

Evaluating the Utility and Limitations of Interim Analyses

May 2023 Gulf SSC Meeting



What are they?

- Interim analysis is a stock evaluation tool with minimal data requirements that is meant to be used in between conventional stock assessments.
 - Allows for reconsideration of species catch limits
 - Can serve as a health check
 - Uses a representative index of abundance scaled against landings and the ABC
- Usually takes 2-3 months
- SSC review
- Requires peer-reviewed completed assessment

SSC questions and concerns:

- Timing of index processing
- Catch advice changes: OFL and/or ABC?
- Time limits on using IAs for catch advice after the terminal year of the stock assessment.
- Conducting a health check versus updated catch advice
- Resources needed to conduct health check and how are health checks received?



Timing of indices processing

- Usual indices considered:
 - NMFS Bottom Longline
 - Ready in November of same year
 - GFISHER (Combined Video)
 - Ready in September of following year
 - Headboat CPUE
 - Ready in May of following year



Catch advice changes: OFL and ABC

Problems:

- How and whether to generate new OFLs from IAs
 - Is the 'new' OFL going to affect the status of the stock?
 - How many years of the index are needed to create new ABCs robust to overfishing?

Caveats:

- Assumptions about probability of overfishing
- Assumption that selectivity and retention functions remain unchanged



Time limits on using IAs

- Uncertainty builds as time from TY elapses
- IA assumes no change in key variables
 - Recruitment, selectivity, catchability, age/length relationships, distribution, etc.
 - Assumptions may be violated following stock assessment
- Consider additional data alongside IA?
 - Length composition data from directed fleets
 - Empirical and representative data/survey
 - Fisherman Feedback?



Health check versus catch advice

- Currently unreasonable to update catch advice annually
 - One-year lag between SSC recommendation and management implementation
- Regulatory streamlining may expedite
- Meanwhile, health checks valuable
 - May allow the Council to take other proactive measures
 - Modify catch limit buffers, retention limits, or fishing seasons

Resources needed for health check

- Same resources as needed for catch advice
- No projections for future yield necessary
- Can still analyze trends:
 - Landings against the ABC
 - Discards
 - Trend in the representative index of abundance



Guidance to SSC

- Updating catch advice may become more expedient
 - Regulatory streamlining may allow automation of some SSC recommendations
 - SSC recommends OFL and ABC
 - If recommendations within a threshold, RA updates catch limits
 - If recommendations outside a threshold, Council works on appropriate document to modify FMP
 - Always consider assumptions for IA



Feedback needed from SSC

- Prioritize health checks amongst other SEFSC requests?
- Provide feedback about the length of time the Council should rely on IAs as opposed to requesting a new assessment.
- Comment on situations where updating the OFL may be problematic.

