12. MUTTON SNAPPER ASSESSMENT REVIEW

- 12.1.Documents

Attachment 15. Mutton Snapper Assessment

12.2.Overview

An assessment of mutton snapper was recently completed by the FL FWCC. The SSC is asked to review the assessment and provide fishing level recommendations. The stock is managed jointly by the Gulf and South Atlantic Councils.

April 2015

The assessment was reviewed by the Gulf SSC in March 2015, at which time they accepted it as best available scientific information. Since 82% of the mutton ABC is allocated to the South Atlantic jurisdiction, the Gulf SSC consents to the SAFMC SSC taking the lead on developing fishing level recommendations, and plans to review the SAFMC SSC recommendations at their next meeting in May.

12.3.Presentation

Assessment Overview: Joe O'Hop, FL FWCC

12.4.<u>Action</u>

- Review the assessment and consider whether it represents Best Scientific Information Available.
- Identify and discuss assessment uncertainties
- Provide fishing level recommendations

SSC RECOMMENDATION:

The SSC reviewed the mutton snapper SEDAR 15A assessment update conducted by Florida FWC. The Committee consensus was that the update represents the best scientific information available and can, therefore, be used to provide management advice.

Specific comments and discussion points brought up during the SSC meeting included:

- The SSC expressed concern that, despite improvements in the data streams and the fact that the analytical team tried to follow CIE reviewer recommendations from the previous assessment, a few problems either developed or worsened during the update:
 - Patterns in residuals for some of the indices and the commercial discards.
 - *Poor fit to the age composition.*
 - Problems estimating selectivity for some of the fleets.
- However, the change in magnitude of the MSY estimate between the prior and this assessment seems to reflect improvements in how the update model handles fishing mortality and selectivity (i.e., improved selectivity estimates prevent the assumption of a large cryptic biomass as observed in SEDAR 15A).

Since this assessment falls under Tier 1 of the SAFMC ABC control rule, ABC was obtained according to a P^* value. A summary of results from applying the ABC control rule is presented below:

- 1. <u>Assessment Information</u>: Tier 2 (-2.5%): an SPR-based proxy was used for MSY benchmarks.
- 2. <u>Uncertainty</u>: Tier 3, medium (-5.0%): many of the uncertainties are well documented but did not seem to take into account problems with fitting the indices and the age comps.
- 3. <u>Stock Status</u>: Tier 2, Not Overfished, No Overfishing is occurring but stock may be in close proximity to benchmark values (-2.5%).
- 4. <u>Productivity-Susceptibility Analysis</u>: High Risk (-10%): based on the MRAG report.

In total, these results provide for an adjustment score of 20%, and a P^* of 30%. The SSC recommends using 5-year projections at P^* =50% for OFL and at P^* =30% for ABC.

The SSC pointed out that this assessment still has to go to the Gulf SSC to be finalized before actual fishing level recommendations can be implemented.

Table 2. Mutton Snapper recommendations

Criteria Criteria			ermini	Probabilistic				
Overfished evaluation			Not overfished: SSB/MSST=1.12					
Overfishing evaluation			Not overfishing: F/F _{30%SPR} =0.65					
MFMT (F _{30%SPR})			0.18					
SSB _{30%SPR} (lbs females)			4,649,200					
MSST (lbs females)			4,137,700					
(1-M(SSBmsy); M=0.11)								
Y at F _{30%SPR} (MSY proxy, lbs)			912,500					
Y at F _{40%SPR} (lbs)			874,000					
ABC Control Rule Adjustment						20%		
P-Star						30%		
OFL RECOMMENDATIONS								
Year	Landed LBS	Discard	LBS	Landed Number	Discard Number			
2014	664,876	30,708		113,300	17,341			
2015	664,877	44,496		125,245	25,215			
2016	713,492	54,005		148,995	29,298			
2017	751,711	55,962		164,150		29,660		
2018	793,823	56,994		173,656		30,071		
2019	835,318	58,170		180,716		30,430		
2020	850,077	58,857		184,868		30,780		
ABC RECOMMENDATIONS								
Year	Landed LBS	Discard	LBS	Landed Number	Dis	scard Number		
2014	664,900	30,7	00	113,300		17,300		
2015	664,900	44,8	00	125,800		25,400		
2016	692,000	52,8	00	145,400		28,600		
2017	717,200	53,7	00	157,500		28,400		
2018	746,800	53,9	00	164,500		28,300		

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2019	774,400	54,400	169,300	28,300
2020	798,300	54,500	172,700	28,300