

The Pacific Fishery Management Council's Groundfish Bycatch Mitigation Program Work Plan -- March 2007

1. Introduction

Amendment 18 to the groundfish fishery management plan (FMP), implementing the preferred alternative in the Bycatch Mitigation Program Final Environmental Impact Statement, adds language to the FMP to:

- Require the use of current bycatch minimization measures.
- Provide the current standardized bycatch reporting methodology in the FMP.
- Incorporate the Groundfish Strategic Plan goal of reducing overcapacity in all commercial fisheries. (FMP Objective #2: "Adopt harvest specifications and management measures consistent with resource stewardship responsibilities for each groundfish species or species group. Achieve a level of harvest capacity in the fishery that is appropriate for a sustainable harvest and low discard rates, and which results in a fishery that is diverse, stable, and profitable. This reduced capacity should lead to more effective management for many other fishery problems.")
- Support the future use of individual fishing quota (IFQ) programs as bycatch reduction tools for appropriate commercial fishery sectors.
- Authorize the use of sector-specific and vessel-specific total catch limit programs to reduce bycatch in appropriate sectors of the fishery.
- Authorize the use of full/maximized retention requirements for selected fisheries, where practicable.

The Groundfish FMP provides information on the fishery, and contains specific requirements for managing the fishery. As a framework plan, it also contains standards and procedures for adopting new management measures, and 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.

The Council reviewed this work plan at its November 2004, March 2005, September 2005, November 2005, September 2006, and November 2006 meetings. At its November 2005 meeting, the Council debated the practicability of implementing the various bycatch mitigation measures made available for use in the groundfish fishery through Amendment 18. The Council determined that, while sector- and vessel-specific bycatch limits could be useful bycatch mitigation measures in some cases, fishery management agencies do not, at this time, have the resources, money, or infrastructure to manage major portions of the groundfish fishery with sector- or vessel-specific bycatch limits. Therefore, the Council is focusing its current efforts on management tools that could be developed and implemented within a 2- to 3-year time frame, in order to evaluate and improve bycatch accounting, reduce bycatch through programs that are practicable for near-term implementation, and build a management infrastructure to support implementation of more complex bycatch reduction measures. As initial steps, the Council directed that this work plan first focus on:

- Requiring permits in the open access sector of the groundfish fishery to better monitor overall participation in the groundfish fishery;

- Analyzing how total catch data is delivered to the Council process, in order to improve the speed of data delivery.

Section 2 of this work plan reviews the range of measures the Council has already implemented. Section 3 discusses additional bycatch mitigation measures under Council development.

At its September 2006 meeting, the Council asked that the work plan be revised to include a preliminary schedule of when groundfish actions related to bycatch minimization are expected to be on the Council's future agendas (see below.)

At its November 2006 meeting the Council requested some additions to the schedule and asked that there be a description of how the document will be used and revised.

2. Bycatch Mitigation Measures and Programs Currently in Place

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 Areas.
- Large-scale closed areas to protect groundfish essential fish habitat: 51 new closed areas implemented off West Coast in June 2006.
- Vessel Monitoring System (VMS) requirements for the limited entry fleet to ensure compliance with closed area restrictions.
- Landings limits set for harvest of healthy stocks so that they constrain the incidental catch of overfished species that co-occur with those stocks.
- 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.
- Geographically-based harvest guidelines where appropriate, especially in recreational fisheries.
- Total catch limits for canary, darkblotched, and widow rockfish in the non-tribal Pacific whiting sector.
- Amendment 18 implementing regulations: Require that groundfish fishery management measures take into account the co-occurrence ratios of overfished species with more abundant target stocks; require vessels that participate in the open access groundfish fisheries to carry observers if directed by NMFS; update the boundary definitions of the Klamath and Columbia River Salmon Conservation

Zones and Eureka nearshore area to use latitude and longitude coordinates in a style similar to that of the Groundfish Conservation Areas; and authorize the use of depth-based closed areas as a routine management measure. The purposes for the routine use of depth-based closed areas are: protect and rebuild overfished stocks, prevent the overfishing of any groundfish species, minimize the incidental harvest of any protected or prohibited non-groundfish species, control effort to extend the fishing season, minimize the disruption of traditional commercial fishing and marketing patterns, spread the available recreational catch over a large number of anglers, discourage target fishing while allowing small incidental catches to be landed, and allow small fisheries to operate outside the normal season.

- 2007-2008 Groundfish Harvest Specifications and Management Measures: In addition to those measures already listed above as currently in place, this rulemaking adds three new Yelloweye Rockfish Conservation Areas to constrain yelloweye bycatch, and adds an Ocean Salmon Conservation Zone for inseason use to constrain salmon bycatch in the whiting primary season.

Bycatch mitigation measures and programs developed by the Council and planned for implementation in 2007:

- VMS regulations: Expand VMS program to require that all commercial vessels that take and retain, or possess groundfish in the EEZ, or land groundfish taken in the EEZ, and all trawl vessels that operate in the EEZ, must carry and use VMS units.

3. Bycatch Accounting and Mitigation Measures Under Development

3.1 Total Catch Data Collection, Analysis, and Delivery

In June 2006, per the Council's request, NMFS's Northwest Fisheries Science Center presented a report, *Summary of West Coast Groundfish Observer Program Data Collection and Quality Control Process* (Agenda Item F.1.b., NWFSC Report, June 2006). That report described the data collection and quality control process as occurring in four phases: 1) observer data collection, entry, and initial quality control; 2) identifying and attaching corresponding fish ticket data with observer data; 3) data processing and analysis; 4) validating and delivering discard data, and developing models based on this data, for use in management.

To estimate total catch rates in the groundfish fishery, observer data must be expanded from the observed trips in a particular sector to all of the trips taken in that sector. These expansions require that fish tickets are complete for the time period being analyzed and that fishing depth information for each tow, currently only accessible from trawl logbook records, is available for the entire fleet. In its report, NMFS suggested that the delivery to the Council process of analyzed observer data could be speeded up if fish ticket upload time to the PacFIN data system were shortened; logbook data upload time, particularly for identifying fishing depths, were shortened; fish tickets were more consistent between states; and fish tickets and logbooks were altered to add an identifier for when the trip was associated with an exempted fishing permit. Changing this system will require coordination among and action by the three states, NMFS, and the Pacific States Marine Fisheries Commission as fish tickets and trawl logbooks are state and not federal reporting requirements.

3.2 Inter-Sector Allocation

The Council has previously established formal allocations between different fishery sectors for several species or species groups: 1) all groundfish species between the limited entry and open access commercial fisheries based on relative catch histories of the two fleets; 2) whiting between the shore-based, mothership, and catcher/processor sectors of the groundfish limited entry trawl fleet; and 3) sablefish between the limited entry fixed gear and trawl sectors, sablefish between the endorsed and non-endorsed portions of the limited entry fixed gear fleet, and sablefish between the three Amendment 14 tier groups. Several of the bycatch mitigation tools provided by Amendment 18 would first require that the Council

develop additional groundfish allocations between fishery sectors. Implementing sector- or vessel-specific bycatch cap programs would first require that available groundfish harvest be allocated between sectors and/or vessels. Implementing an individual quota program for any one sector of the groundfish fleet would require groundfish allocations between that sector and the remaining sectors in the fleet. To that end, the Council has released a Notice of Intent to prepare an Inter-Sector Allocation Environmental Impact Statement (EIS). The public comment period on this Notice of Intent ended on June 16, 2006. Scoping for the EIS is continuing and the Groundfish Allocation Committee met in October 2006 to refine a range of alternatives for review at the November 2006 meeting. Any inter-sector allocation would likely require an FMP amendment in addition to the EIS. The FMP requires that FMP amendments be considered over at least three Council meetings.

3.3. *Open Access Sector License Limitation*

When it considered this work plan in November 2005, the Council recommended expanding the current limited access system to cover a larger segment of vessels targeting groundfish. The Council noted that fishery managers cannot currently identify all of the vessels participating in the groundfish fishery. Better identification of the fishery participants would allow fishery managers to better monitor and account for bycatch in the sector, and to better target particular management measures to reduce bycatch in the sector. A license limitation program to reduce effort in the fishery would reduce the number of vessels targeting groundfish and having opportunities to discard incidentally-caught fish.

Currently, a federal limited entry permit is not required for all vessels that land groundfish. A trawl-endorsed permit is required to land groundfish with that gear type (as defined in the FMP and Federal regulations), although certain trawl fisheries catching groundfish incidentally, such as the pink shrimp trawl fishery, may land limited amounts of groundfish consistent with specified limits and under defined gear exemptions. Vessels targeting groundfish without a Federal permit may use fixed gear (longline and pot), but may be subject to lower landing limits (such as the daily trip limit for sablefish) than those vessels with a fixed gear endorsed groundfish limited entry permit. Other legal groundfish commercial gear types, such as vertical hook-and-line, may also land groundfish under the same set of open access landing limits, which are established in biennial specifications. In most cases these open access fisheries are subject to state limited entry programs, as is the case for nearshore groundfish fisheries in Oregon and California. (Washington prohibits commercial groundfish fisheries in state waters.) Like the non-groundfish trawl fisheries, there are other fisheries, such as salmon troll, that may land small amounts of groundfish without those species being their principal target. At their September 2006 meeting, the Council began discussions on developing a permit system for the open access fishery participants. Any such program would require amending the groundfish FMP, a process that requires at least three Council meetings (per the FMP) to complete.

3.4. *Trawl Individual Quota Program*

The Council has been considering the development of a dedicated access privileges program, principally focusing on individual fishing quotas (IFQs) for the groundfish limited entry trawl sector. As discussed above, implementing such a program would require allocating harvest of a wide range of target and non-target species between the limited entry trawl sector and all other groundfish sectors in aggregate (by means of the Inter-Sector Allocation EIS.) The Council has appointed an Ad-hoc Trawl Individual Quota Committee to develop alternatives, which will be analyzed in a separate Trawl Individual Quota Program EIS. Like open access permitting, a trawl IFQ program would require an FMP amendment. The Council has already discussed this issue at several past meetings. The Groundfish Allocation Committee will meet in December 2006 to refine and simplify alternatives under this program. The draft timeline for this action estimates that, depending on the complexity of the program proposed, a trawl IFQ program could be implemented beginning January 1, 2011.

3.5 Maximized Retention Program for the Shore-based Whiting Sector

Federal groundfish regulations require that groundfish catch be sorted at sea because they prohibit retention of groundfish in excess of trip limits, and retention of prohibited species. The shore-based Pacific whiting trawl sector has been operating under an exempted fishing permit (EFP) that allows participating vessels to land their catch without sorting it, and to retain until offloading prohibited species and groundfish in excess of trip limits, in order to allow the unsorted catch to go directly into the hold to better preserve the condition of the whiting flesh. Since 2004, NMFS and the states have operated the EFP with at-sea electronic monitoring, and with a requirement that participating vessels maximize their retention of all catch (eliminate discards as much as possible). Pursuant to the FMP's Amendment 10, the Council may exempt a fishery with an approved monitoring program from the prohibitions from landing unsorted catch and from retaining incidentally-caught salmon as part of that unsorted catch. Amendment 18 made electronic monitoring available as a monitoring tool for use outside of experimental efforts. Implementing such a program for the shore-based whiting sector will require: 1) development of requirements for electronic monitoring system components; 2) development of maximized retention regulations; 3) evaluation of the shore-based total catch monitoring program for the whiting fishery; and 4) development of permanent infrastructures to support inseason monitoring of the shore-based whiting fishery's catch and to support collection and analysis of electronic monitoring system data. An EA is currently under development to support the transition from the EFP to a permanent regulatory framework for the exemptions and required monitoring program. Although Amendment 10 initially envisioned a program for the monitoring of incidental salmon catch, current Council efforts have expanded the intent of the program to ensure better accounting of all bycatch species and to reduce fishery discards.

At the Council's September meeting, NMFS and state agencies reported on issues for Council consideration and needed next steps to move this program to Federal regulation. This program may or may not need an additional FMP amendment. For its November 2006 meeting, the Council plans to adopt a range of alternatives for public review. Depending on the complexity of the program developed, the fishery is expected to transition to Federal regulations in time for the 2008 primary whiting season.

3.6 Sector- and Vessel-Specific Bycatch Limits

Per Council recommendations, NMFS has implemented bycatch limits for canary, darkblotched, and widow rockfish taken incidentally in the whiting fishery. At its June 2006 meeting, the Council asked that additional discussions be held at its autumn 2006 meetings on the feasibility of implementing sector-specific overfished species bycatch limits for the three different sectors within the non-tribal whiting fishery. As discussed above, whiting has been allocated between the fishery sectors that target whiting. For overfished species bycatch limits to be implemented for the whiting sectors, those species would have to be allocated between the sectors and an adequate monitoring system would need to be developed and implemented. The Council could recommend that such an allocation be considered as part of the Inter-Sector Allocation EIS, or through some separate action. The trawl IQ program, discussed above, would be a vessel-specific total catch limit program for the trawl sector. Like the trawl IQ program, additional sector- and/or vessel-specific bycatch limit programs could be implemented, if found to be practicable, following the development of inter-sector groundfish allocations for those sectors and development of an adequate monitoring program. A Council evaluation of the total catch data collection, analysis, and delivery program will also be needed to develop an appropriate total catch monitoring program for any sector managed with bycatch limits.

3.7 Other Bycatch Mitigation Measures the Council May Consider

Under Amendment 18, 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.

4.0 Use and Revision of this Document

This Pacific Fishery Management Council intends to use this document for guidance and planning as it moves forward with deliberations on the above described bycatch reduction efforts. The Council could consider this document when reviewing the 3-meeting schedule or during other planning exercises. The Work Plan is a living document, and will be updated by the Council staff as appropriate to reflect Council actions.

The timing and related outputs for planned activities to achieve strategic goals and program objectives are outlined below. As noted above, progress in achieving goals and objectives is subject to change, based on the availability of resources and changes in priorities. Further development and implementation of any program described above will depend upon whether the Council and NMFS determine, among other things, that it is practicable. This document may be periodically updated to reflect these changes.

Table 1: Preliminary timetable and deliverables for initiatives identified in the bycatch workplan.

The below schedule is based on current projections of Council and NOAA Fisheries requirements and capabilities. It is subject to revision due to staffing levels, resource availability and unanticipated events. Brackets ({}) indicate activities subject to further planning.

2006 Council Meetings

	Bycatch Data Collection, Analysis, and Delivery	Trawl Individual Quota Program	Intersector Allocation	Shore-Based Whiting Full Retention	{Open Access Sector License Limitation}	Groundfish Harvest Specifications
September						Council recommended inseason action for 10/1/06.
			GAC; preliminary range of alternatives		{Planning and Scoping}	NOAA implemented inseason action for 10/1/06.
November			Adopt preliminary range of alternatives for analysis	Alternatives & core regulations		Council considers inseason actions for 12/1/06
	PACFIN Meeting to discuss issue	GAC: Review and Simplify Alternatives				NOAA may implement Council inseason recommendations

2007 Council Meetings

	Bycatch Data Collection, Analysis, and Delivery	Trawl Individual Quota Program	Intersector Allocation	Shore-Based Whiting Full Retention	{Open Access Sector License Limitation}	Groundfish Harvest Specifications
March						Council finalizes 2007 whiting ABC/OY. Council considers inseason actions for 4/1/07
	NOAA Science Center – 1 st Annual Constituent Mtg on Observation Data Collection & Analysis					NOAA implements 2007 whiting ABC/OY and may implement Council inseason recommendations
April	PSMFC Whiting Fish Ticket Pilot Program started			Draft EA for final action	{Preliminary scoping meeting; determines process and schedule for action}	Council considers inseason actions
	NOAA Science center – ongoing discussions with states	GAC Meeting	GAC Meeting			NOAA may implement Council inseason recommendations
June		Council refines Alternatives	Select alternatives for EIS			Council considers inseason actions
			Draft preliminary DEIS	Proposed rule publishes		NOAA may implement Council inseason recommendations
September						Council considers inseason actions
						NOAA may implement Council inseason recommendations
November	PSMFC report on Whiting fish ticket pilot	Select alternatives for EIS	Select preferred alternative for public review	Report on electronic logbooks		Adopt Preliminary ABCs and range of OY alternatives Council considers inseason actions
	PACFIN Meeting – Issue on the agenda; develop workplan					NOAA may implement Council inseason recommendations
				Final Rule Publishes		

2008 Council Meetings

	Bycatch Data Collection, Analysis, and Delivery	Trawl Individual Quota Program	Intersector Allocation	Shore-Based Whiting Full Retention	{Open Access Sector License Limitation}	Groundfish Harvest Specifications
March						Council finalizes 2008 whiting ABC/OY. Council considers inseason actions for 4/1/08
						NOAA implements 2008 whiting ABC/OY. NOAA may implement Council inseason recommendations
April			Final Council Action	Action for core regulation effective		Adopt 2009-10 preferred ABC/OY alternative and Preliminary range of management measure alternatives Council considers inseason actions for 5/1/08
						NOAA may implement Council inseason recommendations
June		Select preferred alternative for public review				Final adoption of 2009-10 ABCs/OYs & management measures preferred alternatives Council considers inseason actions for 7/1/08
						Complete EA/DEIS on 2009-10 fisheries; Public review NOAA may implement Council inseason recommendations Proposed Rule on 2009-20 fisheries published
September						Council considers inseason actions for 10/1/08
						NOAA may implement Council inseason recommendations
November		Final Council action				Council considers inseason actions
						Final Rule on 2009-10 fisheries Publishes. NOAA may implement Council recommendations