West Coast Groundfish

Bycatch Program EIS

The Bycatch Mandate

The Magnuson-Stevens Fishery Conservation and Management Act has established policies, definitions, standards and requirements relating to bycatch.

SEC. 301. NATIONAL STANDARDS FOR FISHERY CONSERVATION AND MANAGEMENT

- (a) IN GENERAL. Any fishery management plan prepared, and any regulation promulgated to implement any such plan, pursuant to this title shall be consistent with the following national standards for fishery conservation and management:

  9. Conservation and management measures shall, to the extent practicable, (A) minimize bycatch and (B) to the extent bycatch cannot be avoided, minimize the mortality of such bycatch."

SEC. 303. CONTENTS OF FISHERY MANAGEMENT PLANS

- (a) REQUIRED PROVISIONS.

  Any fishery management plan which is prepared by any Council, or by the Secretary, with respect to any fishery, **shall**

(11) establish a standardized reporting methodology to assess the amount and type of bycatch occurring in the fishery, **and** include conservation and management measures that, to the extent practicable and in the following priority –

(A) minimize bycatch; and

(B) minimize the mortality of bycatch which cannot be avoided

(b) DISCRETIONARY PROVISIONS

- Any fishery management plan which is prepared by any Council, or by the Secretary, with respect to any fishery, **may**

  (8) require that one or more observers be carried on board a vessel of the United States engaged in fishing for species that are subject to the plan, for the purpose of collecting data necessary for the conservation and management of the fishery

DISCRETIONARY PROVISIONS (continued)

- (10) include, consistent with the other provisions of this Act, conservation and management measures that provide harvest **incentives** for participants within each gear group to employ fishing practices that result in lower levels of bycatch or in lower levels of the mortality of bycatch

DEFINITIONS

- The term “**bycatch**” means **fish** which are harvested in a fishery, but which are **not sold or kept** for personal use, and includes economic discards and regulatory discards.

- “**Fish**” means finfish, mollusks, crustaceans, and **all** other **forms of marine animal and plant life other than marine mammals and birds**.

Specifically, with respect to the groundfish fisheries, bycatch includes any capture of

- (1) all species of finfish that are not classified as groundfish by the FMP, and all species of crustaceans, mollusks, and marine plants, whether retained or not;
- (2) marine turtles;
- (3) marine mammals and seabirds;
- (4) Bycatch also includes all **discarded** groundfish.

Bycatch does not include groundfish that are legally retained and sold or kept for personal use.

GOALS AND OBJECTIVES
of the Bycatch Program

These were developed by the Council's ad hoc Environmental Impact Statement Oversight Committee and adopted by the Council

Eight Initial Goals and Objectives

- account for total fishing mortality by species
- establish monitoring and accounting mechanisms to keep total catch of each groundfish stock from exceeding the specified limits
- reduce unwanted incidental catch and bycatch of groundfish and other species
- reduce the mortality of animals taken as bycatch

- provide incentives for fishers to reduce bycatch and flexibility/opportunity to develop bycatch reduction methods
- monitor incidental catch and bycatch in manner that is accurate, timely, and not excessively costly
- reduce unobserved fishing-caused mortalities of all fish
- gather information on unassessed and/or non-commercial species to aid in development of ecosystem management approaches

ALTERNATIVES

- Six alternatives have been developed to address the purpose and need for action.
- Under NEPA, the first alternative is always no action or status quo.

Alternative 1 reduces incidental catch and bycatch through a combination of indirect measures: Optimum Yield (OY) specifications, area closures, gear restrictions, variable trip limits and bag limits, seasons and other measures. High priority to minimize cost of catch monitoring. Vessel trip limits are calculated using a computer model and incidental catch ratios from past years.

Alternative 2 would reduce groundfish bycatch by increasing the size of trip limits. This would be achieved by reducing the trawl fleet by 50%; the goal of maintaining a year-round fishery would continue. The focus on fleet reduction is based on the Council's Strategic Plan for Groundfish. This alternative includes the area/depth management and modeling approach of Alternative 1.

Alternative 3 would reduce groundfish bycatch by increasing the size of trip limits. This would be achieved by eliminating the goal of maintaining a year-round fishery and establishing a short season or series of seasons. This alternative reflects one of the conclusions in the Council's *Strategic Plan for Groundfish* that, if fleet size is not reduced, *"(m)aintaining a year-round fishery may not be a short-term priority."* This alternative includes the area/depth management and modeling approach of Alternative 1.

Alternative 4 would reduce bycatch by establishing **catch** limits for various fishery sectors, rather than **landing/ retention** limits. Inseason (real-time) monitoring procedures would be established, and sectors would be closed when the sector catch limit is reached (or projected to be reached). This alternative includes the area/depth management and modeling approach of Alternative 1.

Alternative 5 would reduce bycatch by establishing **groundfish catch quotas** for individual commercial fishers. Monitoring would be focused at the individual vessel level rather than at the sector level. Certain gear regulations would be relaxed to allow vessels to improve bycatch reduction methods. Vessels could continue fishing until any cap was reached, and vessels with low incidental or bycatch rates would have additional fishing opportunities.

Alternative 6 would reduce bycatch to near zero by closing large areas where overfished groundfish are most likely to be encountered and other areas of high bycatch of non-groundfish species, establishing individual vessel catch allowances (caps) for overfished groundfish species, and requiring every commercial vessel to carry onboard observers. This alternative would include expanded area/depth closures (MPAs) and bycatch limits or discard prohibitions.

- **FISHERY MANAGEMENT TOOLS**
- **(The Mitigation Toolbox)**
- **Harvest Levels**
- ABC/OY
- sector allocations
- trip (landing) limits
- catch limits
- individual quotas
- **Gear Restrictions**
- **Trawl** mesh size
- footrope diameter/length
- net height
- codend mesh and dimensions
- design: on-bottom or pelagic
- bycatch reduction devices (BRDs)
- **Line** number of hooks
- hook size
- line length
- retrieval requirements
- **Pot/trap** number of pots
- pot size
- escape panel in net/pot
- retrieval requirements
- **Other**
- setnets (gill and trammel nets)

- **Time/Area Restrictions**
- seasons
- area closures
- depth closures
- marine reserves

- **Capacity (number of participants)**
- permits/licenses/endorsements
- limited entry

- **Capacity (Vessel Restrictions)**
- vessel size
- engine power
- vessel type
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- **Monitoring/Reporting Requirements**
- permits/licenses
- registrations
- Fish tickets (commercial landings/sales receipts)
- Vessel logbooks
- Surveys
- Punch cards/tags (recreational)
- Port sampling/on-shore observers
- On-board observers
- Vessel monitoring systems (VMS)
- Onboard video recording devices
- Enforcement

FISHING METHODS AND MITIGATION TOOLS

1. Reducing Incidental (Unintended or Unwanted) Catch

- This “toolbox” includes all available management measures (“fishing regulations”) that could be used to reduce incidental catch. Incidental catch means accidental, unintentional and/or unwanted capture of any marine plant or animal. This includes all non-groundfish species and all groundfish that would be discarded for any reason.

  Each tool will be described, and any reporting/ monitoring requirements identified.

2. Reducing Bycatch Mortality (Including Unobserved Mortality)

- This “toolbox” includes all available management measures that could be used to reduce mortality of incidental catch, including unobserved mortalities resulting from gear encountering fish.

  Each tool will be described, and any reporting/monitoring requirements identified.

3. Bycatch Reporting and Monitoring

- This “toolbox” includes all available methods to record and/or report bycatch or fishing activities related to bycatch.

  Each tool will be described, including estimated costs.

THE ANALYTICAL APPROACH

1. Describe the Conditions That Are Related to Incidental Catch and Bycatch

- A. Co-occurrence in time and space
- B. Behavior patterns, size, and other species characteristics that make them vulnerable to the same fishing gears.

- 1. Describe the Conditions That Are Related to Incidental Catch and Bycatch
- 2. Describe/Evaluate the Effects (Impacts) and Effectiveness of Each Mitigation Tool that Relates to Fishing Gears and Methods
- 3. Describe/Evaluate the Effects and Effectiveness of Each Other Mitigation Tool
- 4. Apply the Effects/Effectiveness Ratings to Each of the Six Alternatives.