REPORT OF THE
MACKEREL COMMITTEE
Wilmington, North Carolina
December 2, 2008

The Mackerel Committee met on Tuesday, December 2, 2008 in Wilmington, North Carolina.

The committee minutes from September 2007 are included in the Mackerel Folder on the briefing book CD but were not linked on the agenda.

Dr. Carolyn Belcher provided the SSC review comments:

1. **SEDAR 16 (King Mackerel)**

The SSC approved the recent SEDAR 16 King Mackerel assessment as based on the best available science and advises that management measures be formulated in accordance with the base assessment model run. The SSC supports the conclusion of the review panel that the South Atlantic king mackerel stocks were not overfished. It is uncertain, however, whether overfishing is occurring in the South Atlantic stock or not, but if it is, it is occurring at a low level.

Discussion leading to this conclusion centered on three major topics that arose from the assessment and the SEDAR Review Panel report(s). First, the SSC focused on comments by the Review Panel where they concluded that the base model run was a plausible representation of the king mackerel population; however, the review panel also requested alternative model runs that were necessary to understand more fully the underlying uncertainty of the assessment. In particular, the model was very sensitive to specific fishery-dependent and independent abundance indices and their relative weighting schemes. For example, two alternative model runs were conducted with different treatments of the indices suggested by the Review Panel and resulted in substantially reduced probability of overfishing the stock at higher yields in comparison to the base run. The SSC believed that the base run provided more realistic results with respect to overfishing probabilities, and recommends that it be used as the basis for management. Second, and related to this point, the Review Panel recommended that decision tables be prepared to capture the uncertainty under various model scenarios. The SSC reviewed these tables (prepared by the assessment team) but commented that the Review Panel provided little guidance on how to compare alternative approaches to the base case. Third, the SSC discussed the failure of the Stock Synthesis 3 model to provide management benchmarks under the spatial constraints of the terms of reference. The Review Panel agreed that the Stock Synthesis 3 formulation allows both the Gulf and South Atlantic king mackerel stocks to be modeled while allowing mixing between the stocks during the winter. However, the SS3 model was ultimately not used because it was unclear whether the model was converging and it was not possible to estimate stock-specific benchmarks as required by the terms of reference. Hence, the assessment proceeded using VPAs to independently model Gulf and South Atlantic migratory groups under a 50:50 mixing scenario. The SSC suggests that, in the future, if the two stocks are to be modeled separately, the SS3 model or another statistical

The SSC briefly discussed research recommendations arising from the SEDAR process and found them to be well-documented. In particular, the SSC believes that stronger fishery-independent abundance indices are needed to improve future assessments. In addition, the SSC agrees that a

full assessment of king mackerel would benefit from better access to catch information from the Mexican fishery.

Motion to accept King Mackerel Assessment as based on best available science, and that the base model be used for management.

2. SEDAR 17 (Spanish Mackerel)

There was significant discussion about the review of the Spanish mackerel. The two major sources of uncertainty in the assessment are the historical recreational catches and the amount of mackerel bycatch in the shrimp fishery. Unfortunately, the uncertainty in these data cannot be decreased with additional research. The models must simply deal with this uncertainty. One way to assess the impact of some of this uncertainty is to conduct sensitivity runs. The point estimates for fishing mortality, biomass, Fmsy, and Bmsy were quite sensitive to the assumptions being examined via the sensitivity runs. However, the ratio of current fishing mortality to Fmsy appeared to be robust to the sensitivity runs performed in the Review Workshop and was in agreement with the results of the ASPIC biomass dynamic model. As such, it was determined that the stock was not experiencing overfishing. There was some question as to whether this robustness would hold over a wider range of sensitivity runs. The ratio of current biomass to Bmsy, however, was quite sensitive to the various runs, and as such, the model could not reliably determine whether the stock was overfished or not. There was some discussion as to the overall robustness of the ratios, but the SSC consensus was to agree with the findings of the Review Panel.

It was noted the even though the model could estimate the steepness parameter for the stock-recruit curve, the Review Panel expressed concern over its uncertainty. The SSC noted that we will likely never have precise estimates of such parameters and must make decisions despite this uncertainty.

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The Committee discussed the stock assessment results for both king and Spanish mackerel and given there is no overfishing, decided to address any changes through the Comprehensive ACL Amendment and not use the framework procedures.

The Committee discussed items for scoping and approved items shown in a motion below.

The Committee approved the following motions:

MOTION #1: ADDRESS KING MACKEREL CHANGES IN THE COMPREHENSIVE ACL AMENDMENT
APPROVED BY COMMITTEE

MOTION #2: ADDRESS SPANISH MACKEREL CHANGES IN THE COMPREHENSIVE ACL AMENDMENT
APPROVED BY COMMITTEE

MOTION #3: APPROVE THE LIST OF ITEMS AND TIMELINE FOR SCOPING APPROVED BY COMMITTEE

In addition, the committee provided the following direction to staff:

The following list of items, as they apply to species not undergoing overfishing, will be in the ACL Comprehensive Amendment. Annual crops that are not in an overfished state are exempt from these requirements.

1. Annual Catch Limits
2. Annual Catch Target
3. Accountability Measures
4. Allocations between the commercial, for-hire, and recreational sectors
5. Regulations to limit total mortality (landings and discards) to the Annual Catch Target. Management regulations may include, but are not limited to, the following:
    a) Commercial quotas and recreational allocations
    b) Trip limits
    c) Vessel limits
    d) Size limits
    e) Bag limits
    f) Closed areas
    g) Closed seasons
    h) Permit endorsements
    i) Fishing year

Comprehensive ACL Amendment Timeline
The following is the anticipated timeline:

1. Scoping – approve for scoping at the December 2008 meeting; scoping January/February 2009
2. Appoint Team Members
3. Committee/Council review scoping comments and options paper at March and June 2009 meetings.
4. Approve document for public hearings – September 2009.
5. Public Hearings – November (1^{st} & 2^{nd} weeks) 2009.
6. Review Public Hearing Input & Approve – December 2009.
7. Final Approval (if necessary) – March 2010.
8. Send for Secretarial Review – March 2010/June 2010 @ latest.

Public hearings/scoping meetings are scheduled as follows:
(1) January 26, 2009 in Charleston, SC
(2) January 27, 2009 in New Bern, NC
(3) February 3, 2009 in Key Largo, FL
(5) February 4, 2009 in Cape Canaveral, FL
(5) February 5, 2009 in Pooler, GA