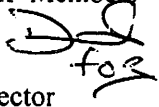


MEMORANDUM

TO: Council and AP Members  
FROM: Chris Oliver   
Executive Director  
DATE: January 19, 2011  
SUBJECT: Groundfish Management

ESTIMATED TIME 4 HOURS (all D-1 items)
--

**ACTION REQUIRED**

- (a) Discussion paper on Sablefish Recruitment Factors.
- (b) Discussion paper on GOA Trawl Sweep Modification.
- (c) Estimation of non-target species catch in halibut fishery (SSC only).
- (d) Review NOAA BSFRF survey results for snow crab (SSC only).
- (e) Discussion of Octopus management.

**BACKGROUND**

- (a) Discussion paper on Sablefish Recruitment Factors.

A discussion paper on factors affecting sablefish recruitment in Alaska was requested by the Council in April 2010. The AFSC prepared the discussion paper as an appendix to the sablefish SAFE report chapter in November 2010, and it was redistributed to the Council in mid-January. The discussion paper is attached as Item D-1(a)(1).

The Council's request for the discussion paper originated from the 2010 EFH 5-year review. The summary report for the 5-year review contained a recommendation by the groundfish Plan Teams that the Council consider establishing measures conserve EFH from fishing threats to sablefish recruitment. Specifically, the stock assessment authors and the Plan Teams noted the following:

"Given the intense fishing in areas of sensitive habitat features as indicated in Figure B.2-3a,b (of the EFH EIS), more research should be done to evaluate the recovery rates of these features and their role in the survival and growth of the early juvenile life stage of sablefish and other species that inhabit those areas."

The referenced figures are attached as Item D-1(a)(2).

In April 2010, the Council considered the Team's recommendation, and asked for further information with which to evaluate how it should be addressed. The Council was specifically interested in understanding whether the problems with sablefish recruitment are habitat-driven, or is poor recruitment attributable to other factors.

This discussion paper was presented to the Plan Teams in November 2010. Their minutes on this issue are attached as Item D-1(a)(3); the Teams supported the stock authors' conclusions that more coordinated efforts towards assessing the effects of fishing on habitat for multiple species are needed.

The Ecosystem Committee will also be providing recommendations on this agenda item, following their meeting on February 3, 2011.

(b) Discussion paper on GOA Trawl Sweep Modification.

In October 2010, in conjunction with final action on Gulf of Alaska (GOA) Tanner crab bycatch measures, the Council initiated a trailing amendment to implement trawl sweep modifications for nonpelagic trawls vessels fishing in the Central GOA. The proposed trawl sweep modification for the Central GOA would apply to all non-pelagic trawl fisheries (e.g., flatfish, Pacific cod, pollock, and rockfish).

During the October 2010 discussions, the Council recognized that there are some outstanding questions with respect to the extent research is necessary to ensure that the modifications are practicable in the fleet, and meet the Council's intent to reduce crab mortality. Given these issues, the Council requested staff prepare a brief discussion paper, which is attached as Item D-1(b)(1). The paper includes a discussion on the practicality of trawl sweep modification for different non-pelagic GOA fisheries, a discussion on effectiveness of the modification at reducing crab bycatch in the non-pelagic GOA fisheries, and a brief outline of the proposed research and field testing on GOA trawl vessels.

(c) Estimation of non-target species catch in halibut fishery (SSC only).

The SSC will receive a Joint Groundfish Plan Team working group report on efforts undertaken in 2010 to investigate quantitative methods to estimate incidental catches in the unobserved halibut IFQ fishery, until such time as the restructured observer program is implemented and observers are active in the halibut IFQ fishery. The goal is to enhance compliance with the Magnuson-Stevens Reauthorization Act requirements for total catch accounting. A draft report was first provided to the SSC as an appendix to the October 2010 Joint Groundfish Plan Team minutes; however the SSC requested additional information on the analytical methods used to estimate non-target species catch in the halibut fishery. The working group has focused on three areas: 1) estimation of variance for extrapolated survey catch and CPUE; 2) investigate methods to better represent commercial fishing behavior by using annual IPHC survey data; and 3) extrapolate survey catch to commercial effort using ratio estimators. Dr. Cindy Tribuzio, NMFS AFSC Auke Bay Laboratories, will present the findings of a report that was distributed to the SSC on January 18, 2011. Document attached as item D-1(c)(1).

(d) Review NOAA BSFRF Survey results for snow crab (SSC only).

The SSC will review a report on snow crab selectivity by the NMFS trawl survey. This report was emailed to the SSC. A copy of the report is attached as Item D-1(d)(1). The report details the research leading to and culminating in the 2010 NMFS-BSFRF cooperative study which focused on the problem of estimating snow crab selectivity from experimental data.

(e) Discussion of Octopus management.

This proposed action to revise management of octopuses is one of a suite of management issues that the Council requested in April 2010 to be addressed in a future discussion paper (Item D-1(e)(1)). The issues were considered by the Council in the context of meeting statutory requirements to implement annual catch limits (ACL) and accountability measures for groundfish, but were set on a separate timeline to allow required ACL elements to be implemented to comply with a statutory deadline of January 1, 2011.

In October 2010 the Council adopted a problem statement and alternatives for analysis to revise management of octopuses in the Fishery Management Plan (FMP) for Groundfish of the Bering Sea and Aleutian Islands Management Area and FMP for Groundfish of the Gulf of Alaska. Alternative 1 is the No Action Alternative. Alternative 2 would move BSAI and/or GOA octopuses to the ecosystem component (EC) category. Octopus would continue to be listed in the “other species” category for the purpose of specifying maximum retainable amounts and halibut prohibited species catch limits in order to constrain harvest in the absence of ACLs. Alternative 3 would set discard mortality rates (DMRs) for BSAI and/or GOA octopuses. A preliminary staff analysis concludes that none of the proposed action alternatives for analysis are viable. The Council may wish to reconsider its previous motion to initiate the proposed action or revise the analytical alternatives.

Alternative 2 To be considered an ecosystem component species, the species should: 1) be a non-target species or non-target stock; 2) not be subject to overfishing or overfished nor likely to become so; and 3) generally not be retained for sale or personal use. Using NMFS data the 2007 - 2010 average retention of octopuses is 70 percent in the BSAI and 97 percent in the GOA. Therefore octopuses would not qualify for EC management due to the high retention rates.

Alternative 3 This alternative was based on the octopus chapters in the BSAI and GOA SAFE Reports, in which it appeared that the lead author recommended that DMRs be considered for management of octopus in place of ACLs due to the paucity of biological data upon which to base biological reference points (i.e., OFL and ABC) for octopuses. In discussions between the lead author and the Groundfish Plan Teams in November 2010, the author recommended that current data for setting DMRs was preliminary and recommended additional scientific work be conducted before determining whether octopus would be better managed under such a program. The teams concurred with the author.

Rejected Alternative The Council requested a summary of a previously rejected alternatives to remove octopus from the Groundfish FMPs and allow the State of Alaska to manage octopus in state and federal waters. ADF&G staff have previously provided comments regarding state and Federal management of octopus (Item D-1(e)(2)).

This proposed action no longer may be a high priority as Tier 6 methods recommended by the SSC for octopuses in 2011 and 2012 do not appear to be constraining on directed groundfish fisheries. There appears to be sufficient buffer between TAC (=catch) and ABC in the BSAI and between catch and ABC (=TAC) in the GOA. The octopus stock assessments report that the BSAI and GOA trawl surveys produce estimates of biomass for octopus that are highly variable and do not reflect the same sizes of octopus that are caught in the fisheries. The state of knowledge about BSAI and GOA octopus is poor and current data are not sufficient for a model-based assessment. The Council may wish to recommend additional research efforts be expended to 1) increase scientific data collections to further our understanding of stock status and life history of these species so that this group can be managed under Tier 5 and/or 2) continue investigations into alternative Tier 6 approaches for stocks that are not well assessed through traditional groundfish trawl surveys.

**Octopus harvest specifications (mt)**

Area	2010 catch	2011 OFL	2011 ABC	2011 TAC
BSAI	150	528	396	150
GOA	324	1,272	954	954