

NEFSC Program Review: Council and Commission Perspectives on Stock Assessments

**Woods Hole, MA
May 21, 2014**



Overview

- 3 Assessment Client Perspectives:
NEFMC, MAFMC, and ASMFC
 - Background on Each Client
 - Client Assessment Needs
 - Perspectives on TORS 3,5,7
- Overall Conclusions

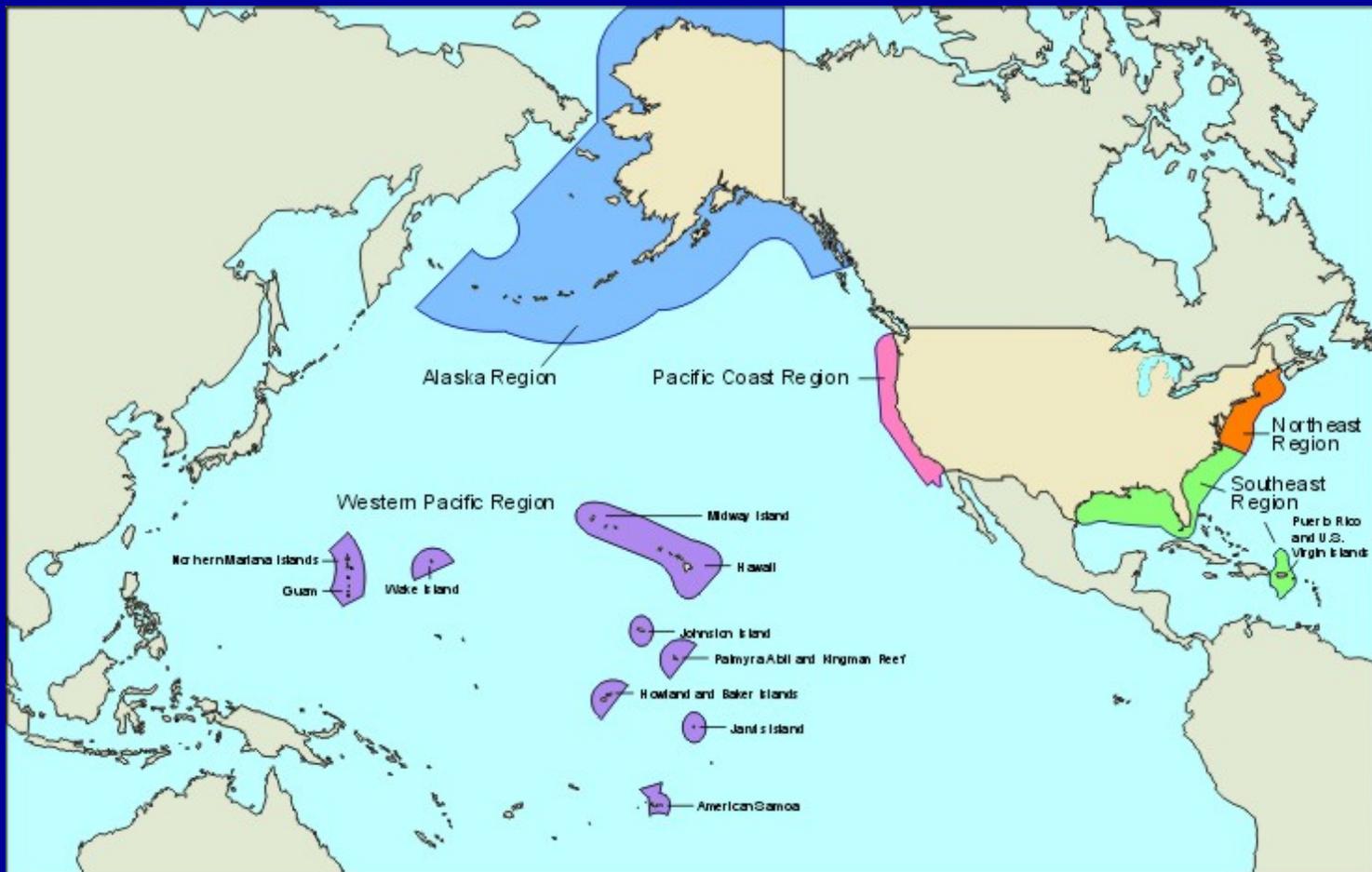


US Fisheries Management

- Department of the Interior
 - US Fish and Wildlife Service
 - Inland waters
- Fishery Commissions
 - State water management
- Department of Commerce
 - NOAA Fisheries
 - Marine Federal waters (>3mi)



1976, Magnuson-Stevens Act (MSA) created 8 Regional Fishery Management Councils. In the Northeast Region, both the New-England and Mid-Atlantic Council share a common NOAA Fisheries Regional Office and Science Center.



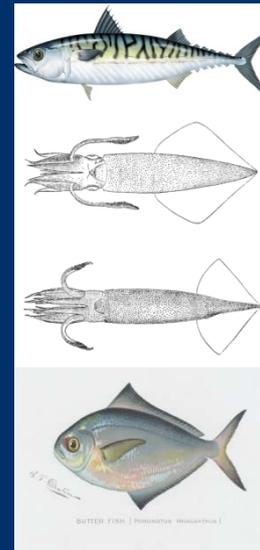
Mid-Atlantic Fishery Management Council (MAFMC)

- ❑ Largest of 8 Councils (est. 1976)
- ❑ Second smallest staff (technical)
- ❑ 21 voting members, 4 non-voting
- ❑ Comprised of state fisheries directors, governors appointees, NMFS, Coast Guard, US-FWS, ASMFC, State Dept.
- ❑ Reps. from New York – North Carolina
- ❑ Use industry advisors, scientific advisors
- ❑ Manage 13 species throughout range



Species Managed by FMP

- Summer flounder, scup, black sea bass
- Atlantic mackerel, 2 squids, butterfish
- Bluefish
- Surfclam and ocean quahog
- Tilefish
- Spiny dogfish (joint with New England Council)
- Monkfish (joint but New England Council is lead)



New England Fishery Management Council (NEFMC)

- ❑ 18 voting members, 4 non-voting
- ❑ Comprised of state fisheries directors, governors appointees, NMFS, Coast Guard, US-FWS, ASMFC, State Dept.
- ❑ Reps. from Maine - Connecticut
- ❑ Use industry advisors, scientific advisors
- ❑ Manage 29 species managed as 39 different stocks



29 Species Managed by FMP

- Northeast Multispecies: cod, haddock, pollock, redfish, witch flounder, plaice, white hake, ocean pout, winter flounder, yellowtail flounder, windowpane flounder, wolffish, halibut
- Atlantic sea scallops
- Monkfish (joint but New England Council is lead)
- Spiny dogfish (joint with MAFMC)
- Silver, red, and offshore hake
- Atlantic herring
- Red crab
- Winter, thorny, smooth, barndoor, little, clearnose, and rosette skates
- Atlantic salmon



Atlantic States Marine Fisheries Commission (ASMFC)

- ❑ Formed in 1942 – ASMFC Compact
- ❑ 15 Atlantic coast states, ME – FL
- ❑ 45 voting Commissioners
- ❑ NOAA Fisheries and USFWS vote
- ❑ 0 – 3 miles from shore
- ❑ Transboundary resources



ASMFC Management Background

- Unique management authority among interstate commissions
- Atlantic Coastal Fisheries Cooperative Management Act of 1993
- Federal pre-emption authority for noncompliance
- NOAA/USFWS assessment support



25 Species/Species Groups Managed by FMP

- 16 species managed solely by ASMFC
 - American Lobster
 - Atlantic Striped Bass, etc.
- 9 Species Managed in Cooperation with Councils/NOAA
 - Summer Flounder, Scup, Black Sea Bass, Bluefish w/MAFMC
 - Spiny Dogfish w/MAFMC and NEFMC
 - Winter Flounder, Atlantic Herring w/NEFMC
 - Coastal Sharks w/NOAA HMS
 - Spanish Mackerel w/SAFMC

Conduits for Public Input

- Councils and Commissions provide an integrated process for stakeholder engagement in State and Federal fisheries management
 - Require best available information on which to base fishery management recommendations
 - To manage sustainably, need to be responsive to changes in stock conditions



Managers need high quality information to manage fish populations and fisheries



- **Biological/Stock Assessments**
- **Habitat/Ecosystems**
- **Fishery**
- **Economic**
- **Social**

MAFMC, NEFMC, and ASMFC all compete for these data resources from the NEFSC

Stock Assessment Needs

- Stock assessment products:
 - Need to be result of a thorough scientific process
 - Need rigorous peer review to produce defensible results in the scientific and management forums
 - Clear and understandable technical documents/products
 - Provided in timely manner to support management
- Council and Commission typically need products anywhere from annually to every 5 years depending on stock

Terms of Reference - In Summary

- **TOR 3:** Is peer review process adequate?
Quality of peer review?
- **TOR 5:** Does NEFSC achieve adequate assessment accomplishments, particularly with number assessed? Quality? Quantity? Timeliness?
- **TOR 7:** Opportunities to improve stock assessments and the process?

Common Comments (All 3 Clients)

TOR - 3

- Yes. Generally adequate from perspective of providing best available information to manage fish stocks
- CIE followed by SSC review provides rigorous, defensible process



TOR-3: MAFMC

- Occasionally conflicts arise between SAW/SARC review and SSC
- Parts of assessments or SARC advice are rejected
- For example, SSC rejected the BRPs for ocean quahog in 2013
- However, SSC recommended new BRPS be developed during a new assessment (now scheduled for SAW/SARC 2016)

TOR-3: NEFMC

- Some concerns over the review of non-SARC products
- External reviewers are often unfamiliar with:
 - management system
 - legal requirements
- Can lead to misinterpreting data and assessment

TOR-3: NEFMC

- No defined standards to help determine when an assessment should be rejected (ASMFC commented on this also)
- Poorly performing catch projections for groundfish stocks
- No established method to implement acceptance of two model formulations (GOM cod, 2012)



TOR-3: ASMFC

- CIE may only have background for a subset of species being reviewed
- CIE reviewers not familiar with differences between ASMFC and councils



Common Comments (All 3 Clients)

TOR - 5

- Assessments are not provided frequently enough to meet management needs
- Insufficient capacity to provide adequate number of assessments for all 3 clients
- Too few staff to support assessment modeling and supporting research
 - Limits progress towards improving stock assessments between peer review
 - Insufficient capacity to resolve assessment problems

Common Comments (All 3 Clients)

TOR - 5

- Timing Issues:
 - Timing of reviews sometimes out of synch with client needs
 - Timing of data availability limits flexibility for scheduling reviews



TOR-5: MAFMC

- Quality of assessment products generally good
- Some data limited assessments pose ongoing challenges (ASMFC commented on this also)



TOR-5: MAFMC

- Most of data poor stocks are suffering from data collection (sampling) and research issues
- There is little time for this presently with the high demands from NEFMC, MAFMC, and ASMFC
- Timeliness? In general the Center tries to be responsive
- NRCC schedules assessments, but not enough slots to meet all client needs

TOR-5: NEFMC

- Data handling limitations appear to be bottlenecks to increasing capacity
- International commitments limit scheduling flexibility (e.g. TRAC, NAFO, ICES)



TOR-5: NEFMC

- Persistent troubling diagnostic errors in some assessments
- Limited review of the past performance of assessments
- Potential for inconsistencies between successive review panels



TOR-5: ASMFC

- Inadequate resources to collect data to address deficiencies.
- Potential over reliance on “Tool Box” for model selection
- Often many months for final reports to be published





TOR-5: ASMFC

- Total number of peer reviews produced has decreased over past 15 years
- CIE selections likely affect acceptance/rejection of assessment



Common Comments (All 3 Clients)

TOR - 7

- Improvements? Streamline/expedite the annual assessment update and data update process
- Better coordination with respect to timing of deliverables, to support SSC process
- Better coordination with SSC on needs in documents for their decision processes (with Councils)



TOR-7: MAFMC

- Reduce the demand for these products
- Increase the number of Center stock assessment analysts, or at least "number" crunchers to do data updates
- Has potential to free up more experienced analysts to do research and modeling innovations

TOR-7: MAFMC

- Improved internal/external communication
- Often deliverables are not received on time because:
 - Those involved are not clear on deliverable dates needed (Clients and Center both guilty of this)
 - The data request needs are delayed or not clearly communicated to the Center analysts (internal Center)

TOR-7: MAFMC

- SSC recommendations for research, further analysis, and data request are often not well communicated in summary reports
- Not enough opportunity for NEFSC analysts to interact with SSC members directly on stock assessment issues to collaborate and understand

- **TOR-7: NEFMC**

- Reduce the time necessary to prepare data
- Standardize assessment reports in an easily read format, as opposed to current TOR-based outline
- Explore use of other assessment scientists to increase capacity

- **TOR-7: NEFMC**

- Separation of peer review from SSC can lead to revisiting assessment debates at SSC
- Prioritize SSC requests for additional assessment outputs
- Need for more transparency for the public



TOR-7: ASMFC

- Explore balance of “academic” research and assessment “through put”
- Explore use of preliminary landings data
- Decrease time to produce deliverables
- Explore greater collaboration with ASMFC, State, and academic scientists to increase capacity



Conclusions Across Clients

- Not enough assessments/reviews to meet management needs
- Not enough time to advance assessment science (data collection and model innovations)
- Assessments are not always timed to meet management cycle

Questions?

