

# The Pacific Fishery Management Council's Groundfish Bycatch Mitigation Program Work Plan June 2005

## Contents

1.	Introduction .....	1
2.	Bycatch Mitigation Measures and Programs Currently in Place or Under Development.....	2
3.	Bycatch Mitigation Measures and Programs To Be Implemented Pursuant to Amendment 18.....	3
3.1.	Bycatch Mitigation Measures Described in the Preferred Alternative .....	3
3.2.	Sector and Vessel-specific Total Catch Limits Implementation Issues.....	3
3.3.	Bycatch Mitigation Implementation Mechanisms.....	4
3.3.1.	Biennial Specifications Process to Implement Interim Sector Total Catch Limits: 2007-2008 .....	5
3.3.2.	Inter-sector Allocation EIS for Permanent Sector Total Catch Limits: 2009 .....	5
3.3.3.	Regulatory Amendment to Implement Vessel-specific Total Catch Limits: 2011 .....	6
3.3.4.	Full Retention Programs .....	6
3.4.	Other Bycatch Mitigation Measures the Council May Consider.....	7

## 1. Introduction

In September 2004 NMFS released the Bycatch Mitigation Program Final Environmental Impact Statement (FEIS), containing the Council's preferred alternative. To implement this alternative, Amendment 18 to the groundfish fishery management plan (FMP) adds language to:

- Require the use of current bycatch minimization measures.
- Fully describe the current standardized bycatch reporting methodology.
- Incorporate the Groundfish Strategic Plan goal of reducing overcapacity in all commercial fisheries.
- Authorize a sector-specific bycatch accounting methodology.
- Support the future use of individual fishing quota (IFQ) programs as bycatch reduction tools for appropriate fishery sectors.
- Authorize the use of sector-specific and vessel-specific total catch limit programs to reduce bycatch in appropriate sectors of the fishery. These programs could include monitoring standards, full retention programs, and individual vessel incentives for exemption from sector total catch limits.

The Groundfish FMP is a framework plan; it provides the Council with a range of management measures they may consider for implementation through federal rulemaking. Implementing new management measures most commonly occurs as part of the biennial harvest specifications regulatory process. The Council may also develop regulatory amendments to change or amend federal regulations.

## DRAFT

Section 2 of this work plan reviews the range of measures the Council has already implemented. Section 3 proposes new bycatch mitigation measures to be implemented through federal rulemaking.

## 2. Bycatch Mitigation Measures and Programs Currently in Place or Under Development

Ongoing management measures and programs implemented by the Council and NMFS that mitigate bycatch include:

- At-sea observer programs in both shore-delivery and sea-delivery groundfish fisheries, including groundfish limited entry trawl, limited entry fixed gear, and open access vessels.
- Large-scale closed areas to reduce protected salmon bycatch: Klamath and Columbia River Conservation Zones.
- Large-scale closed areas to reduce overfished species bycatch: Rockfish Conservation Areas, Cowcod Conservation Areas, Yelloweye Rockfish Conservation Area.
- Vessel Monitoring System (VMS) requirements for the limited entry fleet to ensure compliance with closed area restrictions.
- Season restrictions to reduce directed and incidental catch of overfished species.
- Trawl mesh size, chafing gear, and codend regulations to reduce juvenile fish bycatch.
- Trawl footrope size regulations to reduce access to rocky habitat and rockfish bycatch.
- Selective flatfish trawl regulations to reduce bycatch of rockfish in flatfish fisheries.
- Escape panel requirements for groundfish pots to prevent lost pots from ghost fishing.
- FMP Amendment 14 to reduce capacity in the limited entry fixed gear fleet.
- Trawl buyback to reduce capacity in limited entry trawl fleet.
- Overfished species total catch limits in the whiting fisheries.
- Geographically-based harvest guidelines, especially in recreational fisheries.
- Improving consistency between state and federal regulations.

Bycatch mitigation measures and programs under development by the Council and NMFS include:

- Expanding VMS coverage requirements to open access fisheries that are subject to groundfish closed area restrictions.
- Implementing an IFQ program for the limited entry trawl fishery, which could be used to reduce regulatory bycatch if allowable catch amounts were tradable.
- Implementing measures to mitigate fishing impacts to essential fish habitat (EFH), proposed in a draft EIS under Council consideration, which could also mitigate bycatch.
- Implementing a full retention and electronic monitoring program for the shore-based whiting fishery.

### 3. Bycatch Mitigation Measures and Programs To Be Implemented Pursuant to Amendment 18

#### 3.1. *Bycatch Mitigation Measures Described in the Preferred Alternative*

Although the Council/NMFS have implemented numerous measures to mitigate bycatch, key elements of the preferred alternative need additional development and planning to implement. As part of developing these elements, the Council/NMFS need to explore the type of monitoring that would be required, the program infrastructure that would have to be put into place, and the cost associated with adequate monitoring. Key measures discussed in the preferred alternative and considered for implementation in this work plan are:

- A sector-specific bycatch accounting methodology.
- Sector-specific total catch limit program.
- Vessel-specific total catch limit program.
- Full retention program(s).

#### 3.2. *Sector and Vessel-specific Total Catch Limits Implementation Issues*

Draft FMP amendment language (Section 6.5.3.2) authorizes the Council to develop sector- and vessel-specific programs with the following characteristics:

- A total catch limit is a portion of the OY for a groundfish FMU species, stock, or stock complex assigned to a defined fishery sector or an individual vessel. Total catch is defined as **landed catch plus bycatch (discard) mortality**. The Council may specify total catch limits that are transferable or nontransferable among sectors or tradable or nontradable between vessels.
- Establishing an adequate bycatch (discards) monitoring program would be a prerequisite for implementing a sector total catch limit or an individual vessel total catch limit program. Two approaches to monitoring could be used, based on practicability. First, total catch could be estimated by modeling the expected bycatch associated with the landing of a particular mix of species. With this approach there would be some lag in making estimates, depending on the frequency landing reports (e.g., quota species monitoring [QSM] reports) and the lag time between the end of the monitoring period (e.g., calendar month) and when the report is generated. The second approach could be used in cases where it is practicable to have full at-sea monitoring (as in the at-sea Pacific whiting fishery), which would allow near-real-time monitoring of total catch. The type of monitoring program would likely affect how and whether total catch limits could be implemented, because this reporting would be used to determine when a limit is reached, which would necessitate a fishery closure if it occurred before the end of the limit period (e.g., the fishing year).
- Total catch limits would function like allocated quotas for one or more sectors or vessels in a sector; once a sector or vessel has attained the catch limit, fishing ceases until the start of the next year, fishing season, or other defined period. Limits could differ from an allocation in that they need not be permanent; they could be established biennially, for example. If authorized by the Council, a limit could be changed during a limit period. For example, if total catch in one sector is projected not to reach the total catch limit established for that sector, the difference between the sector total catch limit and projected total catch by vessels in the sector could be transferred to another sector that is nearing its limit.

## DRAFT

- The Council will consider 10 sectors (described in draft FMP language) initially when developing sector limits, but has the flexibility to combine or subdivide these sectors for the purpose of establishing limits.
- An individual-vessel total catch limit program may be established for an already total-catch-limited sector. Vessels would then have the option to gain an exemption from the sector limit and be assigned a limit specific to the vessel. Any limit amount assigned to the vessel would be deducted from the applicable sector limit. Both monitoring requirements and incentives (e.g., higher, differential cumulative landing limits) could apply to participating vessels.
- Barring any legal constraints, vessels with their own total catch limits may be permitted to pool limit amounts and then reassign increments of the pooled limits to participating vessels. This mechanism would rely on private contracts, similar to current arrangements for assigning the overall quota to individual vessels in the Pacific whiting catcher/processor sector.

### **3.3. *Bycatch Mitigation Implementation Mechanisms***

As noted above, implementing bycatch mitigation measures authorized by the amended FMP will involve full rulemaking to establish regulations. Since the bycatch mitigation program EIS was programmatic, and did not evaluate the specifics of total catch limit programs, another National Environmental Policy Act (NEPA) analysis would likely be required as part of this rulemaking. Implementing total catch limits could be part of an one of the following rulemaking/NEPA processes:

1. The biennial harvest specifications rulemaking process and associated EIS (or environmental assessment [EA]).
2. The planned inter-sector allocation EIS proposed as part of the trawl individual quota (TIQ) process.
3. A separate rulemaking/NEPA process.

These three procedural options are not mutually exclusive. For example, catch limits, applying to just a few species and sectors, could be implemented as an “interim” measure as part of the harvest specifications process, while permanent—and perhaps more comprehensive—allocated catch limits could be evaluated in the inter-sector allocation EIS.

Timing is a second issue to consider. Catch limit implementation would likely need to coincide with the biennial harvest specifications process, since catch limits represent a reservation of a portion of an OY specification for a given overfished species. This suggests using the 2007-2008 biennial management cycle to establish some comparatively modest interim measures. Permanent, more comprehensive limits would be implemented for the 2009-2010 cycle through the inter-sector allocation EIS. The timing of the TIQ initiative also needs to be considered. Sector and vessel-specific limits and IFQs may be viewed as a conceptual and functional continuum. The allocations and monitoring programs required for sector and vessel-specific limits are prerequisites for an IFQ program. In addition, decisions and design elements for total catch limit programs need to be consistent with parallel issues in the TIQ program. Since allocations—at least *between* the limited entry trawl sector and other sectors collectively and *among* trawl vessels—are a prerequisite for TIQ implementation, a sector/vessel-specific catch limit program affecting the trawl sector should precede or coincide with TIQ implementation. Full implementation of the TIQ program is currently scheduled for the beginning of the 2009-2010 biennial cycle.

The following implementation options are discussed below:

**DRAFT**

- Biennial harvest specifications process: implement interim sector total catch limits for the 2007-2008 period.
- Inter-sector allocation EIS: implement permanent sector total catch limits to begin in 2009.
- Regulatory amendment: implement individual vessel total catch limits in 2011.

**3.3.1. Biennial Specifications Process to Implement Interim Sector Total Catch Limits: 2007-2008**

Based on the discussion above, the following sector catch limits will be evaluated as part of the 2007-2008 harvest specifications EIS and rulemaking:

Sectors	Species
<ul style="list-style-type: none"> <li>• Non-whiting limited entry trawl vessels.</li> <li>• At-sea Pacific whiting catcher-processors.</li> <li>• Limited entry trawl vessels delivering to at-sea Pacific whiting motherships.</li> <li>• Limited entry trawl vessels delivering Pacific whiting to shore-based processing plants.</li> </ul>	<ul style="list-style-type: none"> <li>• Canary rockfish</li> <li>• Darkblotched rockfish</li> <li>• Widow rockfish</li> </ul>
Limited entry fixed gear vessels, including separately or in combination:	
<ul style="list-style-type: none"> <li>• Sablefish-endorsement permit holders</li> <li>• Permit holders without the sablefish endorsement</li> </ul>	<ul style="list-style-type: none"> <li>• Canary rockfish</li> <li>• Yelloweye rockfish</li> </ul>
<ul style="list-style-type: none"> <li>• Recreational subsectors as defined as part of the harvest specifications process</li> </ul>	<ul style="list-style-type: none"> <li>• Canary rockfish</li> <li>• Lingcod</li> <li>• Yelloweye rockfish</li> </ul>

Note: Supplemental Tribal Comment from the March 2005 Council meeting states “treaty fisheries would not be an appropriate sector for total catch limits on overfished or other bycatch species.” Subject to further Council discussion, the tribal sector is not identified for the use of sector total catch limits at this time.

Similar to OYs, total catch limits would be established for each year in the two-year management period. Establishing catch limits is contingent on an accurate, sufficiently real-time catch accounting system for participating sectors. The projected status of catch accounting for the 2007-2008 period will be part of the evaluation. The risk of overages—total catch above projections—in sectors not assigned catch limits will also have to be evaluated. A policy for dealing with overages will have to be developed. Related to this, an evaluation would consider whether catch limits can be changed during the year (the limit period). The ability to change limits would anticipate inaccuracies in the catch projections upon which the limits were based, which would result in overages. On the other hand, if fishery participants thought the limit could be adjusted upward, such a policy could weaken the fishers’ incentive to adopt bycatch-reducing practices.

**3.3.2. Inter-sector Allocation EIS for Permanent Sector Total Catch Limits: 2009**

The current proposed action to be evaluated in the inter-sector allocation EIS is allocation of a wide range of target and non-target species between the limited entry trawl sector and all other sectors combined for the purpose of establishing ITQs for the limited entry trawl sector. The proposed action would be expanded to include permanent allocations of groundfish species—functioning as total catch limits—among sectors other than limited entry trawl. The EIS would evaluate what sectors should be defined for

## DRAFT

the purpose of establishing catch limits and the catch accounting program necessary to support them. The NEPA and rulemaking processes would be set to a schedule to implement the proposed action at the start of the 2009-2010 management cycle.

### **3.3.3. Regulatory Amendment to Implement Vessel-specific Total Catch Limits: 2011**

A vessel-specific total catch limit program could be developed for implementation beginning in 2011. A separate NEPA (EA or EIS) and rulemaking process would be used to evaluate elements of this program. Phasing it in this way will benefit from considerable experience with sector catch limits, settled allocations for identified sectors, and the implementation of ITQs in the limited entry trawl sector. The preferred alternative in the bycatch program FEIS envisions vessel-specific limits as a modification of current cumulative landing limit regime (“This alternative would modify the definition of trip limits to include catch [mortality] limits....”) The two components—landed catch and discard mortality—of a total catch limit would be accounted for and limited, so there would be no need to prohibit retention as a disincentive. Vessels “opting out” of a sector catch limit would be assigned their own limit for each applicable species. Requirements could be established—partial or full payment of observer costs, for example—for vessels to receive a limit. This could be coupled with an incentive, such as higher cumulative landing limits for non-overfished species.

A scheme for determining vessel-specific limits would have to be developed. In geographically diverse sectors, where participating vessels may encounter overfished species at variable rates, a proportional division of the optimum yield to establish vessel limits would not work very well. One solution would be to make the individual vessel limits tradable; this would represent a special case of an ITQ program if limits (i.e., quotas) applied only to overfished species. Current information suggests the overhead costs of an ITQ system are not justifiable if only applied to a limited range of species. Another approach would be to treat vessel limits similar to the initial allocation in an ITQ program without introducing tradability. Limits could be based on catch history during a specified “window period,” for example. Any such formula would have to ensure equitability within a sector between vessels remaining under the sector catch limit and those with vessel-specific limits.

A further elaboration of vessel-specific limits would be to allow vessels to pool limits and trade increments of the pooled limit by private contract. Alternatives based on these issues would be evaluated in the EA or EIS associated with the rulemaking process to implement vessel-specific limits. For implementation in 2011, this process would likely have to begin in mid-2009.

### **3.3.4. Full Retention Programs**

The bycatch program FEIS mentions full retention as a sub-component of a sector/vessel-specific catch limit program but contains no details or analysis of sectors that might be subject to full retention. The shore-based Pacific whiting trawl sector has been operating under a full retention policy, using an exempted fishing permit (EFP) issued for each management period. An EA is currently being developed to transition from the EFP to a permanent regulatory framework. Although this retention requirement was established to monitor the incidental capture of listed salmon species, it allows better catch accounting through current dockside monitoring programs. Full retention can be coupled with disposition requirements for landings (such as donation to a food bank of designated species) to discourage targeting. Required retention of selected species in designated sectors could be part of a catch accounting program in support of sector and/or vessel-specific total catch limits. The Council could consider full retention requirements as part of any three of the work plan elements described above.

## DRAFT

### **3.4. Other Bycatch Mitigation Measures the Council May Consider**

Although not discussed in the bycatch mitigation program FEIS, the Council could also consider the following bycatch mitigation measures for development:

- Integrating EFH- and bycatch-related groundfish closed areas so that where EFH-related closed areas reduce bycatch, that reduction is accounted for in bycatch rate modeling.
- Expanding VMS coverage requirements to commercial passenger fishing vessels that are subject to groundfish closed area restrictions.
- Hot-spot management to either prevent fishing in an area of overfished species abundance, or to allow fishing in an area of target species abundance.

The Council has the option of adding additional mitigation measures to the work plan.