

TRAWL RATIONALIZATION TRAILING ACTIONS

ISSUE: WHITING SEASON AND SOUTHERN ALLOCATION

Draft Council Decision Analysis Document

**PREPARED BY
THE PACIFIC FISHERY MANAGEMENT COUNCIL
7700 NE AMBASSADOR PLACE, SUITE 101
PORTLAND, OR 97220
503-820-2280
WWW.PCOUNCIL.ORG**

NOVEMBER 2012

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CHAPTER 1 PURPOSE AND NEED FOR THE PROPOSED ACTION

1.1 Introduction

This document provides background information about, and analyses for, modifications affecting regulations for the shore-based whiting fishery. The proposed action would require an amendment to the regulations implementing the Pacific Coast Groundfish Fishery Management Plan (FMP). The proposed action must conform to the Magnuson-Stevens Fishery Conservation and Management Act (MSA), the principal legal basis for fishery management within the Exclusive Economic Zone (EEZ), which extends from the outer boundary of the territorial sea to a distance of 200 nautical miles from shore.

In addition to addressing MSA mandates, this document will provide the analytical content for an environmental assessment (EA), pursuant to the National Environmental Policy Act (NEPA) of 1969, as amended. Assuming that an EA is required, the document will be organized so that it contains the analyses required under NEPA.

1.2 Description of the Proposed Action

The action considered under this issue is to amend the regulations governing the groundfish fishery by modifying the season opening date for the shore-based primary whiting season and the allocation cap on the amount of the allocation taken and retained early in the season in the area south of 42° N. lat.

1.3 Purpose and Need for the Proposed Action

The trawl rationalization program generates benefits over the previous management program to the degree that previous management constraints can be relieved and flexibility provided in the new program. The opportunity for regulatory relief is generated by the individual and collective responsibility for staying within allowed catch levels that is imposed by the rationalization program. The self responsibility of the trawl rationalization program is generated through a system of catch shares (in the form of IFQs or catch limits assigned to co-operatives). Flexibility in the new program is provided by providing the opportunity for individuals to trade catch shares among themselves. This flexibility is expected to allow the industry to optimize the value it derives from the fishery, subject to those regulations which need to remain in place to achieve conservation objectives and address socio-economic concerns which would not otherwise be expected to result from the influence of market forces.

A substantial portion of the regulatory relief provided to the shore-based trawl fishery was the near elimination of the system of 2-month trip limits which was used to control harvest of nonwhiting species under the previous management regime. However, the trawl rationalization program made no automatic adjustments to the season structure used to control harvest in the shore-based and at-sea whiting fishery. There may be an opportunity to further enhance benefits of the trawl rationalization program by relieving constraints imposed by the season regulations. The Amendment 20 trawl rationalization program specifically identified consideration of modification of the whiting seasons to be a matter for a trailing action.

CHAPTER 2 DESCRIPTION OF THE ALTERNATIVES

2.1 Alternatives

2.1.1 Background

In 1996, the northern shore-based fishery (north of 42° N. lat) and at-sea whiting fisheries (mothership and catcher-processor) all began on May 15, the central shore-based fishery (between 42° N lat. and 40° 30' N lat.) began on March 1 and the southern fishery (south of 40° 30' N lat.) began on April 15. For 1997 the Council adopted, and NMFS approved, a preferred alternative which changed the opening date for the northern shorebased fishery to June 15, and moved the start date for the central fishery to April 1. Additionally, an allocation decision was made to limit the central and southern fisheries (the California fisheries) to taking a total of 5% of the shorebased allocation prior to the start of the northern fishery. These regulations have remained in place and continue under the trawl rationalization program.¹

In addition to modifying the season dates and establishing a California early season allocation, the Council's action for the 1997 fishery also established a framework for modifying the season opening dates on an annual basis. The framework for taking action is discussed in Section 2.3.

The alternative to status quo would return the northern shore-based season start date to May 15 and would also move the California fishery season start dates to May 15. The 5% limit on the

¹ The Council's action implemented for the 1997 fishery:

Adopted alternative: establish a season framework. Under the proposed framework, the Council may set separate season opening dates for each of the three sectors. Objectives and criteria for making these decisions are included in the discussion document. The season for northern California (40°30' N to 42° N latitude) would be modified to open April 15 in 1997 (60 days prior to the opening of the northern shorebased season) and be subject to a limit of 5% of the shore-based allocation (about 4,300 mt in 1997). The 1997 season opening date for mothership processors and catcher-processors will remain May 15, but the shore-based season north of 42°N will be June 15. Seasons may be adjusted annually to achieve the stated objectives. In addition, at-sea processors would be authorized to process whiting waste products when other at-sea whiting operations are prohibited, except for 48 hours before and after the at-sea whiting season is open.

amount of fish taken in the California fisheries prior to the start of the northern fishery becomes nonsensical if the California and northern fisheries start at the same time. Therefore, the alternative to status quo would also eliminate the early season allocation to the California shore-based whiting fishery (south of 42° N. lat).

The environmental assessment for the 1997 action is available from the Council website: http://www.pcouncil.org/wp-content/uploads/02_1997_EA_RIR_Whiting.pdf.

2.1.2 Description of Alternatives

The following are the alternatives being considered for this action.

Status quo: No Action. The current regulations for the start date and southern allocation are as follows.

660.131(B)(2) Different primary season start dates. North of 40°30' N. lat., different starting dates may be established for the catcher/processor sector, the mothership sector, and in the Pacific whiting IFQ fishery for vessels delivering to IFQ first receivers north of 42°N. lat. and vessels delivering to IFQ first receivers between 42° through 40°30' N. lat. . .

(iii) Primary whiting season start dates and duration. After the start of a primary season for a sector of the whiting fishery, the season remains open for that sector until the sector allocation of whiting or non-whiting groundfish (with allocations) is reached or projected to be reached and the fishery season for that sector is closed by NMFS. The starting dates for the primary seasons for the whiting fishery are as follows:

- (A) Catcher/processor sector—May 15.
- (B) Mothership sector—May 15.
- (C) Shorebased IFQ Program, Pacific whiting IFQ fishery.
 - (1) North of 42°N. lat.—June 15;
 - (2) Between 42°–40°30'N. lat.—April 1; and
 - (3) South of 40°30'N. lat.—April 15.

660.55 (f)(2) . . . No more than 5 percent of the Shore based IFQ Program allocation may be taken and retained south of 42° N. lat. before the start of the primary Pacific whiting season north of 42° N. lat. . . .

Alternative (PPA): Use a single May 15 start date for all whiting sectors including California fisheries and eliminate the 5 percent California early season whiting fishery cap, to the extent that a fishery management plan (FMP) amendment is not required. This change would be implemented through the two-meeting process already authorized under the framework of the Pacific Coast Groundfish FMP.

2.1.3 Rationale

A number of considerations influenced the 1996 decision to move the season opening date for the northern shore-based fishery from May 15 to June 15, including providing an opportunity for catcher vessels to participate sequentially in the mothership fishery (opening May 15) and the shorebased fishery (opening June 15), and allowing vessels to complete their May-June DTS cumulative limits before the start of the fishery (it was not permissible to land more than 60% of the DTS limit in a particular month). The shift from a May 15 to a June 15 opening (and from March 1 to April 1 for the central area) was also expected to have some effect in allowing the fish to grow to a larger size prior to harvest (decreasing the total number of individual fish taken to achieve the allocations and having some marginal effect on increasing stock productivity). On the down side was an expectation that shifting a portion of the season to later in the year might increase bycatch rates of rockfish because more of the whiting stock biomass would be in northern areas where rockfish such as yellowtail and widow are more available to midwater gear. With respect to the salmon fishery, the 1997 EA summarized:

The salmon bycatch data do not show a consistent pattern other than to indicate that high salmon bycatch rates may occur in the at-sea fishery later in the year. The shore-based fishery has experienced low salmon bycatch rates during most summer periods. It would be difficult to predict the impact of changing the season timing on salmon bycatch, especially on a year-to-year basis as could occur under the proposed framework" (Council 1997, p. ES-4).

The change in the shore-based season opening dates was supported by all sectors of the industry, including the shore-based processors in northern California.

The 5% limitation on early season whiting catch in the California fishery was seen as "prevent[ing] expansion and further capitalization in that area, contributing to further stability as well as minimizing cost to the nation from further capitalization" (Council 1997, p. ES-4).

For the shorebased industry in the north, returning to a May 15 opening would increase flexibility to determine the most optimal time to harvest the whiting by adding one month to the season length. The actual timing of harvest would likely take into consideration numerous factors including bycatch rates of other species (bycatch of groundfish is constrained by the quota pounds fishermen hold and bycatch of salmon above certain levels may trigger a reinitiation of consultation under the ESA²), opportunity costs related to other fishing opportunities (such as participation in the mothership whiting fishery or pink shrimp fishery), optimal size and condition of whiting for processing, and market prices. Moving the season start dates for California fisheries would simplify regulations and eliminate the 5% early season cap (eliminate a management measure requiring a possible inseason action that would constrain participants in the IFQ program) and may have an effect on salmon bycatch. The tradeoff for the California fisheries is a decrease in flexibility due to the shortened season. However, with implementation of the IFQ program it appears that harvest has moved out of northern California (Table 2-1. Industry members report that the historic landing in this area were primarily from catcher vessels trying to get a jump on the start of the season. With the IFQ travelling south for the early season no longer provided an advantage in terms of increased harvest opportunity.

² The standard for reinitiation of consultation is 0.5 Chinook per mt for any sector or a total of 11,000 Chinook for all sectors including the whiting fishery

Table 2-1. History of early season participation (1994-1996 and 2004-2011)

Shoreside Early Season Landings		1994	1995	1996	2004	2005	2006	2007	2008	2009	2010	2011
Metric Tons												
N of 42	May 15-June 14	12,648	25,598	11,250	-	-	-	-	-	-	-	-
42°-40°30'N. lat	April 1-May 14	1,730		1,283				2,087	2,298	1,792	1,736	0
S. of 40°30'N. lat.	April 15-May 14	0	0	0	0		0	0	0	0	0	0
ExVessel Value (\$)												
N of 42	May 15-June 14	796,295	2,682,576	657,727	-	-	-	-	-	-	-	-
42°-40°30'N. lat	April 1-May 14	171,850		119,509				259,645	493,746	197,080	297,657	0
S. of 40°30'N. lat.	April 15-May 14	0	0	0	0		0	0	0	0	0	0
Number of Vessels												
N of 42	May 15-June 14	16	25	26	-	-	-	-	-	-	-	-
42°-40°30'N. lat	April 1-May 14	4	1	4	4	4	5	6	7	6	9	0
S. of 40°30'N. lat.	April 15-May 14	0	0	0	0	1	0	0	0	0	0	0
Number of Buyers												
N of 42	May 15-June 14	6	11	7	-	-	-	-	-	-	-	-
42°-40°30'N. lat	April 1-May 14	3	1	3	2	2	2	3	5	5	7	0
S. of 40°30'N. lat.	April 15-May 14	0	0	0	0	1	0	0	0	0	0	0

Cells are blacked out to ensure confidentiality.

2.2 Alternatives Considered But Rejected from Detailed Analysis

The scope of the current alternatives is limited to moving the whiting season opening for the shore-based fisheries to May 15, coastwide, and a complementary adjustment (elimination of the 5% cap on the early season catch in the south). Moving the whiting season opening date even earlier, or other modifications of the whiting season regulations might also be considered but would require a more extensive analysis that could not likely be completed on time to be implemented for the 2013 fishery, given current workload constraints. Therefore, the current priority is to determine whether some interim regulatory relief can be provided until more substantial adjustments to the whiting regulations can be considered.

2.3 Summary of Impacts

Table 2-2. Summary of impacts.

Category	Summary of Impacts
Impact Mechanism Shift in Timing of Whiting Harvest (Relatively Small Impact)	<p>Based on 2011 data, perhaps about 17% to 27% of the shoreside harvest might shift up a month with the earlier fishing opportunity – depending on a variety of market, capacity, and fish availability factors as well as alternative fishing opportunities (see opening paragraph of Section 3.1).</p> <p>Because the shorebased fishery is allocated only 42% of the nontribal TAC, perhaps 7 to 11 percent of the nontribal TAC might be shifted one month earlier.</p> <p>Relative to 2010, the total whiting catcher vessel harvest for May 15-June 14 may not change that much because an increase for the shorebased fishery would be offset by diminished early effort in the mothership fishery, assuming the 2011 pattern holds (See Figures 3-1 and 3-2).</p> <p>Opportunities for early season fishing off California would be eliminated.</p>
Nonwhiting trawl	The earlier opening would also allow the earlier use of midwater gear to target on non-whiting species such as widow rockfish and yellowtail rockfish.
Physical Environment and Habitat	No impact.
Whiting Productivity	<p>Negligible impacts</p> <p>A 10% increase in productivity was projected when comparing a hypothetical situation where all the commercial harvest is taken in September to one in which all is taken in April. This might shift only about 10% of the harvest by one month instead of four.</p>
Bycatch Species	
Salmon	<p>Salmon –it appears a Section 7 Consultation may not be needed for the extension of the whiting season.</p> <p>Previous analysis indicates the risk of higher salmon bycatch is in late April and early May.</p> <p>Impacts would continue to be capped at 11,000 Chinook for the entire midwater whiting fishery.</p> <p>Salmon impacts would also occur as a result of the use of midwater trawl gear to target nongroundfish. If bycatch rates in such activities are higher May 15-June 14 than later in the summer and fall, then there could be an increase in total salmon bycatch.</p> <p>If bycatch rates are higher with the earlier opening, segments of the fishery other than shorebased whiting could be affected.</p>
Rockfish	Rockfish – rockfish bycatch issues should be addressed by the IFQ program.

Category	Summary of Impacts
Bycatch of other species including forage fish.	Data is not available to inform an assessment of possible impacts. An impact would occur if these rates are higher during the earlier period than after June 15. With 100% monitoring, information will be available to assess bycatch in the fishery and make adjustments if bycatch rates are problematic.
Socio-economic Fishery -	<p>Opportunities for vessels that participate in both the shorebased and mothership segments of the fishery may shift if both fisheries open at the same time.</p> <p>An earlier opening will provide some additional harvesting and processing flexibility which may benefit the industry.</p> <p>In years when the TAC is very high, an earlier opening may facilitate more optimal harvest rates.</p>
Socio-economic Community Effects -	Elimination of the early season openings off California may adversely effect future opportunities and flexibility for those communities, however, there was no early season fishing in 2011.
Socio-economic Agency -	Elimination of need to monitor 5% early season cap on landings off of California.

2.4 Process for Taking Action

The Council's action for the 1997 fishery (see footnote 1) established a framework for modifying the season opening date on an annual basis. That framework was codified in the following regulations:

660.131(B)(2) Different primary season start dates. North of 40°30' N. lat., different starting dates may be established for the catcher/processor sector, the mothership sector, and in the Pacific whiting IFQ fishery for vessels delivering to IFQ first receivers north of 42°N. lat. and vessels delivering to IFQ first receivers between 42° through 40°30' N. lat.

(i) Procedures. The primary seasons for the whiting fishery north of 40°3' N. lat. generally will be established according to the procedures of the PCGFMP for developing and implementing harvest specifications and apportionments. The season opening dates remain in effect unless changed, generally with the harvest specifications and management measures.

(ii) Criteria. The start of a primary season may be changed based on a recommendation from the Council and consideration of the following factors, if applicable: Size of the harvest guidelines for whiting and bycatch species; age/size structure of the whiting population; expected harvest of bycatch and prohibited species; availability and stock status of prohibited species; expected participation by catchers and processors; the period between when catcher vessels make annual processor obligations and the start of the fishery; environmental conditions; timing of alternate or competing fisheries; industry agreement; fishing or processing rates; and other relevant information.

The framework does not provide for the modification of the southern allocation nor does it include modifying the season start date for the southern most area (south of 40°30' N. lat.). Additionally, NMFS has made a preliminary determination that an EA will be required for this action. Given that the Council will need to go through the process of adopting a preliminary and preferred alternative, that the framework does not appear to provide any relief in terms of the analytical requirements, and that the current scope of the alternative goes beyond that covered by the framework, it is not readily apparent that use of the framework provisions for changing the whiting season provides any advantage over use of the socio-economic framework contained in the FMP. The socioeconomic framework requires a full rule making process including two decision meetings for the Council (preliminary and final actions).

CHAPTER 3 **IMPACTS**

3.1 Direct and Indirect Impacts to the Physical Environment, Including Habitat and Ecosystem, and Biological Environment

Biological impacts will be driven by the degree to which an earlier season opening results in a shift of harvest earlier into the year. Under the status quo IFQ program there is no race to fish. Whether an earlier opening results in earlier fishing will likely be driven by early season market prices, the condition of fish, catch per unit effort, the occurrence of bycatch species for which there is an avoidance incentive, opportunities in other fisheries, etc. Heavy fishing at the outset of the season under status quo might indicate a higher probability of an advantage to an earlier season and a greater likelihood that more harvest will be taken earlier if the season opens earlier. Prior to the trawl rationalization program, the fishery generally reached its peak in the first full week of fishing (week 25, Figure 3-1). With implementation of the trawl rationalization program in 2011 the fishery ramped up more slowly than in previous years, not reaching a peak until week 26. The fishery took a total of 16,000 mt in the first four weeks and then about 6,200 mt per week from week 26 through week 34. If the earlier opening simply shifts this same pattern forward in time, one might expect somewhere between 16,000 mt (17% of the 2011 harvest) and 24,800 mt (4 x 6,200, 27% of the 2011 harvest) to be taken in the newly opened period (May 15 through June 14).

Another factor influencing the effect of an earlier season opening date may be cross participation between fisheries. A comparison of Figure 3-1 and Figure 3-2 show the historic offset in the peak harvests for these two fisheries. The fishery pattern changed in 2011 with the implementation of the trawl rationalization program. In 2011, the mothership fishery had a bimodal distribution (with the strongest fishing occurring early and late) which generally bracketed the shorebased fishery's high effort period. Of the 50 permits with some whiting history from 2003-2010 (shaded cells of Table 3-1), 19 (nearly 40%) participated in both the shorebased and mothership sectors during that period (boxed cells in Table 3-1). If the overlap of the earlier season forces some vessels to choose between participation in the mothership and shorebased fishery, then either of the sector might fish at a slower rate than they otherwise would. However, it is also possible that processor capacity and demand, combined with the transferability of quota, would simply result in a redistribution of harvest among more vessels, rather than a different fleet harvest rate.

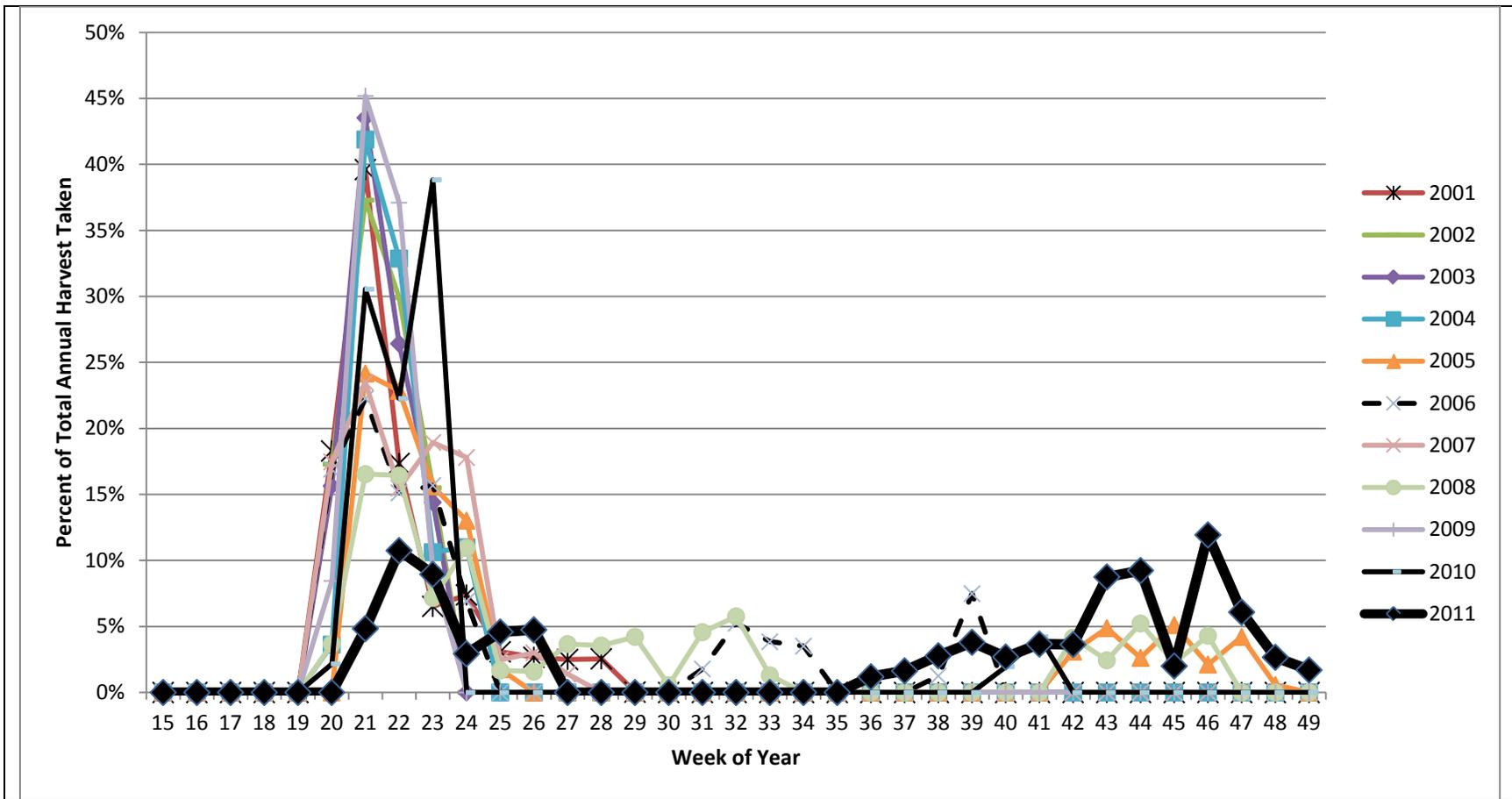


Figure 3-2. Percent of annual harvest, mothership sector by week, 2001-2011.

Table 3-1. Participation in the whiting fishery for two periods (1994-2003 and 2004-2010) for catcher vessel permits, showing participation in the **mothership** whiting fishery and **shorebased** whiting fishery.

	Shoreside Whiting Participation				Total
	Active in Both Periods	Not Active in Earlier Period (Entering After 2003)	Active Only in Earlier Period (Exiting After 2003)	Not Active (mothership whiting only)	
	Number of Catcher Vessel Permits				
Mothership Whiting Participation	-	-	-	-	
Active in Both Periods	18	1	4	2	25
Entering After 2003	-	-	-	-	-
Exiting After 2003	9	-	4	1	14
Not Active (shorebased whiting only)	11	5	13	-	29
Total	38	6	21	3	68

The 1997 EA (Council 1997) found that the likely biological and physical environment impacts from shifting the whiting season opening dates would accrue to the whiting resource, salmon (mostly chinook), and other groundfish species (primarily yellowtail and widow rockfish). A summary of the main conclusions of the EA is provided in the following sections. Some of this information may need to be updated for this EA.

3.1.1 Whiting

The 1997 EA stated

Delaying all or part of the whiting harvest to later in the season allows the whiting to grow, and thus fewer would be caught to achieve the harvest guideline. This could equate to as much as a 10% increase in longterm yield if the entire harvest were delayed until September each year, compared to the entire harvest being taken in April.

Under consideration here is a one month move (from June 15 to May 15) of a portion of the shorebased sector's allocation of whiting (42%). The 1997 EA indicated a 10% change in the yield would result from a four month delay in the entire whiting OY, a September harvest as compared to a harvest taken entirely in April. Given that the action alternative would result in only a one month move of only a relatively small portion of the total harvest (perhaps 11%³ of the whiting OY), the maximum impact on long term yield would likely be relatively small. Moreover, movement of the opening date to May 15 does not mean the timing of the entire shore-based harvest will be moved forward by a one month increment. The IFQ program provides an opportunity for harvest to be spread out over a longer period of time. It may that an extension of the season duration by one month encourages a steady but lower rate of harvest, spread out over a longer time, or that conditions are such that very little harvest occurs earlier in the year. Regardless, it seems unlikely that the entire allocation would be harvested during the

³ Derived assuming that 27% of the harvest is moved forward by a month and applying that value to the 42% allocated to the shoreside sector.

earlier period (May 15-June 14) as a result of the season change and the expected effect on yield would be small.

Given that under trawl rationalization, the optimal fishery appears to be a slower paced one, an earlier season start date may provide flexibility which is useful for years in which the whiting allocation is particularly high – provide more of an opportunity to harvest the entire allocations at the more optimal slower rate.

3.1.2 Bycatch Species

3.1.2.1 Salmon

The 2010 section 7 consultation on the salmon fisheries stated the following with respect to the whiting fishery:

Large numbers of salmon are caught in the bottom trawl and whiting components of the groundfish fishery off the coasts of Washington, Oregon, and California. A number of section 7 consultations have been conducted to determine effects of the fishery on ESA listed salmon. In each of the consultations, NMFS has determined that the incidental take of salmon in the fishery would not likely jeopardize the continued existence of the ESUs under consideration. The 1999 groundfish FMP opinion included an incidental take statement that permits the bycatch of 11,000 Chinook salmon in the whiting fishery (primarily a mid-water trawl) and 9,000 Chinook salmon in the bottom trawl component of the groundfish fishery (NMFS 1999). Consultation on the groundfish fishery was reinitiated in 2006 as a result of data that indicated that the incidental take statement for Chinook salmon had been exceeded in some fashion in 3 out of 4 years between 2002 and 2005 (NMFS 2006a). Ultimately, the supplemental biological opinion concluded that the fishery was not likely to jeopardize those ESUs and that the incidental take statement in place remained adequate for the groundfish fishery going forward. The groundfish trawl fishery operates in areas offshore most of the U.S. west coast, with the exception of southern California, but the amount of salmon bycatch associated with California Central Valley ESUs is not believed to be high. A recent study of salmon bycatch in the whiting fishery estimated about 3% of the salmon were Central Valley fall-run, and no evidence of Sacramento winter-run was detected (Moran et al. 2009), although this finding was based on data from only one year. Based on the information available from CWT recoveries, it seems likely that the bycatch of winter-run north of Point Arena would be minimal (see Effects Analysis). (NMFS 2010, p. 29).

When the shorebased season opening was moved from May 15 to June 15 NMFS found that the rule change was within the scope of the consultation in place at that time.⁴ NMFS has informed Council

⁴ The ESA Biological Opinion on salmon provide criteria that would require reinitiating an ESA consultation. In September 2010, NMFS issued a public notice which read, in part, as follows:

The National Marine Fisheries Service (NMFS) is concerned that current Chinook salmon bycatch rates in the 2010 shoreside Pacific Whiting fishery have been consistently higher than 0.05 Chinook/mt of whiting. This catch ratio is the guideline outlined in the 1999 Biological Opinion addressing potential effects of incidental Chinook salmon mortality in the whiting fishery. Consultation shall be reinitiated if: the shoreside catcher/processor, mothership, or Tribal components of the fishery exceed or are expected to exceed the bycatch rate of 0.05

staff that a move from June 15 to May 15 would also likely be within the scope of the current Biological Opinion for salmon species listed under the ESA.

With respect to salmon bycatch rates in the early season, the 1997 whiting season EA observed that prediction of bycatch rates by season is difficult and the greatest risk of elevated salmon bycatch for the shorebased whiting fishery appeared to be in late April and early May.

The dynamic nature of the marine ecosystem makes prediction of bycatch rates difficult. For example, salmon bycatch in the whiting fishery is not uniform, but rather patchy, and most tows are free of any salmon. . . . Improved communication among participants in the fishery could help reduce this bycatch by identifying areas of local salmon abundance. . . . An early season (especially in late April and early May) has been associated with higher salmon bycatch rates, especially in the shore-based fishery. However, during the joint venture period of the 1980s, salmon bycatch generally increased after June, peaked in July, and increased again in October. A NMFS report dated May 25, 1992 concluded there is little apparent seasonality. The late season seems especially variable. . . . The shore-based fishery has experienced low salmon bycatch during most summer periods. It would be difficult to predict the impact of changing season timing on salmon bycatch, especially on a year-to-year basis, as could occur under the proposed framework.

3.1.2.2 Groundfish Bycatch

With respect to rockfish, the 1997 EA on moving the salmon season stated:

Rockfish are the primary groundfish taken as bycatch in the whiting fishery, especially widow and yellowtail rockfish. Bycatch of these species could tend to increase if seasons are set late in the year when the bulk of the whiting biomass is in northern waters where rockfish are more available to midwater trawl gear. As with salmon, if areas of rockfish concentration can be identified and avoided, bycatch could be reduced.

Irrespective of the effects of a move of the season on the amount of rockfish taken as bycatch, total trawl related mortality is limited by sector allocations and the amount of fish allocated to each quota holder. Thus, no biological or distributional impacts would be expected. The allocations to each QP holder provide individual vessel incentive to avoid bycatch for IFQ species that may constrain total harvest.

With respect to species for which allowable harvests are sufficient to support targeting, under trawl rationalization it is permissible to target nonwhiting groundfish species with midwater gear. An earlier season start date would allow earlier harvest of not only whiting but also other species taken with midwater gear, such as widow rockfish and yellowtail rockfish. Differences in total bycatch for non-IFQ groundfish species would be expected only if the bycatch rates from May 15 through June 14 are higher than in the summer. Information on the earlier season bycatch rates of non-IFQ species will not be available until the fishery is open for that period, at which time adjustments can be made in the start dates for subsequent seasons if problematic bycatch rates occur.

3.1.2.3 Bycatch of Other Species, Including Eulachon and Forage Fish

Changing the whiting season date affects midwater gear targeting not only on whiting but on other groundfish species as well. Under the trawl rationalization program, once the whiting season is open, midwater gear can be used to target any species of groundfish north of 40° 10' north latitude, for which

chinook/mt of whiting; and the expected total bycatch of chinook in the fishery is expected to exceed 11,000 fish.” (NMFS, 2010b)

an individual has adequate QP. Widow rockfish and yellowtail rockfish are the most likely targets. The main effect of moving the season date is a change in the timing of harvest. Total harvest is not likely to be affected. An issue which might be concern is whether some bycatch rates of forage fish or other species might be higher during the earlier opening. Good data are not currently available to inform the assessment of possible changes in bycatch. The last time the shorebased whiting fishery was open from May 15 through June 14 was prior to 1997. While the fishery at that time was a full retention fishery the data recorded on fish tickets for many bycatch species is reported to be unreliable (e.g. data on eulachon and forage fish bycatch). Observer data is not available because the WCGOP was not in place until 2002.

Even with an earlier shorebased opening, the total whiting effort for the May 15 through June 14 period might change substantially, relative to the pre-2011 levels. Assuming that the 2011 fishing pattern holds, which showed strongly diminished May 15 through June 14 catch in the mothership fishery, the net effect of an increase in harvest in the shorebased fishery for that period might be negligible. That the total whiting catch might not increase is relevant only to the degree that the bycatch in the mothership and shorebased fisheries do not differ. Whether this is the case is uncertain. Because 100% observer coverage is now in place to document any bycatch, these rates will be reported. If the earlier rates create a biological concern the season opening date can be readjusted in the future under the season setting framework (which is not being used here because the change to the southern allocation does not fit within it).

3.2 Direct and Indirect Impacts to the Socioeconomic Environment

3.2.1 Fishery and Business Impacts

Under the trawl rationalization program businesses will time the harvest and processing of product to maximize net revenues from all fishing opportunities in aggregate. Extending the shorebased season by a month will increase the choices available for the northern fishery, providing an opportunity to improve private economic benefits if those benefits are higher in the May 15 through June 14 period than later in the year. If the benefits cannot be increased by harvesting during that period, then it is less likely that the change in harvest date will have a substantial effect on the seasonal distribution of harvest in the northern fishery. For the southern area, for up to 5% of the shorebased harvest,⁵ there would be a contraction in flexibility to harvest—with the season opening moving from April 1 (in southern California) and April 15 (in northern California) to May 15. However, data for 2011 shows no harvest is occurring in this area under the IFQ program. Table 2-1 Even though those data show no harvest is currently occurring, introducing a constraint will reduce the opportunity to take advantage of any newly developing opportunities which may occur with shifts in stock distribution or shifts in other local economic factors.⁶

While it does not appear that the movement of the start date for the shorebased fishery will create a need for reconsultation under the ESA, if the salmon bycatch rates in the shorebased fishery are higher from May 15 through June 14 than they are later in the year, there could be an impact on other sectors—all of which together are under an aggregate limit of 11,000 Chinook.

⁵ Under status quo, 5% is the maximum that can be taken in the early California season.

⁶ In the event that extraordinarily favorable conditions occurred in the southern early season, the 5% cap combined with a much larger amount of quota pounds available for harvest, could result in a mini-derby, a race to harvest whiting QP prior the 5% cap being reached.

3.2.2 Impacts on Communities

To the degree that whiting are less available off of California after May 15, as compared to between the status quo April openers and May 15, communities in California into which whiting might be landed may be disadvantaged by the action alternative. Fish are more likely to have moved out of the area early in warmer water years than colder water years. While the opportunity to own QS ensures the right to harvest the whiting, if whiting are not available after May 15 in concentrations and conditions that allow economically competitive fishing then any potential opportunity that could arise in the California area might be dampened. As discussed above, it appears that under the IFQ program, the early season whiting fishing off California may have disappeared because of the elimination of the race for fish.

3.3 Impacts on Agencies

The alternative would eliminate the need for agencies to monitor the 5% early season cap on the California whiting fishery and create a more consistent whiting management regime for on-the-water monitoring (vessels using midwater gear north of 40° 10' north latitude between May 15 and June 14 would be allowed to do so regardless of whether they were delivering to shore or at-sea). Under status quo, from May 15 to June 14 vessels are allowed to use midwater gear only if they are delivering to motherships and not if they are delivering to shorebased processors.

References

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