

**DRAFT ACTION PLAN TO REVISE MANAGEMENT OF SHARKS AND SCULPINS IN THE  
GROUND FISH FMPs FOR THE BERING SEA/ALEUTIAN ISLANDS AND GULF OF ALASKA  
June 17, 2009**

**PROPOSED ACTION** The Council initiated action in April 2005 to eliminate the “other species” category and set annual catch limits (ACLs) for skates<sup>1</sup>, squids<sup>2</sup>, octopods, sharks, and sculpins (and grenadiers), based on recommendations from its Groundfish Plan Teams, Scientific and Statistical Committee, and Non-Target Species Committee. The Council separated this comprehensive analysis into analyses for each group in February 2008. In June 2008 the Council identified a proposed action to revise management of sharks and sculpins as its fourth priority in managing other species. Actions for the other groups are scheduled in 2009 and 2010. Housekeeping amendments<sup>3</sup> to revise federal fishery regulations will be prepared separately.

**PROBLEM STATEMENT/OBJECTIVE** The groundfish fishery management plans (FMPs) require that an ACL be set for the “other species” assemblage. Once proposed actions to remove BSAI skates, GOA squids and BSAI and GOA octopods from the other species assemblage have been implemented the assemblage will contain only sharks and sculpins. Management of those remaining components of the assemblage, however, may not offer sufficient protection from overfishing because its ACL is set equal to the total of the estimates for the two groups. Therefore, either group (or species within a group) is vulnerable to overfishing because they are managed under an ACL that is set above the level deemed appropriate for that individual group (or species). Current management of sharks and sculpins no longer complies with national ACL policy for managing assemblages.

The proposed action is intended to enhance their protection based on 1) the lack of a reliable biomass estimate (thus their Tier 6 and 5 designations, respectively) and 2) different life history characteristics.

Sharks are long-lived species with slow growth to maturity, a large maximum size and low fecundity. Their productivity is very low relative to most commercially exploited fish. Reproductive strategies are characterized by long gestation periods, with small numbers of large, well-developed young; therefore large-scale directed fisheries for sharks have collapsed even where management was attempted. Eight species are known in the BSAI and GOA. The three dominant shark species are the Pacific sleeper shark, spiny dogfish and salmon shark. Directed fisheries for spiny dogfish are often selective on the larger mature females, resulting in significant impacts on recruitment. Salmon sharks are considered a nuisance because they eat salmon and damage fishing gear. They have been investigated as potential target species in the Gulf of Alaska, however they are currently only targeted by sport fishermen in the state fishery. Salmon sharks are rarely encountered in the fishery.

Sculpins are relatively small, benthic-dwelling groundfish. They are broadly distributed throughout the shelf and slope areas and occupy all benthic habitats and depths. Age and growth, maturity, and diet information is now available for five of the forty six species identified in the BSAI and GOA. Sculpins lay adhesive eggs in nests, and many exhibit parental care for eggs. This type of reproductive strategy may make sculpin populations more sensitive to changes in benthic habitats than other groundfish.

**ANALYSIS** An EA is required to amend the groundfish FMPs to remove sharks and sculpins from the other species assemblages or to move them to a new ecosystem component category.

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<sup>1</sup> Skates are a separate ACL category in the GOA. An FMP amendment to set separate ACLs for BSAI skates is scheduled for final action in October 2009 and could be in effect by the 2011 fishing year.

<sup>2</sup> Squids are a separate ACL category in the BSAI.

<sup>3</sup> In June 2009 the Council added an alternative to set ACLs for BSAI skates and take no action on the other species maximum retainable allowances (MRA) in the BSAI skate analysis and clarified that it would not revise the MRAs for the remaining groups in the other species assemblage

## **RANGE OF ALTERNATIVES**

Alternative 1. (The No Action Alternative) Sharks and sculpins would continue to be managed as a part of the BSAI “other species” category.

Alternative 2. Move sharks and/or sculpins from the “other species” assemblage to the “target species” category in the BSAI and GOA Groundfish FMP.

<sup>4</sup>Alternative 3. Move BSAI and/or GOA sharks and sculpins to a new ecosystem category.

## **APPLICABLE LAWS NEPA, MSA**

## **STAFF RESOURCES**

NPFMC	Jane DiCosimo, Jon McCracken
NOAA AKR	Melanie Brown, Tom Pearson, Kristin Mabry, Josh Keaton
NOAA AFSC	Dr. Olav Ormseth
NOAA Habitat	No habitat implications
NOAA PR	Kaja Brix
NOAA GCAK	Clayton Jernigan
HQ	No national policy implications

## **TIMELINE TO IMPLEMENTATION**

*August 2006 interagency staff meeting to draft the action plan for this analysis*  
*October 2006 Council, AP, and SSC reviews action plan and analytical outline*  
*November 2006 - AFSC prepares stock assessments for the groups*  
*- Plan Teams recommend 2007-2008 group OFLs and ABCs for analysis*  
*December 2006 SSC recommends 2007-2008 groups OFLs and ABCs for analysis*  
*March 2007 - SF In-Season Management staff prepares discussion paper on:*  
*1) temporal/spatial fishery interactions between groups and directed groundfish fisheries; and*  
*2) effects of proposed group ACLs on groups and directed fisheries*  
*- Non-Target Species Committee, Council, AP, and SSC reviews paper*  
*June 2007 interagency staff meeting to revise the action plan for this analysis*  
*September 2007 Groundfish Plan Teams review AKR staff discussion paper on fishery interactions*  
*October 2007 SSC and AP reviews revised action plan and discussion paper*  
*February 2008 Council reviews action plan and discussion papers and identifies preliminary priorities*  
*April 2008 Non-Target Species Committee recommends priorities for action*  
*June 2008 Council reviews committee recommendations and approves draft action plan*  
*June 2009 Interagency action plan meeting and Council data request to AKRO*  
*August 1, 2009 AFSC vulnerability analysis released*  
*December 2009 Internal Review of draft EA*  
*January 2010 Release of initial review draft EA*  
*April 2010 Initial Review of draft EA*  
*June 2010 Final Action/Selection of Preferred Alternative*  
*July 2010 Submission for NMFS review*  
*September 2010 Plan Team recommends proposed OFLs and ABCs for 2011/2012*  
*October 2010 Council adopts proposed ACLs*  
*November 2010 Plan Team recommends final OFLs and ABCs for 2011/2012*  
*December 2010 Council adopts final ACLs for 2011/2012*  
*Late 2010 Approval by the Secretary; implementation of amendments*  
*January 1 2011 Groundfish fisheries open under 2010/2011 ACLs*  
*February 2011 Final ACLs for 2011/2012 are implemented*

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<sup>4</sup> Alternative 3 is included pending the AFSC vulnerability analysis (to be released on August 1, 2009).

## **MAJOR ISSUES**

- Protect sharks and sculpins from overfishing and to meet ACL requirements
- Would allow ACLs to be set for shark or sculpin species
- Protection of ecosystem components
- Difficulty in managing small TACs and area suballocations
- Complex temporal/spatial patterns of how fleets shift effort between directed fisheries
- Geographic hotspots where high levels of incidental catches occur
- Would increase workload on NMFS
- No enforcement or legal issues identified