7.   SPANISH MACKEREL CATCH LEVEL RECOMMENDATIONS

7.1   Documents

Attachment 7a. Equilibrium Values from S78 Base Run

7.2   Presentation

Dr. Erik Williams, SEFSC

7.3   Overview

At the April 2023 SSC meeting, the SSC determined the SEDAR 78 stock assessment was sufficient for providing stock status (not overfished, not overfishing), and was also sufficient for providing catch level recommendations using model output but not projections. Significant concerns with natural mortality in the assessment persisted and was considered as justification to deviate from the ABC control rule for setting catch level recommendations. The OFL was set equal to the yield at F_{MSY} from the base model run (8.210 mp), and the ABC was set equal to 75%F_{MSY} from the base model run (8.024 mp).

A request was sent to the SEFSC for additional values (landings by number, discards by weight, and discards by number) from the SEDAR 78 Atlantic Spanish Mackerel stock assessment model that were not included in the original stock assessment report, but were computed as part of the base model run.

7.4   Public Comment

7.5   Action

➢ Review equilibrium values from the SEDAR 78 base stock assessment model run for Atlantic Spanish Mackerel.
  o *Equilibrium values presented in table 3 (below) are approved.*

Table 3. South Atlantic Spanish Mackerel Catch Level Recommendations

Criteria	Deterministic	Probabilistic
Overfished evaluation ($SSB_{2020}/MSST$)	1.40	1.42
Overfishing evaluation ($F_{2018-2020}/F_{MSY}$)	0.77	0.74
MFMT ($F_{MSY\ proxy}$)	0.516	0.523
SSB_{MSY} (metric tons)	6406	6410
MSST (metric tons)	4804	4808
MSY (1000 lbs.)	8210	8351
Y at 75% F_{MSY} (1000 lbs.)	8024	8158
ABC Control Rule Adjustment	10%	
P-Star	40%	
M	0.35	

OFL RECOMMENDATIONS				
Year	Landed (1000 lbs ww)	Discard (1000 lbs ww)	Landed (1000's)	Discard (1000's)
2023	8,210	581	5,413	1,147
2024	8,210	581	5,413	1,147
2025	8,210	581	5,413	1,147
2026	8,210	581	5,413	1,147
2027+	8,210	581	5,413	1,147

ABC RECOMMENDATIONS				
Year	Landed (1000 lbs ww)	Discard (1000 lbs ww)	Landed (1000's)	Discard (1000's)
2023	8,024	469	4,977	916
2024	8,024	469	4,977	916
2025	8,024	469	4,977	916
2026	8,024	469	4,977	916
2027+	8,024	469	4,977	916