NSI Technical Guidance Subgroup 3 Tech Memo

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Scientific and Statistical Committee
Webinar





National Standard 1 – Technical Guidance

Council Coordination Committee
Kelly Denit and Marian Macpherson
May 2021

NS1 Technical Guidance Workgroup

3 Subgroups

- Subgroup 1: Reference points (Draft in progress)
- Subgroup 2: Carry-over and Phase-in (Complete)
- Subgroup 3: Data-Limited ACLs (Draf complete)



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Subgroup 1 – F_{MSY}, B_{MSY}, and their proxies

Tech Memo on estimation of F_{MSY} , B_{MSY} , and their proxies.

- Guidelines and consideration for direct estimation of F_{MSY} and B_{MSY}
- Guidelines for selecting F_{MSY} and B_{MSY} proxies
- Address additional considerations (e.g., fleet dynamics adjusting reference pts due to changing conditions, multispecies considerations)

Status:

- Have working draft, ongoing input from science cer
- Anticipate draft for internal review in fall 2021.
- Future Council review.



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Overview

- Subgroup 3 Draft -"Managing with ACLs for data-limited stocks in federal fishery management plans - Review and recommendations for implementing 50 CFR 600.310(h)(2) flexibilities for data limited stocks"
- Councils ask to comment on draft
- Goal today: Get SSC feedback on the concepts

50 CFR 600.310(h)(2) flexibilities for data limited stocks

(2) Flexibility in application of NSI guidelines. There are limited circumstances that may not fit the standard approaches to specification of reference points and management measures set forth in these guidelines. These include, among other things, conservation and management of Endangered Species Act listed species, harvests from aquaculture operations, stocks with unusual life history characteristics (e.g., Pacific salmon, where the spawning potential for a stock is spread over a multi-year period), and stocks for which data are not available either to set reference points based on MSY or MSY proxies, or to manage to reference points based on MSY or MSY proxies. In these circumstances, Councils may propose alternative approaches for satisfying requirements of the Magnuson-Stevens Act other than those set forth in these guidelines. Councils must document their rationale for any alternative approaches in an FMP or FMP amendment, which will be reviewed for consistency with the Magnuson-Stevens Act.

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Overview of Draft Tech Memo

- Legal context of MSA and NS1 Guidelines
 - Statutory Requirements
 - NMFS guidance: Standard approach; flexibilities
- Data-limited Assessment Methods
 - Methods that support Standard ACLs
 - Recommendations and Considerations
 - Other methods that support MSA compliance
- Management: Guidance on use of (h)(2) flexibilities for data-limited stocks
 - Qualification: When flexibilities may be available
 - · Potential alternative: ACL expressed in terms of rate
 - Stocks that qualify for (h)(2) but lack data for Rate-based ACL



Background

- Challenges exist for data-limited fisheries
- Advances in data-limited assessment methods

- Extension of flexibilities in 50 CFR 600.310(h)(2) to data-limited stocks (2016)
- Subgroup 3



Data-Limited Assessment Methods: Progress

Advances in stock assessment methods for datalimited stocks are giving us new tools that:

- -more effectively use the data that are available
- -increase understanding of uncertainties



Alternative Approaches: NS 1 Guidelines (h)(2)

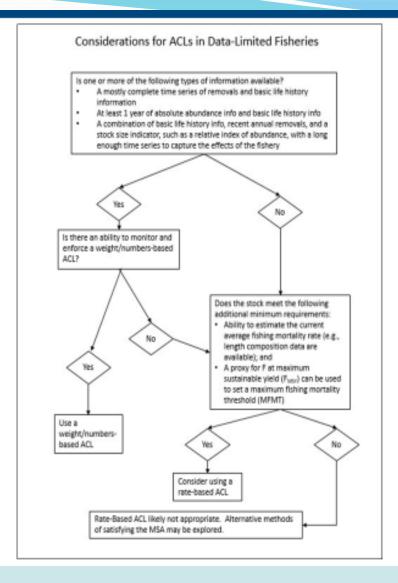
- "limited circumstances that may not fit the standard approaches to specification of reference points"
- "include, among other things, ...stocks for which <u>data are</u> <u>not available</u> either to set reference points... or to manage to reference points" (pursuant to standard approach)
- "Councils may propose alternative approaches for satisfying requirements of the Magnuson-Stevens Act"



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Overview

Start with what you can measure





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Potential Alternative: ACL expressed as rate

- Stock Assessment provides F and MFMT
- ABC and ACL can be derived using buffers just as under the standard approach for ACLs, but expressed in terms of F rather than weight or number



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Example: Establishing F_{ACL}

- MFMT = F_{MSY} proxy = F_{30%SPR}
- MFMT = F_{OFL}
- F_{OFL} x buffer (scientific uncertainty) = F_{ABC}
- F_{ABC} x buffer (management uncertainty) = F_{ACL}



Managing with Indicators: Example

If there are length data, consider whether SSC can correlate indicators to these rates, and management controls can be designed to maintain stock within indicator range.

Hypothetically, this could look like:

- Mean length indicator of 9.4 inches corresponding to F_{OFL} (obtained via length-based assessment)
- Mean length indicator of 10 inches corresponding to F_{ABC} (selected by SSC)
- Mean length indicator of 10.2 inches corresponding to F_{ACL} (selected by Council)
- Management options: size limits, time/area closures, gear modifications



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Stocks that Qualify for (h)(2) but lack rate data

- Must comply with MSA using best scientific information available
- Consider whether a data-collection program to support movement towards rate-based ACL would be appropriate
- Goal: progress towards use of Standard ACL approach



QUESTIONS ??