Coast FMU |
| Black Rockfish - <i>Washington</i> | <i>S. melanops</i> | North of 46°16' N. lat. |
| Black Rockfish - <i>Oregon</i> | <i>S. melanops</i> | 46°16' N. lat. to 42° N. lat. |
| Black Rockfish - <i>California</i> | <i>S. melanops</i> | South of 42° N. lat. |
| Blackgill Rockfish | <i>S. melanostomus</i> | Pacific West Coast FMU |
| Bocaccio | <i>S. paucispinis</i> | Pacific West Coast FMU |
| Canary Rockfish | <i>S. pinniger</i> | Pacific West Coast FMU |
| Chilipepper Rockfish | <i>S. goodei</i> | Pacific West Coast FMU |
| Copper Rockfish <i>North</i> | <i>S. caurinus</i> | North of 42° N. lat. |
| Copper Rockfish <i>South</i> | <i>S. caurinus</i> | South 42° N. lat. |
| Cowcod | <i>S. levis</i> | California |
| Darkblotched Rockfish | <i>S. crameri</i> | Pacific West Coast FMU |
| Greenspotted Rockfish | <i>S. chlorostictus</i> | Pacific West Coast FMU |
| Greenstriped Rockfish | <i>S. elongatus</i> | Pacific West Coast FMU |
| Harlequin Rockfish | <i>S. variegatus</i> | Oregon/Washington |
| Pacific Ocean Perch | <i>S. alutus</i> | Pacific West Coast FMU |
| Quillback Rockfish - <i>Washington</i> | <i>S. maliger</i> | North of 46°16' N. lat. |
| Quillback Rockfish - <i>Oregon</i> | <i>S. maliger</i> | 46°16' N. lat. to 42° N. lat. |
| Quillback Rockfish - <i>California</i> | <i>S. maliger</i> | South of 42° N. lat. |
| Redbanded Rockfish | <i>S. babcocki</i> | Pacific West Coast FMU |
| Redstripe Rockfish | <i>S. proriger</i> | Pacific West Coast FMU |
| Rosethorn Rockfish | <i>S. helvomaculatus</i> | Pacific West Coast FMU |
| Rougheye/Blackspotted Rockfish | <i>S. aleutianus</i> / <i>S. melanostictus</i> | Pacific West Coast FMU |
| Sharpchin Rockfish | <i>S. zacentrus</i> | Pacific West Coast FMU |
| Shortraker Rockfish | <i>S. borealis</i> | Pacific West Coast FMU |
| Silvergray Rockfish | <i>S. brevispinis</i> | Pacific West Coast FMU |
| Splitnose Rockfish | <i>S. diploproa</i> | Pacific West Coast FMU |
| Squarespot Rockfish | <i>S. hopkinsi</i> | Pacific West Coast FMU |
| Starry Rockfish | <i>S. constellatus</i> | California |
| Stripetail Rockfish | <i>S. saxicola</i> | Pacific West Coast FMU |
| 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 FMU |
| Yelloweye Rockfish | <i>S. ruberrimus</i> | Pacific West Coast FMU |
| Yellowmouth Rockfish | <i>S. reedi</i> | Pacific West Coast FMU |
| Yellowtail Rockfish <i>North</i> | <i>S. flavidus</i> | North of 40°10' N. lat. |

⁺ The category “rockfish” includes all genera (*Sebastes*, *Scorpaena*, *Sebastolobus*, and *Scorpaenodes*) and species of the family *Scorpaenidae*, even if not listed, that occur in the waters off Washington, Oregon, and California.

| Stock | Species Scientific Name | Stock Boundaries |
|----------------------------------|----------------------------------|-------------------------|
| 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 FMU |
| Shortspine Thornyhead | <i>Sebastolobus alascanus</i> | Pacific West Coast FMU |
| ROUNDFISHES | | |
| 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 FMU |
| Pacific Cod | <i>Gadus macrocephalus</i> | Pacific West Coast FMU |
| Sablefish | <i>Anoplopoma fimbria</i> | Pacific West Coast FMU |
| FLATFISHES | | |
| Arrowtooth Flounder | <i>Atheresthes stomias</i> | Pacific West Coast FMU |
| Dover Sole | <i>Microstomus pacificus</i> | Pacific West Coast FMU |
| English Sole | <i>Parophrys vetulus</i> | Pacific West Coast FMU |
| Flathead Sole | <i>Hippoglossoides elassodon</i> | Pacific West Coast FMU |
| Pacific Sanddab | <i>Citharichthys sordidus</i> | Pacific West Coast FMU |
| Petrale Sole | <i>Eopsetta jordani</i> | Pacific West Coast FMU |
| Rex Sole | <i>Glyptocephalus zachirus</i> | Pacific West Coast FMU |

3.3 Ecosystem Component Species

The species in Table 3-3 are designated Ecosystem Component Species (see section 4.4.4 for more details). The inclusion of all endemic skates, except longnose and big skate, and all endemic grenadiers will allow more precise catch monitoring without the need for a sorting requirement for these species since skates and grenadiers are generally landed in unidentified species market categories (e.g., Unidentified Skates).

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> |
| Soupfin shark | <i>Galeorhinus zyopterus</i> |

| Common Name | Scientific Name |
|------------------------------------|---------------------------------|
| MACROURIDAE | |
| Abyssal grenadier | <i>Coryphaenoides armatus</i> |
| California grenadier | <i>Nezumia stelgidolepis</i> |
| Filamented grenadier | <i>Coryphaenoides filifer</i> |
| Ghostly grenadier | <i>C. leptolepis</i> |
| Giant grenadier | <i>Albatrossia pectoralis</i> |
| Pacific grenadier | <i>Coryphaenoides 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>Coryphaenoides yaquinae</i> |
| ROCKFISHES | |
| Shortbelly rockfish | <i>Sebastes jordani</i> |
| MORIDS | |
| Finescale codling/Pacific flatnose | <i>Antimora microlepis</i> |

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 |
|--------------------|--|
| 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 @xx]

PFCM
05/21/25