SOUTH ATLANTIC FISHERY MANAGMENT COUNCIL

SCIENTIFIC AND STATISTICAL COMMITTEE

SSC Meeting Overview

March 4, 2016

9:00 am – 12:00 pm

MEETING VIA WEBINAR

VERSION
FINAL

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DOCUMENTS

Attachment 1. Oct 28-30, 2014 SSC Report

Attachment 2. Hogfish Projection Request Sep 3, 2015

Attachment 3. Updated Hogfish Projections Sep 2015

Attachment 4. Oct 20-22, 2015 SSC Report

Attachment 5. SERO method for specifying hogfish ACL

Attachment 6. SAFMC method for specifying hogfish ACL

Attachment 7. YPR Model Spreadsheet

Attachment 8. Hogfish Decision Tool Description

Attachment 9. FLK/EFL Hogfish Decision Tool Spreadsheet Using SERO Method

Attachment 10. FLK/EFL Hogfish Decision Tool Spreadsheet Using SAFMC Method

WEBINAR ACCESS

Registration is required to access the webinar. Registration is available through this link:

https://attendee.gotowebinar.com/register/1839997897356616196

After registering, you will receive a confirmation email containing information about joining the webinar.

SAFMC PUBLIC COMMENT PROCESS

Written comment:

Written comment on SSC agenda topics is to be distributed to the Committee through the Council office, similar to all other Council briefing materials. Written comment to be considered by the SSC shall be provided to the Council office no later than one week prior to an SSC meeting. For this meeting, the deadline for submission of written comment is 12:00 pm Friday, February 26, 2016.

SAFMC

4055 Faber Place Drive

Suite 201

North Charleston, SC 29405

Verbal comment:

Two opportunities for comment on agenda items will be provided during SSC meetings. The first will be at the beginning of the meeting, and the second near the conclusion, when the SSC reviews its recommendations. Those wishing to comment should indicate such in the manner requested by the Chair, which may be through a show of hands or a written list if the number of interested parties is extensive, who will then recognize individuals to come forward and provide comment. All comments are part of the record of the meeting.

1. INTRODUCTION

1.1. Documents

Agenda

1.2. Action

- Introductions
- Review and Approve Agenda

2. PUBLIC COMMENT

The public will be provided two opportunities to comment on SSC agenda items during this meeting. The first at the start of the meeting, and the final will be provided at the end during the review of recommendations. Those wishing to make comment should indicate their desire to do so to the Committee Chair.

3. SPECIFYING THE FLK/EFL HOGFISH RECREATIONAL ACL

3.1. Documents

Attachment 1. Oct 28-30, 2014 SSC Report

Attachment 2. Hogfish Projection Request Sep 3, 2015

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3.2. Overview

SEDAR 37 was completed in 2014 by the Florida Fish and Wildlife Conservation Commission (FL FWC), assessing the Florida Keys/East Florida (FLK/EFL) stock of hogfish. The SSC reviewed the assessment at their October 2014 meeting and determined that the FLK/EFL stock was overfished and undergoing overfishing (**Attachment 1**).

The SSC reviewed updated projections for this stock at their October 2015 meeting and determined that these projections represented the BSIA and should be used for management (**Attachments 2 and 3**). In October 2015 the SSC also discussed setting recreational ACLs in numbers vs. weight and concluded it is an appropriate approach for some species, but may not be appropriate for all species managed. The SSC also reviewed Amendment 37, which deals with management for hogfish, and concluded that setting the recreational ACL in numbers of fish is acceptable. The preferred method is to set the ABC and allocate it to sectors in numbers and convert the commercial ACL back to weight (**Attachment 4**). However, this would require recalculating the sector allocations using landings in numbers rather than in weight.

At the December 7-11, 2015 meeting in Atlantic Beach, NC, the South Atlantic Council gave direction during the Snapper Grouper Committee that they did not want to pursue recalculating allocations until such time as an omnibus amendment can be started that addresses all species with recreational ACLs set in numbers. Therefore, Amendment 37 specifies the FLK/EFL hogfish ABC in pounds, sector allocations in pounds based on the allocation formula approved through the Comp ACL Amendment, and the recreational ACL in numbers using the average weight of a recreationally caught hogfish from 2012 to 2015 Wave 3 (SERO staff). However, this causes a potential issue when other management measures are considered within Amendment 37.

In particular, a proposed change to the minimum size limit causes a potential problem if the ABC is set in pounds but the recreational ACL is set in numbers. The proposed alternatives increase the minimum size of a hogfish in the FLK/EFL stock from 12″ up to 20″ in increments of 1″. The assumption is that as the minimum size limit is increased, the average weight of a recreationally caught hogfish would also increase. If the average weight of a hogfish increases and the recreational sector is held to the same number of fish as was projected by the model under a 12″ size limit, reaching the ACL in numbers may result in exceeding the ACL in pounds. Since the recreational sector in the FLK/EFL area is allocated over 90% of the ABC, there is the possibility that the overall stock ABC in pounds may be exceeded if the average weight of a hogfish increases considerably.

Currently, the fishery is harvesting fish at an average size of 13.9″. The Council chose 15″ as their preferred minimum size for the recreational FLK/EFL stock during their December 2015 meeting. On average, 70% of the hogfish harvested recreationally are below 15″ in the FLK/EFL stock. Therefore, it seems likely that the average weight of recreationally caught hogfish in the FLK/EFL stock will increase if a minimum size of 15″ is implemented.

Two methods have been proposed to compensate for the change in minimum size when setting the recreational ACL for the FLK/EFL stock of hogfish in numbers. The first was developed by Southeast Regional Office (SERO) staff and involves adjusting the average weight used for converting the recreational ACL from pounds to numbers based on the Length-Weight (L-W) regression derived during SEDAR 37 (**Attachment 5**). Basically, as the minimum size increases, the average weight used for the conversion is increased based on the L-W relationship from SEDAR 37, accounting for the assumed difference in the average weight of landed hogfish from the proposed minimum size change. SERO staff developed a Decision Tool for Amendment 37 to analyze each of the management alternatives individually and in combination with other proposed management measures (bag limit, trip limit, recreational season). The Decision Tool for recreational FLK/EFL hogfish estimates landings and catch rates under different management alternatives and compares those to the recreational ACL in numbers to determine the approximate season length, landings by month, and dead discards by month for the recreational fishery. A version of the Decision Tool has been included for reference purposes that uses this variable average weight method for determining the recreational ACL of FLK/EFL hogfish for each size limit alternative (**Attachments 8 and 9**).

The method proposed by SERO staff keeps the ABC and total ACL specified in pounds, and limits the fishery to the ABC chosen by the Council, which is based on stock projections incorporating selectivity from the recent past. In other words, the ABC recommendation does not account for the size limit changes being considered by the Council. If the ABC and ACL are in pounds, then the number of fish harvested would need to be reduced, as the average weight of those fish increases, in order to remain below the ACL in pounds. The underlying assumptions are that conditions input to the model for the projections are still true (certain level of recruitment, selectivity, natural mortality, productivity, etc.), and that if the ABC is exceeded in either pounds or numbers, there is a probability that overfishing could be occurring.

Council staff proposes a second method that would set the ABC and total ACL in numbers of fish instead of pounds. This was in response to the concern that the assumptions inherent in the method proposed by SERO staff may be violated by the proposed minimum size increase. In particular, the assumed selectivity pattern and, therefore, the resulting yield per recruit (YPR) would no longer be valid once the minimum size limit change is implemented. This could result in the fishery being able to harvest a higher yield of hogfish (in pounds) without causing overfishing to occur. Therefore, Council staff developed a modified YPR model to investigate the effects of changes in the minimum size on fishing mortality (F) (**Attachment 6 Appendix** and

Attachment 7). The results of the modified YPR indicate that the fishery could continue to harvest the same number of fish up to the 20" proposed minimum size alternative with little to no effect on the value of F.

The reason for this is that F is based on the numbers killed, so alternatives with the same number of fish killed have similar F values when you consider F over the same range of ages. Therefore, the recreational fishery can harvest a higher poundage of hogfish without causing the stock to undergo overfishing. By increasing the minimum size of hogfish the fishery can harvest, the Council can alter the selectivity. The expected selectivity under the preferred minimum size limit (15 inches) is different than the current selectivity of the fishery. The Amendment 37 IPT agreed on their Jan 15, 2016 conference call that the preferred method for dealing with this situation was to rerun the projections under different selectivity assumptions. However, conversations with FL FWC staff made it clear that this exercise would take a significant amount of time and effort to complete due to complications with the SS3 model coding and the fact that there is no one with the necessary expertise to make these types of coding changes to SS3 in a reasonable time frame. Currently, Amendment 37 is under a statutory deadline to be implemented by Feb of 2017 due to the FLK/EFL hogfish stock being declared overfished and the rerunning of these projections cannot be completed within the allowable timeline.

Therefore, Council staff proposed an alternative method which maintains an equivalent value of F as projected by the assessment model, but allows the yield of the ACL to vary based on changes in the expected selectivity at different minimum size limits. As mentioned previously, this method initially sets the ABC and total ACL in numbers of fish instead of pounds. Although the ABC and total ACL are in numbers, conversions to pounds must be done in order to apply the sector allocation formula in pounds and to track the commercial landings in pounds (the native units for the commercial sector). However, the proposed minimum size change would have little to no effect on the commercial sector because they are currently harvesting hogfish right at the proposed 15" minimum size, on average (**Attachment 3**). This method sets the total ACL in numbers, converts it to pounds using the model calculated average weight, and then uses the commercial allocation in pounds to determine the commercial ACL in pounds. The commercial ACL in pounds is converted to numbers using the commercial average weight, which is equivalent to a fish at the preferred 15" minimum size (avoiding the same problem faced in the recreational sector). Once the commercial ACL is in numbers, it can be subtracted from the total ACL in numbers to determine the recreational ACL in numbers. In this method, all AMs could be tracked in numbers rather than in pounds (or the commercial sector can be tracked in pounds if the Council prefers). A version of the Decision Tool created by SERO staff that utilizes this

alternative method for determining the recreational ACL of FLK/EFL hogfish is included for reference (**Attachment 10**).

3.3. Action

- Review the two proposed methods for specifying the recreational ACL for the FLK/EFL stock of hogfish.
    - Identify uncertainties in each method and discuss their impact on fishing level recommendations and management.
    - Compare and contrast the approaches with regard to risk of overfishing and progress toward rebuilding goals.
    - Discuss whether the implementation of a minimum size limit violates the projection selectivity assumptions for recreationally caught hogfish in the FLK/EFL stock and the potential effects on fishing level recommendations.
    - Discuss whether each method represents Best Scientific Information Available, and provide guidance on their use in setting fishing level recommendations for this stock in Amendment 37.

4. OTHER BUSINESS

5. PUBLIC COMMENT

The public is provided an additional opportunity to comment on SSC recommendations and agenda items.

6. REPORT AND RECOMMENDATIONS REVIEW

The Committee is provided this opportunity to review its recommendations and consensus statements recorded during the meeting.

Recognizing the short time between this meeting and the March 2016 Council meeting, the Council requests that SSC recommendations addressing the TORs be provided by the SSC chair at the Snapper Grouper Committee meeting on March 8, 2016.

7. ADJOURN