8th National Workshop of the Scientific Coordination Subcommittee

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SCS8 Workshop:

Applying ABC Control Rules in a Changing Environment



Hosted by New England Fishery Management Council in Boston, MA (August 26-28, 2024)

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Applying ABC Control Rules in a Changing Environment

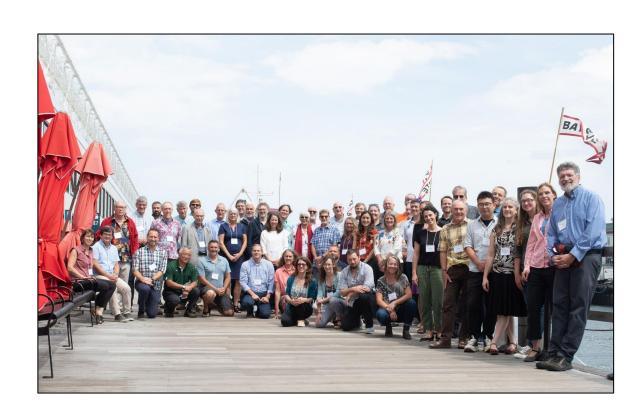
Goal: Provide <u>actionable guidance</u> on how to best support Councils in the management of fisheries, specifically the application of ABC control rules, in a changing environment.

Motivation: SSCs have been challenged in applying ABC control rules in a manner that reliably achieves management goals given the degree of ecosystem change and scientific uncertainty that Council regions are experiencing.



Participants

- Representatives from 8
 Fishery Management
 Councils SSC's and staff
- NOAA representatives
- Keynote speakers
- Facilitated by Urban Harbors Institute, UMass Boston



Meeting Opener

Janet Coit
Assistant Administrator
NOAA Fisheries





Topics We Covered

- Context setting: Current approaches to defining ABC control rules and challenges in their application
- **Sub-Theme I:** Advances in ecosystem science and assessment to inform ABC control rules in a dynamic environment
- Sub-Theme II: Application of social science to achieve management goals under dynamic conditions
- Sub-Theme III: Adaptation of reference points, control rules, and rebuilding plans to changing environment
- Closing: Synthesis, actionable outcomes, next steps

Context Setting

- Reviewed ABC control rules used across Councils:
 - Tiered control rules are used across most regions, some use of ramped control rules. Empirical approaches (index or catch) used in data-limited scenarios.
 - Some Councils have one (tiered) control rule for all stocks, others are FMP-specific.
 - Recent and ongoing revisions to ABC control rules underway by some Councils.
- Overviewed challenges and successes in applying ABC control rules.





CHALLENGES when applying ABC control rules in the context of ecosystem change



Are your Council's control rules evaluated? If yes, how?





SUCCESSES when applying ABC control rules in the context of ecosystem change





Challenges with ABC Control Rules

Challenges Recommendations · Funding and planning to address data limitations **Basic research Data Limitations** More mechanistic studies Integrate climate impacts Stock Assessment into assessment and **Analytical advances** Performance reference points **Performance ABC Control Rule** Simulation testing (MSE) Retrospective analyses evaluation **Performance** Regulatory actions required to allow future flexibility **Proactive actions System Rigidity** (phase-in, carryover)

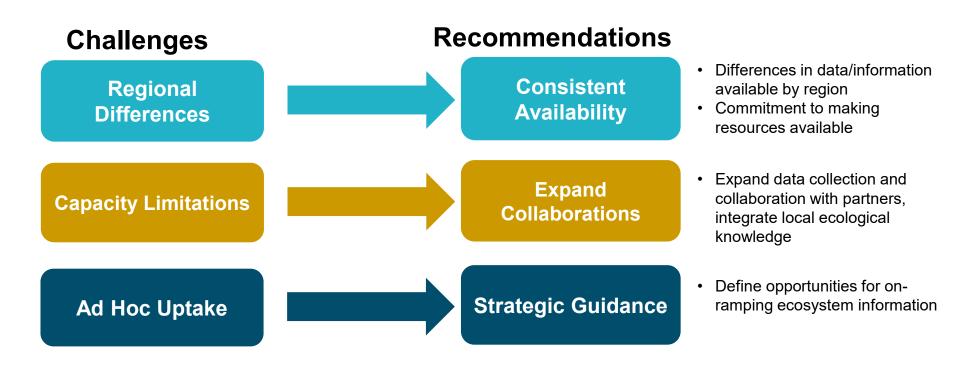
Build flexibility into FMPs.

1. Advances in Ecosystem Science and Assessment

- Initiatives and products
 - O Climate, Ecosystem, and Fisheries Initiative
 - O Ecosystem Status Reports
 - O Ecosystem and Socioeconomic Profiles
 - O Fisheries Ecosystem Plans
 - O Climate Chapter in SAFE Report
- Modeling platforms that can use ecosystem/climate info (e.g. WHAM, FIMs)
- Use of risk tables to characterizing ecosystem considerations



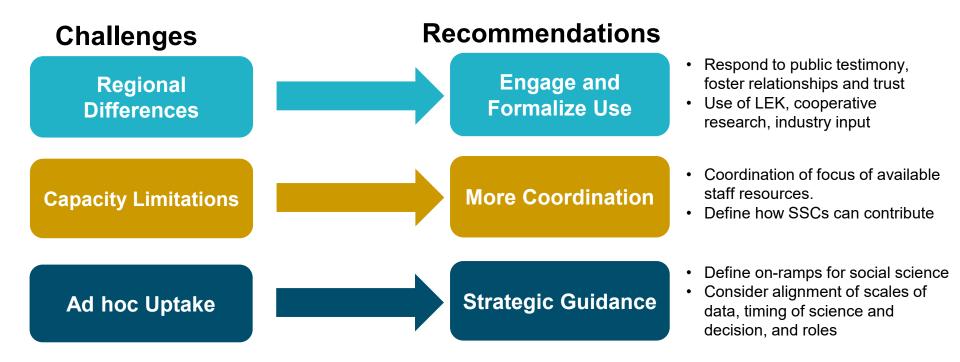
I. Advances in Ecosystem Science and Assessment



II. Use social science expertise and information in decision making

- Variation in the scope/flexibility for SSCs to use socioeconomic data
- Risk Policy and setting ABC by SSCs:
 - ABC setting focused on biological risk, ACL often set very close or equal to ABC, leaving little room for integration of socioeconomic impacts of decision making
 - Risk policies vary widely in integration of social science and economic metrics
 - With empirical assessments or when less quantitative biological data is available, SSCs utilize more socioeconomic information.
 - Risk policy and/or ABC control rules being revised, potentially to include socioeconomic data.
- More use of socioeconomic data in is setting ACL/TAC by Councils (e.g., SEEM process)
- Some SSC involved in reviewing economic models and impacts

II. Use social science expertise and information in decision making



III. Adapting reference points, control rules, and rebuilding plans to environmental change

- Examples of performance testing of Council control rules under climate change (e.g., Pacific sardine)
- Examples of integration of climate impacts into assessment (e.g., NCLIM)
- Examples of reference points being adjusted to account for changes in climate and ecosystems are emerging.
- Mechanisms and perceived rate of climate influence on stocks varies across regions.



III. Adapting reference points, control rules, and rebuilding plans to environmental change



SCS8 Goal: Provide Actionable Guidance

- Given **very real limitations** in data, capacity, our understanding of ecosystem change and fish and fishery impacts, and funding:
 - How can we do more with what we have right now?
 - What action can we take in our specific regions?
 - Are there national level policy changes that need to be made to enable these actions?

Development of Council Action Plans

 Plan for how each Council delegation would bring SCS8 recommendations home to continue the dialogue and take action on recommendations.

Framing of actions

- Audience/Scale
- Timeline/Priority
- Process
- Partners and resources
- Next Steps...



Examples of Council-specific Action Items

- Data-poor regions to explore alternative management frameworks and data collection schedules/methods to overcome existing barriers.
- Leverage existing expertise to consider alternative management pathways to integrate socioeconomic data into decision making.
- Build conceptual model of the management process and identify constraints that prevent changes to management in response to climate change.
- Develop working group of managers and scientists to focus on strategic guidance on changing reference points in response to ecosystem change.

NEFMC Action Items

Action Item 1: Develop a working group on reference points that spans management and science and supports goals to redefine reference points in a dynamic environment.

Audience: Council, GARFO, and NEFSC

Timeline: Long term vs short term (1-3 years)

Scale: Regional, within New England (or joint with Mid-Atlantic)

Prioritization: urgent (1-2 year)

Process: Council priority

Partners: Council to develop work group (e.g. SSC members, NEFSC, GARFO, etc.)

Resources Needed: Council staff to coordinate, funding for convening

Next Steps: Bring to new NEFMC IRA steering committee. Build a NEFMC focused group.

Follow-up

- Currently drafting SCS8 final report, final expected within 2024.
- SCS8 delegates presenting outcomes and draft region-specific action items to their own SSCs.
- Continued communication
 - Among SSC staff coordinators.
 - Informal webinar of SCS in early 2025 to share progress on action items.
- Some Councils planning for region-specific SSC workshops on this theme.
- After Council Executive Directors confirm host Council for SCS9 in 2026, SCS to develop proposed theme; could present to CCC in May 2025 for approval.

Field Trip: Red's Best





Acknowledgements

- SCS8 Steering Committee (26 SSC members, Council and NOAA staff)
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- Funding
 - NOAA Fisheries
 - NEFMC
 - All Regional Councils



