

## **Staff Comments on Prioritizing Proposed Alternatives to Revise Management of BSAI and GOA Other Species Assemblages**

Since 1998, the Council has been considering different approaches to optimally manage the groups contained within the other species assemblage in each groundfish fishery management plan (FMP). The assemblage contains sharks, skates, sculpins and octopus in the Bering Sea/Aleutian Islands (BSAI) Groundfish FMP<sup>1</sup> and sharks, squids, sculpins and octopus in the Gulf of Alaska Groundfish FMP<sup>2</sup>. “Other species” are described in the groundfish FMPs as, “species groups which currently are of slight economic value and not generally targeted upon. This category, however, contains species with economic potential or which are important ecosystem components, but sufficient data are lacking to manage each separately. Accordingly, a single TAC applies to this category as a whole and catch of this category as a whole must be recorded and reported.”

Staff intent is to aid the Council in setting priorities for analyses, i.e., one alternative would be prioritized as a separate action for analysis in 2008. Analysis of other alternatives would follow sequentially. Two new alternatives, which are proposed by staff for Council consideration as a priority action(s) in 2008, overlap long term management issues that have been tabled while awaiting clarification on Magnuson-Stevens Reauthorization Act of 2006 by NMFS Headquarters. The proposed alternatives under joint BSAI and GOA Groundfish FMP Amendment 63/63<sup>3</sup> follow:

**Alternative 1. No Action**

**Alternative 2. Eliminate “other species” assemblage and manage squids, skates, sculpins, sharks, and octopi as separate assemblages.**

**Alternative 3. Manage only BSAI skates and BSAI and GOA sculpins as separate assemblages.**

**Alternative 4. Manage only BSAI skates as separate assemblage**

**Alternative 5. Add grenadiers to BSAI and GOA TAC specification process:**

**Option 1. in a separate assemblage**

**Option 2. in the other species assemblage**

Proposed FMP changes would affect five groups in each of the two FMP s and numerous directed fishing fleets that harvest species in these groups as either intended or unintended catch. An analysis of setting specifications for these ten groups and the effects on multiple fishing fleets for each group potentially could result in an unmanageable and confusing analysis, particularly if regulatory action is needed to close or otherwise manage ten additional and smaller TACs (not counting seasonal, subarea, etc. sub-allocations. To enhance public understanding of proposed actions, the Non-Target Species Committee raised numerous ways to prioritize or separate the alternatives but a decision was delayed due to time constraints during the meeting and the belief that the proposed rule for implementing Annual Catch Limits and Accountability Measures would be published in February 2008<sup>4</sup>. To assist the Council in this inquiry, each alternative is examined below in terms of facilitating implementation of action(s) to enhance protection of potentially vulnerable stocks (in the near term).

**Alternative 2. Eliminate “other species” assemblage and manage squids, skates, sculpins, sharks, and octopi as separate assemblages.**

Alternative 2 would result in specifications for four groups (or more if some species are broken out of a group<sup>5</sup>) instead of one assemblage in each FMP management area. A minimum of eight additional TACs would result, with potentially fishery interactions for numerous fisheries. The Council could separate this alternative into

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<sup>1</sup> Squids are a separate TAC category in the BSAI

<sup>2</sup> Skates are a separate TAC category in the GOA

<sup>3</sup> The Council adopted a SSC recommendation to move grenadiers into the TAC specification process from the non-specified category, i.e., TAC specifications currently are not set for them and harvests do not count against the BSAI OY cap

<sup>4</sup> The timeline for publication of the proposed rule by NMFS Headquarters is unknown, but reported to be on track [http://www.nmfs.noaa.gov/msa2007/docs/msra\\_p1\\_tracking\\_update\\_011808.pdf](http://www.nmfs.noaa.gov/msa2007/docs/msra_p1_tracking_update_011808.pdf)

<sup>5</sup> Skates were removed from the GOA other species assemblage and broken into three specifications for big skate, longnose skate, and other skates

separate amendments for the BSAI and GOA Groundfish FMPs and proceed with each on separate timelines. The committee noted the different natures of the BSAI and GOA fisheries (the BSAI has a small, well observed fleet compared to the GOA) and suggested that the potential success of proposed GOA group level management may be less than in the BSAI. Incidental catch may be greater in the BSAI, thus warranting a priority management response.

**Alternative 3. Manage only BSAI skates and BSAI and GOA sculpins as separate assemblages.**

Alternative 3 would separate Tier 5 groups from the assemblage and leave the remaining Tier 6 groups in the assemblage. Removing either or both Tier 5 group(s) from the assemblage will reduce the remaining other species TAC proportionate to the lower (poorly estimated) biomasses of the remaining component groups. This results in greater protection of those groups that are removed from, as well as those that remain in, the assemblage because masking of over harvest of a group TAC would be minimized by more narrowly defining each TAC.

The committee noted that the Council began consideration of setting sharks and skates as bycatch in 1998. To date only GOA skates have been separated from the assemblage because of a temporary interest by industry for a directed fishery and a long term monitoring interest in collecting additional data from the new fishery. Alternative 3 would mirror the GOA action for skates, and extend it to sculpins in both FMP areas. A modified Alternative 3 would remove sharks instead of sculpins in response to the original 1998 Alaska Board of Fisheries proposal, which initiated the inquiry into enhancing management of all incidentally caught groundfish species. Sharks are considered more vulnerable to overharvesting than are sculpins and interest in developing a spiny dogfish fishery in the GOA has occurred. *This suggestion would replace the current Alternative 3 and not add an Alternative 3A.*

**Alternative 4. Manage only BSAI skates as a separate assemblage**

Alternative 4 would proceed with proposed action just for BSAI skates and would delete sculpins from the proposed action because sculpins have a high biomass and no directed fisheries, while skates are considered to be vulnerable due to their long-life span, slow maturity, and low fecundity. There is no near term concern that sculpins are at risk if no action is taken to enhance their management in the near term. There is not the same level of interest in developing a skate fishery in the BSAI as there has been in the GOA. This alternative would mirror action implemented in 2005 to manage long nose skate, big skate, and other skates as three separate TAC categories in the GOA.

**Alternative 5. Add grenadiers to BSAI and GOA TAC specification process:**

- Option 1.       separate assemblage**
- Option 2.       in other species assemblage**

Alternative 5 would add a new TAC category to both FMPs for grenadiers, which would be categorized as a non-target assemblage in the next proposed stage of management of all non-target species. Under a proposed approach, non-target species or groups would be added as a TAC category only when industry requests the creation of a commercial fishery and an adequate data collection plan is developed. Further, adding a group with a large biomass to the BSAI Groundfish FMP would exacerbate management issues of keeping the BSAI groundfish TACs at less than or equal to 2 million mt.

Staff recommends that the Council delete this alternative from this FMP amendment because adding grenadiers as a specification category is counter to the long term goals for managing species for which there is no intent to harvest (i.e, not under a TAC, but perhaps spatially and/or seasonally). Further, there are economic implications to other valuable groundfish fisheries which are limited by the two million metric ton cap for BSAI groundfish harvests. Since the biomass distribution of grenadiers is in the GOA, the Council could limit the analysis to the GOA. But instead of including it in the plan amendments, grenadiers would make an excellent case study for the next phase of non-target species management and staff recommends the development of such a study after the Council has completed its interim actions affecting the other species assemblages in the BSAI and GOA.

**New Alternative. Remove BSAI and GOA squids as a TAC category and move them into the forage fish category**

The ad hoc working group suggested in 2002<sup>6</sup> that a case can be made to move squid into the forage fish category in both FMPs because squid are a critical food source for many marine mammal, seabird and fish species, which is how the FMPs define the forage fish category.<sup>7</sup> The FMPs describe forage fish species as “those species not included in the target species category and which are a critical food source for many marine mammal, seabird and fish species.” The forage fish species category was established to allow for the management of these species in a manner that prevents the development of a commercial directed fishery for forage fish. The forage fish plan amendments: 1) prohibited directed fishing; 2) established a 2 percent maximum retainable bycatch limit; and 3) limited their sale, barter, trade or processing above the maximum retainable amount. Stock assessments for BSAI and GOA squids are poor due to lack of survey coverage, squid are important prey species, and it would be precautionary to foreclose development of a commercial fishery.

Forage fish species have been grouped together because they are considered to be primary food resources for other marine animals and have the potential to be the targets of a commercial fishery. As described in the EA/RIR/IRFA for FMP Amendments 36/39 (Forage Fish), “Forage fish comprise an important part of the diet of commercial groundfish species, marine mammals and seabirds in the Gulf of Alaska (GOA) and the Bering Sea and Aleutian Islands management area (BSAI). Significant declines in marine mammals and seabirds in the GOA and the BSAI have raised concerns that changes in the forage fish biomass may contribute to the further decline of marine mammal, seabird and commercially important fish populations. Members of the fishing industry and public have expressed concern that the current FMP structure with respect to forage fish may allow unrestricted commercial harvest to occur on one or more of these species. One of the recommendations from the International Council for the Exploration at Sea (ICES, 1994) indicated that fishery managers should develop measures to avoid the commercial targeting of food resources that are key to marine mammals and seabirds. The Council's 1995 Stock Assessment and Fishery Evaluation Report states that if any significant directed fishing on any component of the “other species” category develops, particularly those that serve as prey for marine mammals and seabirds, then future assessments should reflect this change by separating these species out (SAFE, 1995).”

Squid and octopus biomass is substantially underestimated by the bottom trawl survey, resulting in overly conservative estimates of ABC and OFL for this group. Both the Plan Teams and the Scientific and Statistical Committee (SSC) have noted the difficulty of developing an OFL and ABC for tier 6 species. The SSC has charged the Plan Teams with developing alternative methods to establish OFLs within tier 6. The SSC recognized, among several issues, that the incidental catch of species like octopuses and sharks may be so low that average catch is not a meaningful measure of an overfishing limit (February 2006 SSC minutes).

**New Alternative. Remove BSAI and GOA octopuses as a TAC category from both Groundfish FMPs and move them into the forage fish category or remove them from both FMPs and defer their management to the State of Alaska**

The ad hoc working group also suggested in 2002 that BSAI and GOA octopuses could be moved into the forage fish category for the same reasons as identified above for squids. The group also suggested that octopuses could be removed from the FMPs (as occurred for GOA black, blue and dark rockfishes and BSAI dark rockfish). Species or groups removed from the FMP are deferred to the State of Alaska. Interest for developing a target fishery for octopus species has occurred in the BSAI in 2005.

In its March 2005 review of the suite of Council alternatives, the Non-Target Species Committee discussed, but did not recommend, that octopus be re-categorized as a forage fish.

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<sup>6</sup> [http://www.fakr.noaa.gov/npfmc/current\\_issues/non\\_target/adhocrecAug5.pdf](http://www.fakr.noaa.gov/npfmc/current_issues/non_target/adhocrecAug5.pdf)

<sup>7</sup> While incidental catch of squid in the Shelikof pollock roe season, for example, has been as high as 10 percent, enforcement of MRAs is done by NMFS Enforcement and is not monitored by In-Season Management staff. While there are occasional markets for squid, they are not generally targeted. The management issue is whether the fleet can avoid harvesting squid.