8.0 Response to Comments

The 45-day public comment period on the Programmatic Bycatch DEIS closed on April 27, 2004 (69 FR 9313). NMFS received a letter of comment from the United States Environmental Protection Agency (USEPA) Region 10 in accordance with their responsibility to review and rate EISs pursuant to NEPA and Section 309 of the Clean Air Act. Because a preferred alternative was not identified in the DEIS, USEPA rated each alternative separately. Alternatives 1-5 received a rating of EC-2 (Environmental Concerns -Insufficient Information) and Alternative 6 received a rating of LO (Lack of Objections). In addition to these ratings, EPA provided detailed comments on the DEIS. The U.S. Coast Guard also sent a letter on this DEIS, indicating that, because none of the alternatives would affect the Coast Guard's ability to perform its living marine resources statutory responsibilities, the Coast Guard would offer no comments on the document. NOAA Fisheries also received written comments in a joint letter from the Natural Resources Defense Council, the Pacific Marine Conservation Council, Oceana, and the Ocean Conservancy, and in two letters from members of the public.

The detailed USEPA comments are reproduced below in their entirety, with responses following each comment. The other written comments have been summarized to identify specific comments, with responses following each comment. They are reproduced in their entirety as Appendix E to this document.

8.1 EPA Comments

Minimizing Bycatch and Mortality of Bycatch: Magnuson-Stevens Act National Standard 9 and Section 303(a)(11) require that bycatch and bycatch mortality be minimized, and standardized reporting methodologies to assess the amount and type of bycatch occurring in the fishery be developed. In addition, the Council on Environmental Quality Regulations for Implementing the Procedural Provisions of NEPA, require that proposed actions avoid or minimize adverse effects of actions upon the quality of the environment. While all of the alternatives propose actions that would reduce bycatch and bycatch mortality and thereby reduce adverse effects on the environment, Alternative 6 clearly proposes actions that minimize bycatch of all species.

Fish stock data demonstrates that the status quo (Alternative 1) does not adequately minimize bycatch of many species, most importantly, overfished species. Alternatives 2 and 3 would reduce only regulatory discard, that portion of bycatch that results from fishers complying with the regulations. These alternatives do not propose actions to minimize economic bycatch, which according to the EIS, could account for 66% of the discarded bycatch. While Alternatives 4 and 5 reduce all groundfish bycatch, they do not minimize bycatch of other, non-groundfish species. In particular, impacts on Pacific halibut,

salmon, and seabirds would not be minimized.

Alternative 6 proposes actions that would minimize bycatch and mortality to bycatch for all species by employing large area closures, gear restrictions, bycatch caps, and increased retention requirements. The trading and consolidation of RSQs and IFQs would reduce the race for fish. Alternative 6 takes a two-pronged approach to reducing bycatch through use of both a traditional command-and-control approach and a marked-based approach. In addition, Alternative 6 forbids discarding, which produces a strong incentive to develop and apply more selective gear because the cost of sorting, storing, transporting, and disposing of fish that cannot be sold must be substantial.

Response: Alternative 7, preferred, is a combination of Alternatives 1, 4, and 5. Alternative 7 would include the continued use of large area closures to prevent incidental catch of groundfish. Other, non-groundfish species commonly found in the GCAs, such as Pacific halibut, are also subject to lower overall bycatch rates because of these area closures. Alternative 7 would also phase in sector bycatch programs and monitoring standards for full retention programs. Finally, Alternative 7 would support RSQ/IFQ programs for appropriate fishery sectors. NOAA Fisheries expects that this bycatch policy alternative will result in bycatch reduction from both the command-and-control and marked-based approaches.

Observer Coverage: Monitoring is a fundamental mechanism for accounting for and, in turn, minimizing bycatch. Requiring 100% observer coverage is the most effective means of accurately accounting for bycatch. Camera monitors onboard ships are a good mechanism for monitoring the retention of bycatch. They do not, however, provide a means of accurately accounting for species composition and weight of bycatch that is discarded. At present, electronic monitoring technology is not accurate enough to identify species and estimate the weight of discarded fish more than 63% of the time. Therefore, we support 100% observer coverage, as proposed in Alternatives 5 and 6, until such time that video and electronic monitoring of bycatch equals or exceeds that of the observer program. In addition, we support the proposed quota incentives to those fishers and vessels that accommodate observers, until such time that 100% observer coverage can be provided.

Response: NOAA Fisheries has not proposed electronic monitoring as a substitute for human observers. Electronic monitoring equipment is primarily useful in identifying where a vessel is located or what fishing activities are taking place on board that vessel. For example, NOAA Fisheries has been testing the use of camera monitors in the full-retention shorebased whiting fishery. In this fishery, participating vessels retain all of their catch and do not sort it until the vessel is at the dock. Camera monitors were tested in the summer of 2004 to determine whether they would be useful tools for verifying whether the participating vessels had retained all of their catch or dumped some catch at sea. Because the vessels do not sort their catch at sea, species-specific identification of

catch is not necessary.

Depending on the goal of an observer program, 100% observer coverage may not be necessary. WCGOP is a total catch sampling program, meaning that a portion of the groundfish catch is sampled and bycatch estimates are extrapolated for the fleet from those samples. Vessels participating in the at-sea whiting fisheries are being monitored for real-time accounting of catch and bycatch, thus they carry observers around the clock. The aim of the Council's preferred alternative is to match fishery monitoring coverage levels and program goals to particular management strategies of the different sectors of the fleet. For sectors where a full retention program is possible, camera monitoring in company with current VMS requirements may be a sufficient monitoring program. For sectors where real-time data is needed to monitor RSQ and IFQ catch, 100% observer coverage may be appropriate.

High Grading and Market Limits: Observer data indicates that 66% of the bycatch was discarded for market reasons. The high grading of fish for certain attributes (size, sex, or physical condition) in some cases makes them more marketable. High grading occurs when the price differential between high- and low-valued fish is greater than the cost of discarding and replacing the catch and results in increased discarded bycatch. The incentive to high grade is enhanced if the cost to catch additional fish is very low. Related to high grading, processors impose market limits to prevent market gluts or to match their processing capacity. A fisher who catches more than his market limit may high grade if there is a price differential, or may simply dump the entire excess, regardless of size or other factors.

While the EIS proposes various actions for fishers to minimize economic bycatch, it does not propose any such actions for processors. The EIS does not discuss what provisions exist under the Magnuson-Stevens Act that relate to processors for addressing high grading and market limits. The EIS should evaluate and discuss whether sections of the Magnuson-Stevens Act such as those that address processing capacity and processor permitting, could be employed to minimize economic bycatch.

Response: There is currently no legal authority in the Magnuson-Stevens Act to prevent processors from imposing market limits, or to require them to minimize processing waste.

Environmental Justice: Section 6.2.2 of the EIS states that the alternatives under consideration could affect groundfish allocations or harvest levels that could, in turn, disproportionately impact low income and minority populations. While the EIS mentioned coastal and tribal communities, it does not discern which populations may be disproportionately impacted by the proposed actions. In particular, there is no discussion of the minority (people of color) and low income populations that may be fishers, processors, or consumers. In addition, the EIS

does not discuss what actions were taken to achieve meaningful participation from those minority and low-income communities that might be disproportionately impacted. The EIS should include the following:

- A comprehensive accounting of all impacts on low income and people of color, including (but not limited to) cumulative and indirect impacts, and impacts to cultural, historic, and protected resources. In addition, the EIS needs to demonstrate that (sic.) *whether* the impacts to low income and people of color communities will be disproportionately higher than those on non-low income and non-people of color communities. For such a determination, the EIS must identify a reference community, provide a justification for utilizing this reference community, and include a discussion of the methodology for selecting the reference community.

- The EIS should demonstrate that communities bearing disproportionately high and adverse effects have had meaningful input into the decisions being made about the proposed action. The EIS needs to describe what was done to inform the communities about the proposed action (notices, mailings, fact sheets, briefings, presentations, exhibits, tours, news releases, translations, newsletters, reports, community interviews, surveys, canvassing, telephone hotlines, question and answer sessions, stakeholder meetings, and on-scene information,) the potential impacts it would have on their communities, what input was received from the communities, and how that input was utilized in the decisions regarding the proposed action.

Response: In this EIS, NOAA Fisheries focused on identifying the fishing communities and fisheries dependencies of Washington coastal treaty tribes: Hoh, Makah, Quileute, and Quinault. Treaty tribes, their fisheries and communities (including their income, poverty status, economy, labor force status, and fishery infrastructure) are described in section 3.4.4 of this EIS. Scoping for this EIS is discussed in section 1.6.

Fishery management actions promulgated by the Council and implemented by NOAA Fisheries can have environmental and socioeconomic impacts covering all West Coast waters and adjacent coastal communities involved in fishing. This makes it difficult to identify minority and low-income populations that may be disproportionately affected. Fishery participants usually make up a small component of the population, and fisheries may be a small part of the local economy in many places. Thus, even if a community has a high proportion of minority or low income residents, these people might not participate in fisheries and so may be minimally affected by the preferred alternative. Furthermore, within the affected population some segments are more likely to be low income and minority than others. For example, employees in a fish processing plant may be predominantly from a minority group, or deckhands on vessels are likely to have a lower income than the skipper or vessel owner. Unfortunately, the kind of detailed population data necessary to determine the characteristics of the

population affected by the proposed action are unavailable.

In 2004, NOAA's Northwest Fisheries Science Center began a community profiling project in coordination with Alaska and Southwest Centers. The Northwest Center is developing models to rank communities in Washington, Oregon, Idaho, and California, based on their dependence upon and engagement in fisheries. From those states, 150 communities will be chosen for short profiles of their demographic data, history in marine resource extraction, and current fishing activities. These profiles will be available for future NEPA analyses of West Coast groundfish management actions.

8.2 Public Comments

Comment 1: The agency originally framed this DEIS as a programmatic EIS, intended to examine the effects of implementation for the Fishery Management Plan as a whole. In response to a court ruling that NMFS's bycatch program is illegal, *Pacific Marine Conservation Council v. Evans*, 200 Supp. 2d 1194 (N.S. Calif. 2002,) the agency converted the EIS from a programmatic one to one focused on bycatch. Unless and until NMFS completes a legally adequate assessment of the direct, indirect, combined and cumulative effects of the groundfish fisheries as a whole, the agency will not meet its legal obligations under NEPA.

Response: NOAA Fisheries undertook preparation of a comprehensive EIS on the Pacific Coast Groundfish Fishery in 1991. See, 66 Fed. Reg. 18586-87 (April 10, 2001) and 67 Fed. Reg. 5962-63 (February 8, 2002). However, it subsequently became necessary to narrow the scope of the analysis to focus on bycatch. 68 Fed. Reg. 26557-58 (May 16, 2003). This action was necessitated by several species being declared overfished, and by the court's finding that Amendment 13 to the Groundfish FMP on bycatch measures was deficient.

NOAA Fisheries has not abandoned its intent to prepare a new comprehensive EIS for the groundfish fishery. We note that considerable NEPA analysis on the fishery has already been performed in the six EISs that have recently been prepared for Amendments 16-2 and 16-3 (overfished species rebuilding plans), for the 2003, 2004, and 2005-2006 specifications and management measures, and for bycatch, and in the EIS that is currently underway on EFH. Information and analysis contained in these recent EISs can be used as the foundation for developing a future comprehensive EIS on the groundfish fishery.

In 2000, the Council adopted a Strategic Plan intended to provide future direction for West Coast groundfish fisheries management. For its November 2004 meeting, the Council is scheduled to review its Strategic Plan accomplishments to date, and to determine whether to update the plan. NOAA Fisheries believes that

a Strategic Plan update, followed by an FMP amendment intended to incorporate the principles of the Strategic Plan in the FMP, would be an appropriate action for which to prepare a comprehensive EIS on the West Coast groundfish fisheries.

Comment 2: This EIS is not designed to result in prompt action via an immediate fishery management plan amendment needed to bring the FMP into compliance with Magnuson-Stevens Act bycatch related requirements.

Response: As stated in section 1.1 (Proposed Action) of this document, "...The Council is expected to immediately undertake preparation of a new groundfish fishery management plan amendment that will include the conservation and management measures necessary to minimize bycatch and to minimize the mortality of bycatch that cannot be avoided, to the extent practicable." Following the publication of the Notice of Availability for this FEIS, NOAA Fisheries intends to draft amendatory language for the groundfish FMP that would revise the FMP in accordance with the program directions in Alternative 7 (preferred). NOAA Fisheries intends to bring this draft amendatory language before the Council at its November 2004 meeting in Portland, OR. The agency expects to make a draft FMP amendment available to the public via the Magnuson-Stevens Act review process in 2005. NOAA Fisheries also notes that the agency and the Council are already developing a full retention and monitoring program for the shorebased sector of the whiting fishery, which is intended to be implemented in 2005. That program has been designed to meet the policy directions given in the Council's preferred alternative for this EIS.

Comment 3: The DEIS fails to present and analyze the most fundamental information needed to assess bycatch avoidance and minimization measures – species-specific information on current bycatch and discard amounts by fishing sector.

Response: These same commenters also submitted a comment letter on the DEIS for Amendment 16-3 to the groundfish FMP. In that letter, they requested that the DEIS include updated total mortality information for the groundfish fisheries. NOAA Fisheries responded in the July 2004 FEIS on Amendment 16-3 with preliminary total mortality data for 2002 and 2003. Since the publication of that FEIS, NOAA Fisheries has held a data workshop to develop, among other things, methods for using observer data to estimate historical fisheries' discard rates and amounts. Revisions to the estimates provided in the Amendment 16-3 FEIS are provided in this document in Tables 8.1 and 7.2. Methods used to estimate the total mortality amounts provided in Tables 8.1 and 8.2 were developed to be used in stock assessments to be conducted in 2005. These discard estimation methods may again be refined prior to completion of the 2005 groundfish stock assessments. A discussion of the methodology used in making these estimates follows.

Observation of the limited-entry trawl fishery by WCGOP began in September,

2001. From that starting point, data have been analyzed through August, 2003. Discard ratios for 2002 and 2003 were calculated using only observer data from the same calendar year. Consequently, 2003 discard estimates are based on data collected only through August 2003. Trawl data were restricted to those tows: 1) which were not part of an Exempted Fishing Permit (EFP); 2) where retained groundfish tonnage exceeded non-groundfish tonnage; and 3) where retained pink shrimp was less than 100 pounds. Additionally, data collected from mid-water fishing for widow or yellowtail rockfish in November-December 2002 were partitioned and evaluated separately. Data were pooled across months, but were stratified into areas north and south of 40º10' N. lat. and into depth intervals. Depth strata used for the area north of 40°10' N. lat. in both years were: 0-50 fm, 51-75 fm, 76-100 fm, 101-150 fm, 151-200 fm, 201-300 fm, and greater than 300 fm. Depth strata used for the area south of 40°10' N. lat. in both years were: 0-60 fm, 61-75 fm, 76-100 fm, 101-150 fm, 151-225 fm, 226-300 fm, and greater than 300 fm.

For species that are targeted using bottom trawl gear (e.g. sablefish, thornyheads, flatfish), discard ratios are calculated for each stratum as [discarded pounds / retained pounds] for each individual species. For species caught primarily as bycatch–including those under rebuilding plans--discard ratios are calculated as [species discard pounds / sum of retained target species pounds]. For the area north of 40°10' N. lat., the target species included in this calculation are: sablefish, thornyheads, and all flatfish. For the area south of 40°10' N. lat., slope rockfish species are also included in the ratio denominator. For the mid-water widow-yellowtail fishery, discard ratios were calculated for all species using the combined poundage of widow and yellowtail as the denominator.

Following the same stratification used for the observer data, retained weights reported in trawl logbooks are summarized for each of the target species. The observer-based discard ratios are then multiplied by the retained poundage of the appropriate species or group. The result is an estimated discard amount for each species, for all directed groundfish trawl trips covered by logbooks. Not all landings have a corresponding entry in the logbook data base. Ratios of fish ticket-to-logbook species poundage are used to expand the estimates of discard for logbook trips up to a coastwide directed trawl total. For rebuilding species, the expansion ratios use the sum of retained target species poundage from each data set. For the target species, the retained poundage of each individual species is used to expand that species' estimated discard. Expansion ratios are calculated for each area, state, and two-month period. Discard amounts are then summed across areas and time periods.

Several trawl EFPs were conducted during 2003 and all required full retention of *Sebastes* species. Since all potential discards were landed and captured within the fishticket reporting system, application of non-EFP discard rates to all logbook tows would overstate the true amounts of discard (and total catch) for *Sebastes* species. Because an official listing of tows conducted as part of EFPs was not

available at the time these estimates were made, an interim approach for categorizing EFP tows is used. During 2003, only EFP participants had the ability to legally bottom trawl for groundfish within the trawl RCA. Using this restriction, rockfish discard rates are not applied to target tonnage caught within the RCA depths off Oregon and Washington. Additionally, the principal EFP in Washington allowed large amounts of arrowtooth flounder to be landed in excess of trip limits. Accordingly, tows by Washington vessels that exceeded the 2-month allowance of arrowtooth flounder for non-EFP vessels are also categorized as EFP tows. The total target species poundage estimated for EFPs, using these criteria, was also subtracted from fish ticket landings in each state and 2-month period before expansion ratios were calculated.

WCGOP data from the primary fixed-gear sablefish fisheries during 2001-03 are used to calculate discard ratios for rebuilding species and sablefish. For 2002, these rates were calculated across all depths and multiplied by all sablefish landed north of 36^{o} with fixed gear (limited-entry and open access). For 2003, discard rates were calculated for the depths available to the fishery in that year. It is important to note that in these early years, no observer data were collected during these primary fisheries from ports south of Ft. Bragg, California. As a consequence, these data do not provide reliable estimates of discard occurring of central and southern California.

Comment 4: The EIS should contain a more concrete discussion of the magnitude of the effect of bycatch reduction that could be expected from implementing each alternative. Could bycatch reduction associated with each alternative be quantitatively analyzed? Without this specific information, it will be difficult for the Council and NMFS to determine which bycatch reduction measures are practicable.

Response: This EIS is not designed, nor was it intended, to produce a quantitative evaluation of bycatch reduction. Rather, each alternative was developed to include a combination of general management tools that are known to reduce bycatch. The alternatives reflect a range of goals and standards, and the analysis portrays a range of general costs and benefits (or effectiveness) of each alternative.

Alternative 7, the preferred alternative, uses a combination of management approaches from the other alternatives to balance the competing mandates of the Magnuson-Stevens Act. We do not currently have the information necessary to quantify precisely the bycatch reduction effects of specific management techniques. However, this information will be gathered as the preferred alternative is implemented, and will be used in adaptive management of the fishery as the relative efficacy of different bycatch reduction measures becomes more precisely known.

Comment 5: The DEIS mentions gear restrictions under Alternative 4, such as

escape panels in fish traps and finfish excluder devices, but does not explain why it mentions these modifications or what the effects on the environment would be if they were or were not adopted.

Response: Each alternative includes a combination of management tools that could be applied to the fishery if that alternative were adopted. Gear restrictions and definitions are one generic management tool that can be used to reduce bycatch. There are hundreds of possible definitions and restrictions that could be applied. For example, finfish excluder devices could be narrowly defined by size, shape, or configuration, or they could be defined in terms of the objectives or standards to be achieved. The EIS lists and describes many gear modifications that could be required and describes the type of results that would be likely from those modifications. However, it was not the intent of this EIS to adopt specific gear modifications at this step in the process. Specific environmental effects will be analyzed when regulations are developed. For example, the Council has recommended trawl gear regulations for 2005 and beyond that would require the use of selective flatfish trawl gear north of 40°10' N. lat. This gear has been designed to reduce rockfish bycatch by trawlers targeting nearshore flatfish stocks. The effects on the environment of implementing this requirement have been analyzed in the Council's DEIS for the Proposed Acceptable Biological Catch and Optimum Yield Specifications and Management Measures for the 2005-2006 Pacific Coast Groundfish Fishery. As other new bycatch-reducing gear requirements are developed, those specific gear configurations will also be analyzed via the NEPA process.

Comment 6: Sector catch limits would provide incentives to fishing industry participants to avoid bycatch, which would have the effect of reducing regulatory bycatch. The EIS at Table 4.1.2 makes no mention of the potential socioeconomic effects of sector allocations, catch limits, and individual quotas. The EIS at Table 4.1.3 also indicates that sector allocations would have only a minor indirect effect on reducing regulatory bycatch of overfished species, which seems implausible.

Response: NOAA Fisheries agrees that Table 4.1.2 in the DEIS was incomplete. The agency has revised that table for the FEIS, now labeled as Table 4.1.5. NOAA Fisheries agrees that the DEIS 4.1.3 was confusing, so has removed that table. The current management program already uses several sector allocations, as the EIS explains. In most cases, these are retention limits that are based on anticipated catch levels and assumed (or previously observed) bycatch/discard rates. Where catches are fully monitored (for example, in the at-sea whiting sectors), real-time catch and bycatch data are available for inseason management. These sectors have relatively few participants, and thus cooperative agreements (such as data sharing) are more easily established. For larger sectors where the rates of at-sea catch/bycatch observations are less extensive (most of the non-whiting fisheries, especially the open access and recreational sectors), data would not be adequate to demonstrate real-time changes in bycatch rates or amounts.

The EIS describes the issue of "free rider" vessel operators within sectors that may take advantage of more conscientious fishers. The strength of bycatch-avoidance incentives increases as the number of participants in a sector declines. Dedicated access privilege programs provide an extreme example of this phenomenon, wherein the individual has strong incentives to hold himself directly responsible for his vessel's bycatch. Sector allocations by themselves do not resolve the free rider and monitoring problems, and thus may have little direct or indirect effect on bycatch.

Comment 7: Performance standards are a set of goals, criteria and indicators used to identify a target and measure progress toward meeting it. The analysis of the alternative should include a discussion of the role of bycatch performance standards in making sure a set of measures accomplishes its purpose. The DEIS provides no discussion or analysis that would assist the Council or NMFS in setting bycatch program goals.

Response: As discussed in the responses to Comments 4 and 5, the EIS's alternatives provide guidance for future policy directions on bycatch reduction programs. Alternatives 5, 6, and 7 include individual performance standards in the form of individual catch limits or quotas. Alternative 4 would require the setting of sector performance standards as sector catch limits. These performance goals would be set with the specific regulatory program used to implement the policy goals of the Council's preferred alternative.

Comment 8: The discussion of the economic impact of Alternative 4 contains virtually no numerical estimates of any costs of the alternative. Because Alternative 4 proposes sector bycatch caps, the DEIS should address whether the proposed sectors are too large or lack necessary safeguards so that free riders may decrease incentives to reduce bycatch. The DEIS should also specify the magnitude of the economic benefits that could result if the incentives are successful.

Response: Alternative 4, like the other alternatives, proposes a new policy direction for addressing bycatch. The sectors discussed in Alternative 4 may be too large to provide the appropriate incentives for sector participants to reduce their bycatch. As discussed in Sections 4.4.4 and 4.4.7, prescribing smaller-sized sectors in a sectors caps program may provide greater incentives for sector participants to reduce their bycatch levels. NOAA Fisheries believes that in implementing the policy direction provided by Alternative 7 (preferred), the Council will need to think creatively about where sector bycatch caps can be used, and how to define the appropriate sectors for such a program. For sectors that are already well-defined, such as one of the whiting fishery sectors, bycatch caps may be more easily implemented. For sectors that are heterogeneous, like the open access fisheries, the Council will need to define sectors and set sector allocations for targeted and non-targeted species as an initial step to a sector bycatch program.

In the short term, and perhaps the long term as well, bycatch reduction would be expected to result in greater economic costs than benefits. Effective monitoring would be costly; full observer coverage, unless the fleet is substantially reduced, is beyond anticipated government funding levels. As the Council identifies fishery sectors for sector-specific bycatch minimization programs, those sectors and programs will be analyzed for the costliness of implementation through vessel operator funding.

Comment 9: The DEIS must analyze the impacts of bycatch issues on habitat-forming species.

Response: The MSA defines "fish" to include all forms of marine animal and plant life other than marine mammals and birds, and thus bycatch includes the capture, injury and/or destruction of structure-forming species such as sponges and coral. Structure-forming species are generally immobile and slow-growing. Thus, long-term spatial management (area closures or prohibition of on-bottom fishing) is the most effective tool to protect them from incidental catch. WCGOP has been collecting sponge and coral interception data since its inception in August 2001. In January 2004, NOAA's Office of Ocean Exploration published "Deep Sea Coral Collection Protocols" for ocean researchers. WCGOP has been using this document to revise its onboard observer protocols to improve the amount and type of information it collects on structure-forming invertebrates taken in the groundfish fisheries. NOAA Fisheries is investigating the distribution of West Coast communities of structure-forming species for its draft EFH EIS. That EIS will provide the most complete available data on structure-forming species, including an analysis of where those species' habitats intersect with common fishing areas.

Comment 10: The DEIS must acknowledge that the status quo violates the Magnuson-Stevens Act by failing to establish a standardized reporting methodology and failing to minimize bycatch and bycatch mortality.

Response: Legal compliance with the Magnuson-Stevens Act requirements for bycatch was addressed in the case of *Pacific Marine Conservation Council, Inc. v. Evans*, 200 F. Supp.2d 1194 (N.D. Calif. 2002). The court's decision required that the observer program, which is being used in conjunction with other data sources as the standardized bycatch reporting methodology, be made mandatory. In response to the court's decision, the observer program was made mandatory by Amendment 16-1 to the Groundfish FMP. The court's decision also required a new NEPA document and FMP Amendment to address bycatch. This Bycatch FEIS, and the upcoming FMP amendment on bycatch, are intended to address those aspects of the court's decision.

Comment 11: The DEIS must evaluate the adequacy of the standardized reporting methodology for assessing the amount and type of bycatch occurring in the groundfish fishery.

Response: Chapter 3 of this EIS has been expanded to describe current monitoring programs and reporting methodologies used by NOAA Fisheries, the States of Washington, Oregon and California, and the Pacific States Marine Fisheries Commission. Costs associated with an increased at-sea observer program are also described. Appendix A provides methodology reports and analyses from the WCGOP, which is the primary federal standardized reporting program for the commercial West Coast groundfish fisheries.

NOAA Fisheries recently evaluated its standardized reporting methodologies conducted in federal waters nationwide, "Evaluating Bycatch: A National Approach to Standardized Bycatch Monitoring Programs." (Powers et al., 2003). In this report, NOAA Fisheries provided evaluation criteria for all of its monitoring programs and rated WCGOP as a *developing* program and the at-sea whiting fisheries monitoring program as *mature*. A developing observation program is "A program in which an established stratification design has been implemented and alternative allocation schemes are being evaluated to optimize sample allocations by strata to achieve the recommended goals of precision of bycatch estimates for the major species of concern." A mature program is "A program in which some form of an optimal sampling allocation scheme has been implemented. The program is flexible enough to achieve the recommended goals of precision of bycatch estimates for the major species of concern considering changes in the fishery over time." This EIS is not intended to provide an adequacy evaluation for NOAA Fisheries' standardized reporting methodologies that supplants those provided in the 2003 Powers et al. report. WCGOP continues to consider itself a developing program, primarily because it is just now (August 2004) completing its third year of operation. WCGOP will continue to evaluate itself through its annual data report and summary analyses, with the aim of becoming a mature monitoring program for each of the groundfish fisheries it monitors. WCGOP has its longest time series of observer data on the limited entry groundfish trawl fishery. Thus, the observation program for the trawl fishery will likely be considered mature before the program as a whole is considered mature for all groundfish fisheries.

Comment 12: The DEIS does not provide information on known bycatch species and amounts, or on current reporting methodologies used to acquire this information. The EIS should note the current limitations of the WCGOP in identifying and quantifying all bycatch in the fisheries monitored by the observer program, not just those species that are overfished or commercially or recreationally valuable.

Response: In the response to Comment 3 and in Table 8.1 and 8.2, NOAA Fisheries provides bycatch estimates for major fish species discarded in the West Coast groundfish fisheries. Current bycatch reporting methodologies are described in Section 3.4.10 of this EIS. The WCGOP's data collection program is more fully described in Appendix A to this EIS, the Northwest Fisheries Science Center's "West Coast Groundfish Observer Program Initial Data Report and

Summary Analyses" for 2003 and 2004.

Comment 13: For the whiting fisheries, the EIS should describe standardized reporting methodologies.

Response: Chapter 3 (Affected Environment) has been expanded from that of the DEIS to better describe the various fishery monitoring and reporting programs, including those for the whiting fisheries, in section 3.4.10.

Comment 14: For the open access fisheries, the EIS should state whether information is available via standardized reporting methodologies. If not, discuss this information gap and describe options for filling it.

Response: Chapter 3 (Affected Environment) has been expanded from that of the DEIS to better describe the various fishery monitoring and reporting programs, including those for the open access fisheries, in section 3.4.10. The WCGOP has begun to expand its observer coverage into the directed groundfish open access fisheries and will present its initial data from that expansion in early 2005. At its September 2004 meeting, the Council will also review options for expanding VMS coverage into the various open access fisheries.

Comment 15: The DEIS should estimate the amount and type of bycatch occurring in the recreational fisheries and should assess the adequacy of recreational monitoring systems now in place as standardized bycatch reporting methodologies. Following on this analysis should be another analysis to look at the practicability of improving recreational total catch accounting. A recreational fishery accounting system should: account for total fishing mortality by species; establish monitoring and accounting mechanisms to keep total catch of each groundfish stock from exceeding specified limits; monitor bycatch in a manner that is accurate, timely, and not excessively costly, and; gather information on unassessed and/or non-commercial species to aid in the development of ecosystem management approaches to overall fishery management.

Response: In the response to Comment 3 and in Tables 8.1 and 8.2, NOAA Fisheries provides bycatch estimates for major fish species discarded in the West Coast groundfish fisheries, including the recreational fisheries. Chapter 3 (Affected Environment) has been expanded from that of the DEIS to better describe the various fishery monitoring and reporting programs, including those for the recreational fisheries, in section 3.4.10. NOAA Fisheries, PSMFC, and the West Coast states are implementing a new recreational data collection program in 2004-2005 to address increasing needs for accurate recreational fisheries monitoring. These entities were spurred to develop this new program by uncertainty in the estimates derived from the nationally-run Marine Recreational Fisheries Statistics Survey. The states have greater data collection responsibilities in the new system, relying more on direct, at-dock observation of recreational effort and less on telephonic surveys. Telephonic surveys are being shifted from

random sampling of coastal county residents to random sampling of state fishing license holders. The goal of the program is to get improved estimates of recreational catch and to provide managers with more timely estimates of catch to use for inseason management.

Comment 16: No information is provided on bycatch or bycatch reporting methodologies in the tribal fisheries.

Response: Chapter 3 (Affected Environment) has been expanded from that of the DEIS to better describe the various fishery monitoring and reporting programs, including those for the tribal fisheries, in sections 3.4.4 and 3.4.10.

Comment 17: The DEIS fails to provide adequate information to determine which measures are practicable.

Response: Chapters 3 and 4 have been augmented with information relating to costs, logistics and other factors that influence practicability. Section 4.9, "Practicability" has been added to discuss practicability under the Magnuson-Stevens Act. This section discusses factors that influence determination of whether and under which circumstances an alternative may be considered practicable. This section also discusses the practicability of the alternatives, based on the different factors that may determine practicability.

Comment 18: The EIS fails to consider completely phasing out bottom trawling.

Response: The alternatives for this EIS were developed through a public scoping process described in Section 1.6 of this document. The complete phasing out of bottom trawling was not raised as an alternative for consideration during public scoping, nor did the Council request such an alternative for inclusion in this EIS. NOAA Fisheries does not intend to revise this EIS at this stage in the process to include another alternative on the elimination of bottom trawling. However, this EIS does include alternatives intended to reduce trawl sector capacity (Alternatives 2, 5, 6, and 7). Alternative 7 is the Council's preferred alternative and includes capacity reduction in the trawl and other commercial fisheries through implementation of dedicated access privileges programs.

Comment 19: We question the need for the proposed action as it applies to the Southern California longline live fish fishery, since the current management measures already minimize bycatch and bycatch mortality to the extent practicable. The imposition of sector bycatch caps under Alternative 7, which includes Alternative 4, may necessitate the placement of full-time observers aboard our small boats, significantly increasing our operational costs and burdens. We cannot afford full-time observers, nor can we accommodate them on our small (26') vessels. Alternative 7 could be construed to eliminate our fishery altogether. Given the difference between our fishery and other fisheries along the coast, the requirements in any of the Alternatives 4-7 should not be universally

applied to all fisheries. In particular, gear types with a proven record of low bycatch should be subject to fewer requirements than other gear types or fisheries, and should be reimbursed for observer coverage requirements.

Response: Alternative 7, the Council's preferred alternative, would apply sector bycatch caps to appropriate sectors of the groundfish fishing fleets. NOAA Fisheries agrees that applying sector bycatch caps may require vessels to carry full-time observers in order to verify ongoing quantities and rates of bycatch. During the summer of 2004, the agency has been investigating the use of electronic monitoring devices for catcher vessels in the shorebased Pacific whiting fishery. If these devices prove useful in monitoring whether vessels are complying with full retention requirements, they may be required for use in other fisheries in lieu of observers. These devices would not perform the same functions as observer – they would not be used to estimate species-specific bycatch levels. The devices could, however, prove useful in monitoring discard frequencies in fisheries where participants are less able to afford full-time human observation.

Table 8.1 --Estimated total mortality (mt) of major West Coast groundfish species from commercial and recreational fishing during 2002.

	2002 metric tons						
	Total commercial landings	Estimated trawl discard	Estimated non-trawl discard[1]	Comm. mortality sub-total	Recreational landed + discard	At-sea landed + discard	Estimated total mortality
Sablefish		*1,814*					
mortality[2]	3,807	907	59	4,773	7	21	4,801
Shortspine	798	355		1,153		12	1,165
Longspine	1,911	380		2,291			2,291
Dover	6,272	1,210		7,482		0.7	7,482
Petrale	1,775	185		1,960			1,960
Arrowtooth	2,071	4,128		6,199		5.7	6,205
Otr. Flatfish	3,622	1,161		4,783	160	11.8	4,955
Slope Rock.	1,219	196		1,416		1.61	1,417
Splitnose	66	21		87		11.4	98
Yellowtail	1,001	396		1,397	45	191	1,633
Lingcod		*269.1*					
mortality[2]	203	134.5	1.8	339.6	666	0.5	1,006
Canary	48	35.8	1.3	84.9	17	5.2	107
Widow	264	39.1		302.9	3	155	461
Yelloweye	4	0.9	1.6	6.4	7		13
Bocaccio	22	27.4		49.1	86	0.6	136
Cowcod	.	3.1		3.1	1		4
POP	147	36.0		183.1	0	3.8	187
Darkblotched	106	93.6	0.1	199.9		3.2	203
Chilipepper	167	141.1		307.6	13	4.9	325
Shortbelly		5.1		5.1		0.6	6
Hake	45,701	1,841		47,542		84728	179,811

[1] Non-trawl discard is estimated only for the sablefish fishery, based on observations of the primary limited-entry, fixed-gear season. Since no observations were available this fishery south of Ft. Bragg, CA, nor from any rockfish target fishing, discard estimates for southern species, such as bocaccio and cowcod should not be viewed as complete.

[2] Sablefish and lingcod have been observed to survive discard, thus discard mortality estimates are reduced from total discard for these species.

Sources:

Commercial landings were extracted from PacFIN summary-catch tables on August 10, 2004.

Recreational removals include estimates for retained and discarded dead catch (A+B1), and were extracted on August 19, 2004.

At-sea commercial estimates extracted from NPGOP data September 1, 2004.

Table 8.2 -- Estimated total mortality (mt) of major west coast groundfish species from commercial and recreational fishing during 2003 [1].

	2003 metric tons						
	Total commercial landings	Estimated trawl discard	Estimated non-trawl discard [2]	Comm. mortality sub-total	Recreational landed + discard	At-sea landed + discard	Estimated total mortality
Sablefish		*1,615*					
mortality [3]	5,430	808	92	6,330	8	17	6,355
Shortspine	815	432		1,248		16	1,264
Longspine	1,575	321		1,895			1,895
Dover	7,348	1,102		8,450		0.9	8,451
Petrale	2,003	105		2,107			2,107
Arrowtooth	2,319	587		2,907		4.3	2,911
Otr. Flatfish	3,230	753		3,983	54	6.8	4,044
Slope Rock.	1,008	191		1,200		2.2	1,202
Splitnose	157	7		165		12	177
Yellowtail	413	4		417	42	36.4	496
Lingcod		*139.4*					
mortality [3]	166	69.7	1.3	236.6	1,176	0.5	1,413
Canary	9	14.5	0.6	24.6	29	0.9	54
Widow	27	4.9		32.1	0	14.4	46
Yelloweye	3	0.2	1.3	4.4	10		14
Bocaccio	1	2.3		2.9	11	0.3	14
Cowcod	.	0.1		0.1			0
POP	130	14.2		144.6	1	6.2	152
Darkblotched	80	39.0	0.2	119.3		4.3	124
Chilipepper	18	2.3		19.9	0	1.3	21
Shortbelly		0.1		0.1		0.5	1
Hake	55,335	1,255		56,590		86610	199,789

[1] Discard estimates for 2003 are based on observer data collected from January through August, 2003.

[2] Non-trawl discard is estimated only for the sablefish fishery, based on observations of the primary limited-entry, fixed-gear season. Since no observations were available this fishery south of Ft. Bragg, CA, nor from any rockfish target fishing, discard estimates for southern species, such as bocaccio and cowcod should not be viewed as complete.

[3] Sablefish and lingcod have been observed to survive discard, thus discard mortality estimates are reduced from total discard for these species.

Commercial landings were extracted from PacFIN summary-catch tables on August 10, 2004.

Recreational removals include estimates for retained and discarded dead catch (A+B1), and were extracted on August 19, 2004.

At-sea commercial estimates extracted from NPGOP data September 1, 2004.