# Amendment 48 for the Fishery Management Plan for Groundfish of the Gulf of Alaska

\*\*\*\* means the text that either precedes or follows the revision remains unchanged.

## Section 1, first paragraph is revised as follows:

This Fishery Management Plan (FMP) has been developed by the North Pacific Fishery Management Council for the groundfish fishery (excluding halibut) of the Gulf of Alaska. In 1978 it replaced the Preliminary Fishery Management Plan for the management of groundfish in the Gulf of Alaska. Since then, the FMP has been amended over sixty times.

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### Section 2 is revised as follows:

1. Revise the first paragraph of section 2.1 as follows:

The North Pacific Fishery Management Council (NPFMC or the Council) is committed to develop long-range plans for managing the Gulf of Alaska groundfish fisheries that will promote a stable planning environment for the seafood industry and will maintain the health of the resource and environment. In developing allocations and harvesting systems, the Council will give overriding considerations to maximizing economic benefits to the United States. Such management will:

\* \* \* \* \*

2. In section 2.2,

a) Delete definitions for <u>Domestic annual harvest (DAH)</u>, <u>Domestic annual processed catch</u> (<u>DAP</u>), <u>Joint venture processed catch (JVP</u>), and <u>Total allowable level of foreign fishing</u> (<u>TALFF</u>).

b) Revise the definitions of <u>Prohibited Species Catch (PSC)</u> and <u>Total allowable catch (TAC)</u> as follows:

<u>Prohibited Species Catch (PSC)</u> is nonretainable catch. It can take the form of a prohibited or nongroundfish species and/or as a fully utilized groundfish species captured incidentally in groundfish fisheries. Such catch must be recorded and returned to sea with a minimum of injury, except as provided in the <u>Prohibited Species Donation Program</u>. A PSC limit is an apportioned, nonretainable amount of fish provided to a fishery for bycatch purposes.

<u>Total allowable catch (TAC)</u> is the harvest quota for a species or species group; the retainable catch. TAC will be apportioned by area.

#### Section 3 is revised as follows:

- 1. In the section 3.0 titled Areas and Stocks Involved,
- a) (2) is revised to read as follows:

(2) To all fisheries for all finfish, except salmon, steelhead, halibut, herring, and tuna. Harvest allocations and management are based on the calendar year.

b) The fourth paragraph is revised as follows:

Diversity of commercial bottomfish species in the Gulf of Alaska is intermediate between the Bering Sea, where fewer species occur, and the Washington-California region, where more species are present. The most diverse species in the Gulf of Alaska is the rockfish group (genus <u>Sebastes</u>), of which 30 species have been identified in this area. Several species of rockfish have been of significant commercial interest, including the Pacific ocean perch (<u>S</u>. <u>alutus</u>), shortraker rockfish (<u>S</u>. <u>borealis</u>), rougheye rockfish (<u>S</u>. <u>aleutianus</u>), dusky rockfish (<u>S</u>. <u>ciliatus</u>), northern rockfish (<u>S</u>. <u>polyspinus</u>), and yelloweye rockfish (<u>S</u>. <u>ruberrimus</u>). Pacific ocean perch was the subject of a substantial foreign and domestic trawl fishery from the 1960's through mid-1980's. Although Pacific ocean perch is found throughout the Gulf, the biomass and fishery have been concentrated in the Eastern area. For management purposes, rockfish are classified into three distinct assemblages that are based on their habitat and distribution. These assemblages are:

\* \* \* \* \*

2. In section 3.1,

a) Revise the first sentence of the introductory paragraph as follows:

Five categories of species or species groups are likely to be taken by the groundfish fishery (target species, other species, forage fish, prohibited species, and non-specified species).

\* \* \* \* \*

b) Remove the reference to foreign fishing under the prohibited species category so that the Prohibited Species category is revised as follows:

<u>Prohibited Species</u> -Pacific halibut -Pacific herring -Pacific salmon -Steelhead -King crab -Tanner crab

## Section 4 is revised as follows:

1. Add the following paragraph to the end of section 4.1.

\* \* \* \* \*

The groundfish resources off Alaska have been harvested entirely by U. S.-flagged vessels since 1991 and processed entirely by U. S. processors. No portion of the annual optimal yield is allocated to foreign harvesters or foreign processors.

2. Section 4.2.1 is revised as follows:

a) Revise the first paragraph as follows:

Groundfish fishery specifications (including total allowable catch (TAC) amounts for each groundfish fishery) are established each year pursuant to this FMP and its implementing regulations. Fishery specifications may be effective for up to two fishing years. The procedure consists of the following steps:

\* \* \* \* \*

- b. Delete paragraph (6)
- c. Renumber paragraph (7) to (6).
- d. In the paragraph following the new (6), the last sentence is revised to read as follows:

\* \* \* \* \*

Similarly, the attainment of a PSC limit will result in the closure of the appropriate fishery.

\* \* \* \* \*

e. Section 4.2.1.1 is revised to read as follows:

In consultation with the Council, the Secretary will establish harvest specifications, including TACs and apportionments thereof and reserves for each target species and the "other species" category, by January 1 of the new fishing year, or as soon as practicable thereafter, by means of regulations published in the <u>Federal Register</u>. Harvest specifications may be effective for up to two fishing years. Notwithstanding designated target species and species groups listed in Section 3.1, the Council may recommend splitting or combining species in the target species category for purposes of establishing a new TAC, if such action is desirable based on commercial importance of a species or species group and whether sufficient biological information is available to manage a species or species group on its own merits.

As soon as practicable after its October meeting, the Council will recommend proposed harvest specifications to the Secretary. The Council's recommendations will include proposed ABC and TAC amounts for each target species and the "other species" category, PSC limits, apportionments, TAC reserves, the basis for each proposed harvest specification, and a description of developing information that may be relevant to the final harvest specifications. As soon as practicable after the October meeting and after considering the Council's recommended proposed harvest specifications, the Secretary will publish in the <u>Federal Register</u> a notice of proposed harvest specifications and make available for public review and comment all information regarding the basis for the harvest specifications. The notice of proposed harvest specifications will identify whether and how harvest specifications may be affected by developing information unavailable at the time the notice is published. The prior public review and comment period on the notice of proposed harvest specifications will be a minimum of 15 days.

At its December meeting, the Council will review the final SAFE reports, recommendations from the Groundfish Plan Team, SSC, AP, and comments received. The Council will recommend final harvest specifications to the Secretary. As soon as practicable thereafter and after considering the Council's recommendations, the Secretary will publish final harvest specifications for the groundfish fishery. New final harvest specifications will supercede current harvest specifications on the effective date of the new harvest specifications.

However, if the Secretary determines that the notice of final harvest specifications would not be "a logical outgrowth" of the notice of proposed harvest specifications (i.e., the notice of proposed harvest specifications was inadequate to afford the public opportunity to comment meaningfully on the issues involved), the Secretary will either: (1) publish a revised notice of proposed harvest specifications in the <u>Federal Register</u>, solicit public comment thereon, and publish a notice of final harvest specifications, as soon as is practicable; or (2) if "good cause" pursuant to the Administrative Procedure Act exists, waive the requirements for notice and comment and 30-day delayed effectiveness, and directly publish a notice of final harvest specifications with a post-effectiveness public comment period of 15 to 30 days.

- f. Delete section 4.2.1.3.
- g. Renumber section 4.2.1.4 to 4.2.1.3.
- h. In the new 4.2.1.3, revised (7) as follows:

(7) Information to be used by the Council in establishing prohibited species catch limits (PSCs) for Pacific halibut and fully utilized species with supporting justification and rationale.

i. Renumber section 4.2.1.5 to 4.2.1.4.

j. Revise the new section 4.2.1.4 as follows:

Reserves are set at 20% of the TAC of pollock, Pacific cod, flatfish, and other species. At any time, the Regional Administrator may assess these fisheries and apportion to them any amounts from the reserves that is determined will be harvested.

Any additional in-season allocation from reserves may carry with it an additional PSC limit amount proportional to that reserve release and the respective bycatch rates in the affected fisheries.

- 3. Delete Section 4.2.2
- 4. Renumber Section 4.2.3 to 4.2.2., revise the new 4.2.2 as follows:
- a) Revise the section reference in the third paragraph from 4.2.3.1 to 4.2.2.1.
- b) Revise the first word of paragraph 4 from "of" to "if".
- c) Revise paragraph 5 as follows:

When a PSC limit is reached, further fishing with specific types of gear or modes of operation during the year is prohibited in an area by those who take their PSC limit in that area. All other users and gear would remain unaffected.

d) Revise paragraph 6 as follows:

However, when the fishery to which a PSC limit applies has caught an amount of prohibited species equal to that PSC limit, the Secretary may, by notice, permit some or all of those vessel in the fishery to continue to engage in fishing for groundfish in the applicable regulatory area, under specified conditions. These conditions may include the avoidance of certain areas of prohibited species concentrations and will be determined on a case-by-case basis.

- e) Delete the first sentence of paragraph 7.
- f) Renumber paragraph 4.2.3.1 to 4.2.2.1.

g) Revise the section reference in the introductory paragraph of the new 4.2.2.1 from 4.2.3 to 4.2.2.

h) In the new Section 4.2.2.1, revise (1) - (6) as follows:

(1) <u>Prior to the October Council Meeting</u>. The Plan Team will provide to the Council the best available information on estimated halibut bycatch and mortality rates in the target

groundfish fisheries.

(2) <u>October Council Meeting</u>. While developing proposed groundfish harvest levels under Section 4.2.1, the Council will also review the need to control the bycatch of halibut and will, if necessary, recommend proposed halibut PSC mortality limits and apportionments thereof among the target fisheries. The Council will also review the need for seasonal allocations of the halibut PSCs.

The Council will make proposed recommendations to the Secretary about some or all of the following:

- (1) The regulatory areas and districts for which PSCs might be established;
- (2) PSCs for particular target fisheries and gear types;
- (3) Seasonal allocations by target fisheries, gear types and/or regulatory areas and district;
- (4) PSC allocations to individual operations; and
- (5) Types of gear or modes of fishing operations that might be prohibited once a PSC is reached.

The Council will consider the best available information in doing so. Types of information that the Council will consider relevant to recommending proposed PSCs include:

- (1) Estimated change in biomass and stock condition of halibut;
- (2) Potential impact on halibut stocks;
- (3) Potential impacts on the halibut fishery;
- (4) Estimated bycatch in years prior to that for which the halibut PSC is being established;
- (5) Expected change in target groundfish catch;
- (6) Estimated change in target groundfish biomass;
- (7) Methods available to reduce halibut bycatch;
- (8) The cost of reducing halibut bycatch; and
- (9) Other biological and socioeconomic factors that affect the appropriateness of specific bycatch measures in term of objectives.

Types of information that the Council will consider in recommending seasonal allocations of halibut include:

- (1) Seasonal distribution of halibut;
- (2) Seasonal distribution of target groundfish species relative to halibut distribution;
- (3) Expected halibut bycatch needs on a seasonal basis relevant to changes in halibut biomass and expected catches of target groundfish species;
- (4) Expected bycatch rates on a seasonal basis;
- (5) Expected changes in directed groundfish fishing seasons;

- (6) Expected actual start of fishing effort; and
- (7) Economic effects of establishing seasonal halibut allocations on segments of the target groundfish industry.

(3) As soon as practicable after the Council's October meeting, the Secretary will publish the Council's recommendations as a notice in the <u>Federal Register</u>. Information on which the recommendations are based will also be published in the <u>Federal Register</u> or otherwise made available by the Council. Public comments will be invited by means specified in regulations implementing the FMP for a minimum of 15 days.

(4) <u>Prior to the December Council Meeting</u>. The Plan Team will prepare for the Council a final Stock Assessment and Fishery Evaluation (SAFE) report under Section 4.2.1 which provides the best available information on estimated halibut bycatch rates in the target groundfish fisheries, recommendations for halibut PSCs. If the Council requests, the Plan Team also may provide PSC apportionments and allocations among the target fisheries and gear types and an economic analysis of effects of the apportionments.

(5) <u>December Council Meeting</u>. While recommending final groundfish harvest levels, the Council reviews public comments, takes public testimony, and makes final decisions on annual halibut PSC limits and seasonal allocations, using the same factors above relevant to recommending proposed PSC limits, and the same factors above relevant to recommending seasonal allocations of the PSC limits. The Council will provide recommendations, including no change for the new fishing year, to the Secretary of Commerce for review and implementation.

(6) As soon as practicable after the Council's December meeting and following the specifications process described in section 4.2.1.1, the Secretary will publish the Council's final recommendations as a notice of final harvest specifications in the <u>Federal Register</u>. Information on which the final harvest specifications are based will also be published in the <u>Federal Register</u> or otherwise made available by the Council.

5. Renumber section 4.2.4 to 4.2.3. Revise the section reference in the paragraph from 4.2.3.1 to 4.2.2.1.

- 6. Renumber section 4.2.5 to 4.2.4.
- 7. Renumber section 4.2.6 to 4.2.5.
- 8. Delete the title to section 4.3.1
- 9. Renumber section 4.3.1.1 to section 4.3.1.
- 10. Renumber section 4.3.1.2 to section 4.3.2

- 11. Renumber section 4.3.1.2.1 to section 4.3.2.1.
- 12. Renumber section 4.3.1.2.2 to section 4.3.2.2.
- 13. Renumber section 4.3.1.2.3 to section 4.3.2.3
- 14. Renumber section 4.3.1.3 to section 4.3.3

15. In the new section 4.3.3, delete the fourth paragraph titled <u>Information on processing</u> expectations.

- 16. Renumber section 4.3.1.4 to section 4.3.4
- 17. Renumber section 4.3.1.5 to section 4.3.5.
- 18. Renumber section 4.3.1.6 to section 4.3.6.
- 19. Renumber section 4.3.1.6.1 to section 4.3.6.1
- 20. Renumber section 4.3.1.6.2 to section 4.3.6.2.
- 21. Renumber section 4.3.1.6.3 to section 4.3.6.3.
- 22. Renumber section 4.3.1.6.4 to section 4.3.6.4.
- 23. Renumber section 4.3.1.7 to section 4.3.7.
- 24. Delete section 4.3.2
- 25. Renumber section 4.3.3 to section 4.3.8.
- 26. Renumber section 4.3.4. to section 4.3.9.
- 27. Renumber section 4.3.4.1 to section 4.3.9.1.
- 28. Renumber section 4.3.4.2 to section 4.3.9.2.
- 29. Renumber section 4.3.4.3 to section 4.3.9.3.
- 30. Delete table 4.4 and figures 4.2 and 4.3.

#### Section 5 is revised as follows:

In Section 5.1.1.20 the table is unchanged but the text is revised as follows:

### 5.1.1.20 Skates

### Management Plan and Area(s): BSAI and GOA groundfish

#### Species Representatives:

The following skate species were identified during the 1999 Alaska Fisheries Science Center GOA bottom trawl survey:

Alaska skate (*Bathyraja parmifera*) Aleutian skate (*Bathyraja aleutica*) Bering skate or sandpaper skate (*Bathyraja interrupta*) Mud skate (*Bathyraja tanaretzi*) Black or roughtail skate (*Bathyraja trachura*) Commander skate (*Bathyraja lindberghi*) Whiteblotched skate (*Bathyraja maculata*) Big skate (*Raja binoculata*) Longnose skate (*Raja rhina*)

Based on the GOA 1999 survey results, the majority of the skate biomass is big skate (50%) and longnose skate (33%).

#### Life History and General Distribution:

Skates (Rajidae) that occur in the BSAI and GOA are grouped into two genera: *Bathyraja sp.*, or soft-nosed species (rostral cartilage slender and snout soft and flexible), and *Raja* sp., or hard-nosed species (rostral cartilage is thick making the snout rigid). They are dorso-ventrally compressed (flat) animals with large pectoral wings attached to the sides of the head, and long, narrow whiplike tails. Skates are long-lived and have low fecundity. Reproduction is oviparous; fertilization is internal and eggs (usually one in each case, except for 1-7 in big skate egg cases) are deposited in horny cases for incubation.

Skates, as a group, represent the highest proportion of estimated non-target species catch weight (28 percent) during 1997 to 1999) in both the BSAI and GOA combined. The biomass of all skate species combined as estimated by the Alaska Fisheries Science Center (AFSC) bottom trawl surveys has generally increased in both areas over the past 15 to 20 years, although it has declined somewhat from the 1990 peak in the eastern Bering Sea (NMFS 1999). Little is known of their habitat requirements for growth or reproduction, nor of any seasonal movements.

Skate species distributions from Meckelenburg, Mecklenburg, and Thorsteinson 2002:

Alaska skate: mostly 90-250 m on shelf in eastern Bering Sea (EBS) and Aleutian Islands (AI) and western Gulf of Alaska (GOA); Aleutian skate: throughout EBS, AI, and GOA, 100-1400 m; Bering skate: throughout EBS, AI, and GOA, 90-460 m; Mud skate: Not confirmed to occur in the GOA; Black skate: In AI, EBS and GOA, 400-1500 m; Commander skate: EBS, AI and not confirmed in the GOA, 120-2000 m; Whiteblotched skate: EBS and AI, not confirmed in the GOA, 100-1100 m; Big skate: EBS, AI, and GOA, 22-190 m; and Longnose skate: EBS, AI and GOA 20-650 m.

#### Fishery:

Skates are caught as bycatch in both longline and trawl fisheries, primarily in the Pacific cod, rex sole and sablefish fisheries. They generally are discarded (and may survive depending on catch handling practices), although skates caught incidentally are sometimes retained and processed. Markets for skate products are currently limited in the North Pacific, but skates are subject to directed fisheries in other areas (e.g., Martin and Zorzi 1993, Agnew et al. 1998).

In 2003, a directed fishery for skates developed in the GOA. Skates were removed from the "other species" list in the FMP in 2004 under Amendment 63 to allow for separate management for the directed fishery. Skates are primarily directly fished during the closure of the longline or trawl Pacific cod directed fisheries.

<u>Relevant Trophic Information</u>: feed on bottom invertebrates (crustaceans, molluscs, and polychaetes) and fish.

<u>What is the approximate upper size limit of juvenile fish (in cm)</u>: Unknown for most species. For big skates, age and length at maturity are 8-12 years and 109-130 cm. For longnose skates, age and length at maturity are 7-10 years and 74-100 cm. (Zeiner and Wolf 1993).

Source of Additional Data: William Raschi, Bucknell University

Habitat and Biological Associations (if known) Narrative:

*Egg/Spawning*: Deposit eggs in horny cases on shelf and slope.

<u>Juveniles and Adults</u>: After hatching, juveniles probably remain in shelf and slope waters, but distribution is unknown. Adults found across wide areas of shelf and slope; surveys found most skates at depths <500 m in the GOA and EBS, but >500 m in the AI. In the GOA, most skates found between 4-7°C, but data are limited.

#### Literature:

Allen, M. J., and G.B. Smith. 1988. Atlas and zoogeography of common fishes in the Bering Sea and Northeastern Pacific. U.S. Dep. Commerc., NOAA Tech. Rept. NMFS 66, 151 p.

Agnew, D.J., C.P. Nolan, J. R. Beddington, and R. Baranowski, 2000. Approaches to the assessment and management of multispecies skate and ray fisheries using the Falkland Islands fishery as an example. Can. J. Fish. Aquat. Sci. 57: 429-440.

Eschmyer, W. N., and E. S. Herald. 1983. A field guide to Pacific coast fishes, North America. Houghton Mifflin Co., Boston. 336 p.

Fritz, L. W. 1996. Other species *In* Stock Assessment and Fishery Evaluation Report for the Groundfish Resources of the Bering Sea/Aleutian Islands Regions as Projected for 1997. North Pacific Fishery Management Council, 605 West 4th Avenue, Suite 306, Anchorage, AK 99501.

Gruber, and T. Taniuchi (eds.). Elasmobranchs as living resources: advances in the biology, ecology, systematics and the status of the fisheries. U.S. Dep. Commerc., NOAA Technical Report 90.

Hart, J. L. 1973. Pacific fishes of Canada. Fisheries Res. Bd. Canada Bull. 180. Ottawa. 740 p.

Martin, L. and G.D. Zorzi, 1993. Status and review of the California skate fishery. In Conservation biology of elasmobranchs (S. Branstetter, ed.), p. 39-52. NOAA Technical Report NMFS 115.

Mecklenburg, C. W., T. A. Mecklenburg, and L. K. Thorsteinson. 2002. Fishes of Alaska. American Fisheries Society. Bethesda, Maryland.

NMFS. (1999). Environmental Assessment for the Total Allowable Catch Specifications for the Year 2000 Alaska Groundfish Fisheries. Appendix C, NMFS P.O. Box 21668, Juneau, AK 99801.

Teshima, K., and T. K. Wilderbuer. 1990. Distribution and abundance of skates in the eastern Bering Sea, Aleutian Islands region, and the Gulf of Alaska. Pp. 257-267 *in* H.L. Pratt, Jr., S.H.

Zeiner, S. J. and P. Wolf. 1993. Growth characteristics and estimates of age at maturity of two species of skates (*Raja binoculata* and *Raja rhina*) from Monterey Bay, California. In Conservation Biology of elasmbranchs (S. Branstetter. ed.), p. 39-52. NOAA Technical Report NMFS 115.

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