

**REPORT  
AD HOC WORKING GROUP ON GROUND FISH MANAGEMENT  
AUGUST 5-6, 2002**

The Scientific and Statistical Committee/Plan Team/Alaska Fisheries Science Center working group (Dan Kimura, Steve Berkeley, Sue Hills, Sandra Lowe, Jim Ianelli, Grant Thompson, Sarah Gaichas, Andy Smoker, Tom Pearson, Paul Spencer, Ivan Vining, Jane DiCosimo) met on August 5-6, 2002 to discuss management of BSAI and GOA other species and BSAI other red rockfish and other rockfish. Additional NMFS Regional Office staff attended the meeting. The group discussed the need to develop criteria for separating species from aggregate complexes for all groundfish species and assemblages, rather than the current ad hoc approach. The objective is to protect species that need protection and not to lump and split species aggregates just for the purpose of standardizing procedures. The group made the following recommendations.

**Criteria for splitting/lumping species for all groundfish**

After considerable discussion, the group developed a decision matrix (below) of when to split or lump species out of or into assemblages. One participant questioned the notion that all species or assemblages must be maintained above  $B_{MSY}$  as the Magnuson-Stevens Act defines overfishing at the unit of “fisheries,” not individual species. Others stated concern over overfishing individual species even if the MSA did not require preventive measures. The risk of overfishing/extinction was identified as unknown, along with risk of unknown ecosystem effects (at both the fishery and species levels). The group identified its preference for proactive and precautionary fisheries management. The case for lumping species into assemblages occurs with poor data and low vulnerability. The case for splitting assemblages into species occurs with good data and high vulnerability. Lumping can occur with good data and low vulnerability, if convenient for management. The group also discussed which species could be lumped into an assemblage, regardless of the data quality/vulnerability issue. Considerations should include if they are caught together, have the same possible or recommended exploitation rate, similar life history, etc. (Dissimilar life histories, rather than insufficient data, would lead to a recommendation to not lump sharks and skates).

Data and vulnerability are defined below. The source and age of data should be considered in determining placement in the overfishing tier categories.

- Data quality defined by: 1) the appropriateness of the survey coverage in space (relative to the species range and to its habitat), time (of year), gear; and 2) the precision of the survey estimate (i.e., the CV).
- Vulnerability defined by life history, habitat, economic value, co-occurrence with target fishery, easily misidentified, risk of disproportionate harvest to biomass, current management measures, exploitation rate, biomass

The group is developing a table of species managed at Tier 5 to identify current patterns of splitting and

Data Quality (tier-specific)	Vulnerability	
	high	low
good survey coverage	single species	complex if needed for management or single species
poor survey coverage	single species	complex or single species
	start high quality data collection	collect additional data if possible
	interim quality, precautionary	
	no directed fishery	
	alternative management strategies	
	under alternative management schemes,	
	low MRB, area/time closures, creative thinking.	

lumping, with the assistance of stock assessment authors. The table will compare MSA requirements and North Pacific fisheries management. It will be available for review prior to the Plan Team meeting.

## Need for additional action

“Other species” are described in the BSAI groundfish FMP 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. Catch of this category as a whole must be recorded and reported. The category includes sculpins, sharks, skates, and octopus (and squid in the GOA). Eulachon, smelts, capelin were removed from the other species category and placed in a newly created forage fish category beginning in 1998.

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 is 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 % maximum retainable bycatch limit; and 3) limited their sale, barter, trade or processing above the MRB amount. AFSC assessments 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.

The forage fish species have been grouped together because they are considered to be primary food resources for other marine animals and they 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).”

Capelin, eulachon, and other Osmeridae (other smelts) were within the “other species” category of the FMPs. Sand lance, Pacific sandfish, lanternfish and Bathylagidae were within the “nonspecified species” category of the FMPs. A TAC for the “nonspecified species” category is not specified or managed but is defined in the FMPs as the amount taken incidentally while fishing for other groundfish. No reporting is required and no ABC is estimated for this category.

The species in the “other species” category could be moved into the forage fish category if they can be identified as a critical food source for many marine mammal, seabird and fish species since that is how the FMPs define the category. Or they can be reclassified in a new non-target category. This new category could include grenadier and perhaps other species that would be identified in the analysis.

## Recommendations

### Other Species

For 2003, the committee recommends the following interim actions to address the 1998 State proposal. However, no conservation issues were identified for 2003 should the Council prefer to analyze the impacts of the proposed interim action before its implementation. The committee acknowledged that more, smaller quotas would be created with potential economic impacts on the non-CDQ fisheries and CDQ fisheries.

- Separate sharks and skates from the other species category in the GOA and BSAI groundfish FMPs; Provide OFL and ABC recommendations for sharks (the shark complex could be broken out to the individual species level) and skates;
  - Recommend that the Plan Team and SSC consider whether to combine the two groups into a management assemblage or set separate specifications. For management convenience, the Council might choose to lump species, genera, or phyla, but only if the species contained therein did not fall into the poor data/high vulnerability category (described below).
  - Recommend that TAC(s) be set at bycatch levels. (*Conforms with State action, but not their stated preferred alternative*)
- In the GOA, the remaining other species complex (squids, sculpins, and octopus) TAC would continue to be set equal to 5% of the cumulative GOA groundfish TACs until revised by FMP amendment. Note that the other species TAC (set equal to cumulative groundfish TACs) would be marginally higher for 2003 as a result of creating the additional sharks and skate TAC category(ies).
- In the BSAI, squid are already broken out. Recommend that the Plan Team and SSC consider whether to leave sculpins and octopus in the other species category or break them out. Separate ABCs are currently calculated and summed for the other species total.

For 2004:

- Revise Amendments 63/63 alternatives to:
  - revise management of sharks and skates:
    1. place sharks and skates on bycatch (unless already addressed under specifications)
    2. defer to State management
    3. remove sharks from the FMPs (*State recommendation*) (and skates?)
    4. move sharks and skates into the forage fish category
  - revise management of octopus:
    1. move octopus into the forage fish category
    2. remove octopus from the FMPs and defer management to the State (would the State want management of octopus?)
  - move squid into the forage fish species category
  - manage sculpins as a target category (tier 5)
  - add grenadier as a target category (tier 5)
  - add data collection requirements

## ADDENDUM

To address the recommendations of the ad hoc committee, **Council staff will submit a plan amendment proposal for Plan Team adoption** that would develop criteria for splitting/lumping species and for identifying when sufficient data is available to allow a target fishery on the species or assemblage. The proposal takes the ad hoc committee one step further and suggests analyzing the creation of a new “non-target” category that would include “other species” and additional species that are not targets of directed fisheries now, but may be so in the future (e.g., grenadiers).

The analysis could explicitly include the State recommendations for action on sharks and skates, if the State still supports its stated preferred alternative of removing sharks (but not skates) from the groundfish FMPs and deferring to State management. Staff has initiated consultation with ADFG staff to determine the State’s current position. This is Scenario 1.

Scenario 2 is the staff’s recommended approach. It allows for the Council to take action that mirrors State action on sharks and skates either under the annual specifications process or through management of non-target species while addressing the overall management issues that face the Council in management of all groundfish assemblages (i.e., flatfish, rockfish, other species). It also adds other species that have been identified for additional management consideration (e.g., grenadiers).

Scenario 3 combines the measures of scenarios 1 and 2 and allows the Council to consider all proposed options in revising groundfish management. Scenario 1 (and therefore Scenario 3) might be eliminated if the State identifies that its principal goal was to set sharks and skates as bycatch rather than assuming all management for sharks (and skates?).

### Scenario 1

- Alternative 1: No action.
- Alternative 2: Separate sharks and/or skates from the “other species” category through the annual specifications process and enact federal regulations to prohibit directed fishing of those species.
- Alternative 3: Amend the BSAI and GOA groundfish FMPs to separate sharks and/or skates from the “other groundfish” species category and defer management to the State of Alaska.
- Alternative 4: Amend the BSAI and GOA groundfish FMPs to delete sharks and/or skates from the BSAI and GOA groundfish FMPs.

Or the analysis could implicitly address management of sharks and skates within the newly defined “non-target species” category, under the following alternatives.

### Scenario 2

- Alternative 1. No action.
- Alternative 2. Revise the BSAI and GOA groundfish FMPs:
  - Action 1. Identify the fishery management units in the groundfish FMPs to include only target, non-target and forage fish species categories (non-specified species allow for incidental catch measures and monitoring but are outside of the FMP).
    - Option. Move all non-target species into the forage fish category.
  - Action 2. List the species in the target, non-target, and forage fish species categories that are within the FMP management area.
    - Option. List non-target and forage fish species.
  - Action 3. Identify a *policy* based on scientific *criteria* to determine single species or assemblage management (split or lump);
  - Action 4. identify a *policy* based on scientific *criteria* to determine when sufficient data is available to move species from the non-target to target species categories.

Or the analysis could explicitly address both management of sharks and skates as interim measure and address management of “non-target species” under the following alternatives.

### **Scenario 3**

- Alternative 1. No action.
- Alternative 2. Revise management of sharks and skates in the BSAI and GOA groundfish FMPs:
  - Action 1. Separate sharks and/or skates from the “other species” category through the annual specifications process and enact federal regulations to prohibit directed fishing of those species.
  - Action 2: Amend the BSAI and GOA groundfish FMPs to separate sharks and/or skates from the “other groundfish” species category and defer management to the State of Alaska.
  - Action 3: Amend the BSAI and GOA groundfish FMPs to delete sharks and/or skates from the BSAI and GOA groundfish FMPs.
- Alternative 3. Revise the BSAI and GOA groundfish FMPs:
  - Action 1. Identify the fishery management units in the groundfish FMPs to include only target and non-target species categories (non-specified species allow for incidental catch measures and monitoring but are outside of the FMP).
    - Option. Move all non-target species into the forage fish category.
  - Action 2. List the species in the target, non-target, and forage fish species categories that are within the FMP management area.
    - Option. List non-target and forage fish species.
  - Action 3. Identify a *policy* based on scientific *criteria* to determine single species or assemblage management (split or lump);
  - Action 4. identify a *policy* based on scientific *criteria* to determine when sufficient data is available to move species from the non-target to target species categories.