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for
Comments on the 2003 North Pacific Groundfish Draft Programmatic Supplemental
Environmental Impact Statement on the Fishery Management Plans (“FMPs”)
of the Bering Sea/Aleutian Islands and Gulf of Alaska

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 - 5.1 The revised draft PSEIS fails to provide a meaningful performance review and assessment of combined and cumulative effects of the FMP amendments and fishery management measures since the last EISs were prepared, without which there is no way for NMFS to claim that the 2002 comparative baseline constitutes an adequate yardstick for determining the “significance” of alternative FMPs
 - 5.1.1 The revised draft PSEIS employs a 2002 comparative baseline that fails to address cumulative adverse effects of past decisions contained in the FMPs since the last EISs were prepared, in effect sanctioning a greatly diminished state of nature as the new, “shifted” baseline
 - 5.1.2 In evaluating the impacts and efficacy of FMP amendments over time, the Fisheries Service must explain the central role of the North Pacific Fishery Management Council in the decisionmaking process, including its procedures for making tradeoffs and achieving “balance between competing uses” of the North Pacific marine environment
 - 5.2 The the tool used to conduct the main portion of the analysis of FMP bookends provides only a crude representation of some potential impacts of alternatives and tells us nothing about many important effects
 - 5.3 The revised draft PSEIS evaluation of “target species management” and the FMPs’ $F_{40\%}$ “harvest policy” does not address core questions from the 2001 draft PSEIS and fails to explain how an approximation of MSY under the $F_{40\%}$ policy achieves objectives for OY in an ecosystem context
 - 5.3.1 The revised draft PSEIS fails to explain basic management premises of SPR-based $F_{40\%}$ “harvest policy” and the risks associated with this policy, and explain why $B_{35\%}$ or $B_{40\%}$ is considered a safe proxy for unknown B_{MSY}
 - 5.3.2 The revised draft PSEIS fails to reassess existing Optimum Yield values in the North Pacific or to show that the $F_{40\%}$ policy complies with statutory guidelines for achieving an Optimum Yield that protects marine ecosystems and addresses ecosystem considerations

- 5.3.3 The Preliminary Preferred Alternative fails to include an MSST value that complies with statutory guidelines for achieving Optimum Yield and protecting marine ecosystems
- 5.3 The 2002 baseline $F_{40\%}$ policy fails to demonstrate that it is adequately “risk-averse” with regard to uncertainty, “safe” for target and non-target species, or “sustainable” in an ecosystem context
 - 5.3.1 The revised draft PSEIS fails to evaluate *all* aspects of model error and uncertainty in the stock assessment advice, identify options for addressing model uncertainty in the ABC/TAC-setting process, and explain how the Preliminary Preferred Alternative will employ them to treat uncertainty comprehensively
 - 5.3.2 The revised draft PSEIS fails to take a hard look at the simplifying assumptions of the $F_{40\%}$ policy and explain how the risks associated with these assumptions will be addressed under any alternative except Alternative 4
 - 5.4.2.1 The revised draft PSEIS fails to explain how much additional mortality above the estimated natural mortality is imposed on a stock by the $F_{40\%}$ policy, how that additional mortality affects age structure and spawning potential over time, and how uncertainty surrounding estimates of natural mortality are addressed (or not) in the calculation
 - 5.4.2.2 The revised draft PSEIS fails to explain how the $F_{40\%}$ policy addresses the risks associated with inferring a density dependent spawner-recruit relationship and does not reconcile these assumptions to the countervailing assertions that density-independent “bottom-up” environmental forces drive fish population dynamics
 - 5.4.2.3 The revised draft PSEIS fails to explain the risks associated with using estimates of spawning stock *biomass* as a proxy for spawning potential
 - 5.4.3 The revised draft PSEIS fails to explain *how much* uncertainty the “uncertainty correction factor” employed in Alternative 3.2 bookend FMP and proposed for PPA.2 bookend FMP addresses, and how much uncertainty remains unaddressed in the stock assessment advice and in the real world outside the model
 - 5.4.4 The revised draft PSEIS fails to reconcile the premise of “surplus” production embedded in the MSY-based “harvest policy” with the objective of protecting the forage base of competing consumers in the ecosystem
 - 5.4.4.1 The revised draft PSEIS claims of insignificance for the status quo/PPA FMPs with respect to forage availability of competing consumers in the ecosystem are not supported
 - 5.4.4.2 The revised draft PSEIS fails to show that the “Harvest Control Rule” will avoid jeopardy to endangered Steller sea lions and adverse modification of their critical habitat at the global scale of competitive interaction resulting from the cumulative effects of the $F_{40\%}$ exploitation strategy on prey fields and the carrying capacity of that habitat

- 6.0 BYCATCH ANALYSIS IS INCOMPLETE AND CUMULATIVE IMPACTS SINCE THE FIRST EISs WERE PREPARED ARE NOT EVALUATED
 - 6.1 The inadequate analysis of fishery bycatch of non-target species uses limited data from the late 1990s to 2001, fails to evaluate readily available analyses of bycatch data spanning the history of the FMPs, and fails to satisfy NEPA’s requirement for analysis of combined and cumulative effects of the FMPs since the last EISs were prepared
 - 6.2 The revised draft PSEIS fails to justify ratings of “insignificance” for status quo/PPA bycatch of non-target species, which are based on a limited review of the data, lack of meaningful consideration of cumulative effects, and assertions from absence of evidence
 - 6.3 The revised draft PSEIS fails to provide any critical analysis of the performance of the IR/IU program to determine if bycatch has been reduced or merely converted into fishmeal
 - 6.4 The revised draft PSEIS fails to evaluate the performance of Prohibited Species Catch (PSC) bycatch regulations since the last EISs were prepared or to show that the combined and cumulative effects of current regulations are adequate to protect depleted crab and salmon stocks
- 7.0 HABITAT PROTECTION UNDER THE STATUS QUO GROUND FISH FMPS OR THE PROPOSED PPA DOES NOT MEET OBJECTIVES FOR CONSERVATION AND MANAGEMENT OF TARGET, NON-TARGET, AND PROTECTED SPECIES, PROVIDE ADEQUATE INSURANCE AGAINST MULTIPLE UNCERTAINTIES, OR CONSTITUTE AN ECOSYSTEM-BASED APPROACH TO FISHERIES MANAGEMENT
 - 7.1 Need and basis for an ecosystem approach to fish habitat protection is well-founded in all relevant laws
 - 7.2 Unknowns and uncertainties about the impacts of the groundfish fishery on marine habitats severely undermine NMFS’s claims of insignificance for the status quo/PPA, and counsel for adoption of a highly precautionary, protective approach to all types of affected habitat
 - 7.3 The status quo FMP policy approach wrongly places the burden on the environment to demonstrate harm before taking protective action
 - 7.4 Essential Fish Habitat
 - 7.4.1 The Preliminary Preferred Alternative (“PPA”) would not remedy shortcomings in EFH compliance under the status quo
 - 7.4.2 The Habitat Impacts Model used to evaluate impacts of fishing on living habitat used unreasonable inputs and methods
 - 7.4.3 The PSEIS’s analysis of the effects of fishing on non-living habitat is inadequate

- 7.4.4 The PSEIS analysis of impacts to habitat fails to employ a concept of ecosystem sustainability
- 7.5 Protected species habitat conservation: Steller sea lions and northern fur seals illustrate Fisheries Service’s failure to provide meaningful habitat protection or to live up to its marine mammal stewardship obligations under the ESA and MMPA
 - 7.5.1 Steller sea lion critical habitat continues to be the focus of large trawl fisheries for pollock, cod and Aleutian Atka mackerel, in violation of the Endangered Species Act (ESA)
 - 7.5.1.1 The Supplemental October 2001 “RPA” Biological Opinion was premised on a fatally flawed interpretation of scientific data and failed to address any of the relevant scales of jeopardy and adverse modification identified by NMFS in the 30 November 2000 FMP-level BiOp
 - 7.5.1.2 The June 2003 Final Supplement to the Supplemental ESA Section 7 consultation BiOp of October 2001 provides no new information or analyses to justify the NPFMC-brokered Steller sea lion protection plan, premised on a fatally flawed “zonal approach” to Steller sea lion critical habitat
 - 7.5.1.3 The analyses of fishing patterns in critical habitat demonstrate that the current sea lion “protection” regulations allow fishery catches to rise to levels and occur at times that were found to constitute jeopardy and adverse modification in the 1998 and 2000 Biological Opinions
 - 7.5.1.3.1 Seasonal patterns of concentrated fishing in the winter and fall months have not changed appreciably for pollock, and not at all for cod and Atka mackerel
 - 7.5.1.3.2 Groundfish catches taken in critical habitat have not been reduced and in fact have increased to previously high levels, particularly in the southeastern Bering Sea
 - 7.5.2 Northern fur seal declines at the largest reproductive center in the eastern Bering Sea coincide with the rise of large-scale trawl fisheries for pollock and other groundfish and point to food shortages as a likely cause, which NMFS fails to evaluate
 - 7.5.2.1 Northern fur seal foraging habitat is vulnerable to large-scale pollock trawling but NMFS fails to provide information and evaluate trends in the levels of EBS pollock fishing within foraging areas utilized by fur seals or the cumulative effects of fishing on the quality of that habitat
 - 7.5.3 The inability to estimate changes in the prey field or calculate fishery “harvest” rates reliably in protected species’ habitats illustrates why the Fisheries Service cannot ensure that concentrated fishery removals from these habitats are “safe” for marine mammals, and why more precautionary spatial/temporal management of fishery catches is needed
- 7.6 Incremental use of gear restrictions and existing patchwork of time/area closures under FMP 1/PPA are not adequate to address widespread habitat/bycatch impacts of the North Pacific groundfish fisheries now occurring or the risks associated with high uncertainty about lasting,

long-term impacts, and are not adequate to achieve objectives for target, non-target and protected species conservation and management

- 7.7 The Preferred Alternative should include basin-wide Habitat Protection Plans for the eastern Bering Sea, Aleutian Islands, and Gulf of Alaska, including a system of gear closure areas and marine protected areas (understood as refuges from all fishing) to meet FMP objectives for target, non-target and protected species management
 - 7.7.1 At least 20% of known spawning habitat for pollock and cod should be closed to directed fishing for these species to address uncertainties about fishery impacts and conserve the reproductive capacity of target species across their ranges
 - 7.7.2 Vulnerable rockfish stocks and habitat on the continental shelf-edge and slope regions must be protected through a system of gear closure areas and marine protected areas (understood as areas managed primarily for the protection of fish and wildlife and their habitats that exclude commercial fishing, and may permit subsistence and/or personal use, and may in special circumstances include fully protected no-take reserves)
 - 7.7.3 Pelagic habitat zones characterized by predictable water column properties of enhanced productivity that concentrate prey and attract mobile fish, mammal and bird predators must be included in the Preferred Alternative habitat conservation plan
 - 7.7.4 Habitat conservation measures for non-target species and HAPC living habitat
 - 7.7.5 Adopt the NPFMC's recommended fishing closure areas for HAPC living habitat in the Aleutian Islands
 - 7.7.6 Extend trawl closure areas to pelagic shelf-edge habitat on the Bering Sea greenbelt where squid bycatch in the pollock fishery is concentrated
 - 7.7.7 Extend trawl closure areas for crab conservation to encompass essential crab reproductive habitat within the reinstated boundaries of the former Crab Pot Sanctuary
 - 7.7.8 The Preferred Alternative should identify candidate areas for designation as Marine Protected Areas (understood as areas managed primarily for the protection of fish and wildlife and their habitats that exclude commercial fishing, and may permit subsistence and/or personal use, and may in special circumstances include fully protected no-take reserves) as part of the Habitat Protection Plans for the Bering Sea, Aleutian Islands, and Gulf of Alaska
- 8.0 THE REVISED DRAFT PSEIS FAILS TO PROVIDE ADEQUATE CONSIDERATION OF ALL RELEVANT INFORMATION OR ADEQUATE ANALYSIS OF ALL FISHERY IMPACTS TO MARINE MAMMAL AND SEABIRD SPECIES AFFECTED BY THE NORTH PACIFIC GROUND FISH FISHERIES

- 8.1 Omissions of relevant information, use of rating criteria based on a depleted baseline, and superficial renderings of scientific data in NMFS’s analyses of alternatives in this draft PSEIS invalidate the ratings of “insignificance” for status quo FMP fishery impacts on marine mammals and seabirds
- 8.2 Acknowledged uncertainties regarding the effects of fishing on marine mammals and birds, combined with large-scale fisheries removals of known food supplies and spatial/temporal concentration of catches in known foraging habitats of at-risk species, do not support claims of “insignificance” for the status quo FMPs or the Preliminary Preferred Alternative
- 8.3 Instead of addressing fishery competition with declining marine mammal species identified as being at high risk more than 20 years ago, the Fisheries Service attempts to explain away their declines with unfounded speculations suggesting that such declines within the bounds of natural variation and driven by hypothesized environmental effects
- 8.4 The Fisheries Service’s analysis of fishery impacts on ESA- And MMPA-protected species fails to disclose, discuss or analyze relevant information relating to the effects of fishing on Steller sea lion and northern fur seal physiology, reproductive biology, and foraging ecology, which are energetically expensive and therefore particularly vulnerable to declines in prey availability caused by large-scale trawl fisheries in the North Pacific
 - 8.4.1 Closely monitoring fishery performance, assessing the ecological impacts of “single-species” fishing levels, and adopting regulations to protect the food supplies and habitats of endangered Steller sea lions and depleted northern fur seals should be top priorities of North Pacific fisheries management in the Preferred Alternative in order to improve carrying capacity and recovery of these at-risk species
- 9.0 **SPATIAL/TEMPORAL MANAGEMENT OF FISHERIES MUST BE ELEVATED TO A POLICY-LEVEL PRIORITY IN THE FMPS AND INTEGRATED INTO THE TAC-SETTING PROCESS IN THE PREFERRED ALTERNATIVE**
- 9.1 The revised draft PSEIS fails to provide a cogent assessment and performance review of the combined and cumulative effects of spatial/temporal management measures since the last EISs were prepared
 - 9.1.1 Pollock fishery management
 - 9.1.2 Aleutian Atka mackerel fishery management
- 9.2 The ad hoc and crisis-driven approach to spatial/temporal management of TACs in response to management problems reflects the need for policy-level standards and guidelines for spatial/temporal management of TACs based on ecosystem principles as well as practical procedures for incorporating spatial/temporal considerations into decisionmaking

10.0 THE REVISED DRAFT PSEIS BASELINE EVALUATION OF THE ECOSYSTEM IN SECTION 3.10 FOCUSES ALMOST EXCLUSIVELY ON PRELIMINARY ECOSYSTEM MODELING, CONJECTURAL “REGIME SHIFT” GRAY LITERATURE, AND ANECDOTAL HISTORICAL ACCOUNTS TO SUPPORT THE VIEW THAT VAGARIES OF CLIMATE ARE RESPONSIBLE FOR MAJOR ECOSYSTEM CHANGES IN THE AFFECTED ENVIRONMENT SINCE THE LAST EISS WERE PREPARED, AND IGNORES WELL-DOCUMENTED IMPACTS OF FISHING

11.0 SOURCES