SOUTH ATLANTIC FISHERY MANAGEMENT COUNCIL

SOCIO-ECONOMIC PANEL OF THE SCIENTIFIC AND STATISTICAL COMMITTEE

SEP Meeting Overview

May 3, 2016

Town and Country Inn
2008 Savannah Highway
Charleston, SC

PURPOSE

This meeting is convened to:

- Discuss definitions of Optimum Yield (OY)
- Review the economic decision tool for Snapper Grouper Amendment 37 (hogfish)
- Provide input on red snapper management
- Discuss recent and upcoming council actions in the South Atlantic region

CONTENTS

DOCUMENTS

Attachment 1a: Excerpt on Optimum Yield from NMFS guidance on National Standard 1
Attachment 1b: 2016-2020 Vision Blueprint for the Snapper Grouper Fishery
Attachment 1c. Background Information on OY in the Snapper Grouper and Dolphin Wahoo FMPs
Attachment 1d. Background on Bering Sea and Aleutian Islands (BSAI) Groundfish OY

Attachment 2a*. Overview of Snapper Grouper Amendment 37
Attachment 2b*. Presentation on the Snapper Grouper Amendment 37 Economic Decision Tool
***Will be posted as soon as available.**

Attachment 3: Red Snapper Management and Data Synopsis

Attachment 4: Recent and Developing Council Actions

1. Introduction

1.1. Documents

Agenda
Minutes, April 2015

1.2. ACTIONS

- Approve Agenda
- Approve April 2015 Minutes
- Introductions

2. Discussion on Defining Optimum Yield

2.1. Documents

Attachment 1a. Excerpt on Optimum Yield from NMFS guidance on National Standard 1
[Full NS1 guidance available here: http://www.fisheries.noaa.gov/sfa/laws_policies/national_standards/documents/national_standard_1_cfr.pdf

Attachment 1b. 2016-2020 Vision Blueprint for the Snapper Grouper Fishery
This is the guiding document generated by the Visioning Process, which includes the overall management goals, objectives and actions. Public input on problems and solutions in the snapper grouper fishery were an integral part of this three-year project. More details about the Visioning Process available here: http://www.safmc.net/resource-library/council-visioning-project

Attachment 1c. Background Information on OY in the Snapper Grouper and Dolphin Wahoo FMPs
This document includes information on the optimum yield for some snapper grouper species, and for dolphin, and was compiled following discussion at the March 2016 SAFMC meeting. Dolphin is primarily a recreational species.

Attachment 1d. Background on Bering Sea and Aleutian Islands (BSAI) Groundfish OY
This document was provided by David Witherell, North Pacific Fishery Management Council. The BSAI Groundfish is managed with a multi-year, multi-species OY, and a total allowable catch (TAC) for each species in the BSAI Groundfish complex.

Additional references for the discussion:

Patrick, W.S., and J.S. Link. 2015. Hidden in plain sight: Using optimum yield as a policy framework to operationalize ecosystem-based fisheries management. *Marine Policy* 62: 74-81.

Healey, M.C. 1984. Multiattribute analysis and the concept of optimum yield. *Can. J. Fish. Aquat. Sci.* 41:1393-1406. Available at: http://web.whoi.edu/seagrant/wp-content/uploads/sites/24/2015/01/WHOI-R-84-014-Healey-M.C.-Multiattribu.pdf

Dichmont, C.M., et al., 2010. On implementing maximum economic yield in commercial fisheries. *PNAS* 107(1):16-21. Available at: http://www.pnas.org/content/107/1/16.full.pdf

2.2. Overview

The Magnuson-Stevens Act defines *optimum yield* as:

> …the amount of fish that will provide the greatest overall benefit to the Nation, particularly with respect to food production and recreational opportunities and taking into account the protection of marine ecosystems; that is prescribed on the basis of the MSY from the fishery, as reduced by any relevant economic, social, or ecological factor; and, in the case of an overfished fishery, that provides for rebuilding to a level consistent with producing the MSY in such fishery. OY may be established at the stock or stock complex level, or at the fishery level.

With the variety of resource users and desired outcomes for fisheries management in the South Atlantic and other regions, it is common for the Council to encounter conflicting management goals. An example is the consideration of changing recreational/commercial allocations, with which the definition of the optimum yield for a fishery creates challenges for the Council.

The concept of OY has been used in fisheries for several decades and is still required by the MSA. NMFS guidance instructs that OY is based on the defined maximum sustainable yield (MSY) for the fishery and must not exceed the MSY level. However, fisheries management has adapted to the acceptable biological catch (ABC) and annual catch limit (ACL) system mandated by the 2006 Reauthorization of the MSA, which may broaden the potential definition of OY by removing the need for the association with MSY. Additionally, ecosystem-based management and managing for multi-fishery participation—looking at the bigger picture—may help to construct a new approach to defining OYs and overall management goals.

The SEP discussion should include but is not limited to:

- different ways to define OY
- different 'levels' of OY and how they would interact, such as sector OYs and an overall fishery OY (see BSAI Groundfish example (Attachment 1d)
- considerations for OY decisions- social, economic, ecosystem-based, etc.
- applications of OY in management decisions and long-term goals (e.g., the Snapper Grouper Vision Blueprint).

2.3. Presentation

Kari MacLauchlin, SAFMC staff

2.4. ACTIONS

Discuss and provide guidance to the Council on revising the definition of optimum yield.

SEP RECOMMENDATIONS:

3. Hogfish Decision Tool for Snapper Grouper Amendment 37

3.1. Documents

Attachment 2a*. Overview of Snapper Grouper Amendment 37
Attachment 2b*. Presentation on the Snapper Grouper Amendment 37 Economic Decision Tool
***Will be posted as soon as available.

3.2. Overview

In response to the outcome of the SEDAR 37 (2014) assessment, the Council began development of Amendment 37 to the Fishery Management Plan for the Snapper Grouper Fishery of the South Atlantic Region (SG-37). SG-37 proposes different ABCs, annual catch limits (ACLs), annual catch targets, minimum size limits, trip limits, and bag limits for the FLK/EFL and GA-NC hogfish stocks. Recreational and commercial decision tools were developed to simulate the impacts of various combinations of proposed management measures to support SG-37.

Brian Cheuvront (SAFMC Deputy Director) will provide an overview of Amendment 37, including a summary of the rationale, actions and alternatives. David Records (SERO) will review the economic decision tool.

Attachments 2a/2b are still under review and will be provided as soon available. The economic decision tool (Excel file) will be available soon, and posted in the SSC briefing book: http://safmc.net/SSCMeeting_BriefingBook05_2016.

3.3. Presentations

Snapper Grouper Amendment 37 Overview – Brian Cheuvront, SAFMC staff

Review of the Economic Decision tool – David Records, SERO staff

3.4. ACTIONS

Discuss and make recommendations as necessary.

- Consumer surplus (CS) estimates were used to calculate the economic effects for the recreational sector. There is no specific CS estimate available for hogfish. The CS value for a snapper ($12.37 in 2014 $) was used as a proxy. There is a CS value for grouper, but it is much higher ($134.73 for a first grouper, $103 for a second grouper, $69 for a third and so on). There is also a CS estimate for catching a red snapper of $140.23. Does the SEP agree that using the CS for harvesting a generic snapper is the most appropriate, or should another value be used?
- Estimates of value for the commercial fishery used an average price per pound for hogfish. Using an average hogfish price is an important assumption because it assumes price will not change in response to changes in hogfish supply. There are many substitute species for hogfish that would suggest high price elasticity. Additionally, there has been low fluctuation in price over time and the overall quantity of commercial hogfish landings relative to other snapper grouper species is low. Is it appropriate to use the average price per pound for commercial economics effects?

- SARIMA modeling was used to forecast baseline commercial landings for the EFL/FL Keys sub-region. Does the SEP feel that using this model was the most appropriate approach? If not, what other modeling approaches would be better?
- Are there other aspects of the economic models that the SEP would like to comment on?

SEP RECOMMENDATION:

4. Red Snapper Management

4.1. Document

Attachment 3. Red Snapper Management and Data Synopsis

4.2. Overview

The stock assessment for red snapper (SEDAR 41) will be reviewed by the SSC at their May 2016 meeting, and the Council will receive the assessment results and SSC recommendations in June 2016. Red snapper in the South Atlantic are currently managed with no size limit, 1 fish per person bag limit, 75-pounds commercial trip limit, limited season, and annual catch limits (ACLs) based on acceptable biological catch (ABC) recommendations from the SSC.

Amendment 28 to the Snapper Grouper FMP was approved in 2013 and specified the process and formulas for setting commercial and recreational ACLs for red snapper during limited fishing seasons. NNMFS will not open a season if the previous year's harvest, including dead discards, exceeds the projected ABC level for that year. The red snapper seasons in recent years have been short: recreational seasons are 6-8 days and commercial seasons are between 3-7 weeks. In 2015, harvest of red snapper was not allowed due to total removals in 2014 exceeding the 2014 ABC.

The public and the Council are interested in revising management of red snapper, particularly because updated information from the recent stock assessment will be available. The overall management goal is to allow some harvest of red snapper, and the Council may consider standard measures such as bag/trip limits, seasons, and changes in minimum size limit.

Chip Collier, SAFMC staff, will provide a synopsis of red snapper data is being provided to inform Council discussions on potential red snapper management measures. The data include commercial and recreational landings, seasonality of harvest, size distribution of red snapper catch, and distribution of bag/trip sizes.

4.3. Presentation

Chip Collier, SAFMC staff

4.4. ACTIONS

- Provide input on potential actions to allow and lengthen the red snapper commercial and recreational seasons.
- Make recommendations for economic and social analyses considerations.

SEP RECOMMENDATION:

5. Recent and Developing Council Actions

5.1. Document

Attachment 4. Recent and Developing Amendments

5.2. Overview

Council staff will provide a briefing on recent and upcoming amendments and actions.

5.3. Presentation and Discussion

Kari MacLauchlin, SAFMC staff

5.4. ACTIONS

Discuss and make recommendations as necessary.

SEP RECOMMENDATION:

6. Other Business

7. Report and Recommendations Review

8. Next SEP Meeting

- Spring 2017, Charleston SC