

Assessment and Management Procedures

MRFSS/MRIP Workshop

TOR 3

- Recommend a plan for implementing the calibration methodology into updated and benchmark stock assessments.

It depends....

- Implementation plan may depend on the calibration methodology –
 - if the group recommended no calibration, then no need for implementation
 - assessment and review requirements can vary based on data and methodology changes

SEDAR Assessment Process

- 3 Assessment Types
 - Benchmark
 - open to any new data and methods
 - Comprehensive 3 workshop process; 15 mos
 - Standard
 - limited new data and methods
 - Single workshop; 6 mos
 - Update
 - no new data or methods. Only new points
 - No workshop. 3 mos
- Administered through SAFMC: Council Process

SEDAR Oversight and Planning: SEDAR Steering Committee

- SEFSC, SERO, SAFMC, GMFMC, CFMC, ASMFC, GSMFC, HMS
- establishes process
- establishes assessment schedule
 - 5-year planning horizon
 - Schedule fixed 18m in advance. 2012/13 done
 - Subject to last minute changes
 - Council and SSC input: Priorities
 - Fall 2012: final schedule for 2014

SAW/SARC Assessment Process

- Assessment Types
 - Benchmark
 - Open to new data and methods
 - Comprehensive process: SAW prepares assessments, SARC reviews
 - Update
 - Incorporate new points
 - less external review
 - Several regional assessments (TRAC, GARM)
 - Operational Assessments: Pending
 - Similar to Updates.
 - Rapid, high production
- Administered through NEFSC: NMFS Process

SAW/SARC Oversight and Planning: Northeast Region Coordinating Committee

- NEFSC, NEFMC, MAFMC, ASMFC, NERO
- Establishes Process
- Establishes Schedule
 - 2-3 year planning horizon
 - subject to short term changes

Management Considerations

- Regulatory process follows assessment
 - adds time
- Options to address changes
 - FMP Amendments
 - Framework
 - Regulatory Amendments
 - Specification Packages
- Culminate in NMFS rule making process
- Also may trigger state rule making

Management Timing (MAFMC Example)

- Evaluate and select alternatives: 3 mos +
- Develop a specifications package: weeks to months
- NMFS review to implementation: 5 to 7 mos if EA, more if EIS
- More time for more involved actions (amendments or regulatory amendments)

Process

- Each region has a process to prioritize assessments
- Assessment programs have flexibility to address revised values through several assessment types
- Nature of calibrations and deviation from published data may determine assessment type

Constraints

- Time and Manpower
 - analysts, data managers, reviewers, SSC
- Existing assessment plans and priorities
 - overfished and overfishing stocks
 - rebuilding plans reaching milestones
 - aging assessments
 - unassessed stocks, especially with developing fisheries or major ABC-ACL impacts

Consideration & Discussion

- How should SEDAR or SAW/SARC prioritize stocks when considering revised information?
- How to balance expected demand for revised assessments, based on perception of impacts, against existing priorities?
- Consider a pause in benchmark activities to conduct multiple updates?

Prioritization

- High Proportion of Rec Catch
- Systematic Bias Exists
- Upcoming scheduled assessments
- General Importance (Value \$)
- Overfished
- Council preferences may be needed
 - Create process to get input from managers
 - Science focuses on getting relevant info to Councils
 - Creation of a list that would identify stocks that from a science point of view may be more impacted
 - Management pressure may do this for you.

Prioritization (cont)

- Species for which management actions are highly dependent on Rec catch estimates

Homework

- Who calculates ratio adjustments for data that have not been officially re-estimated and for new data (until an assessment uses new data)
- Case by case basis
 - OK for this year but starting in 2013 need ratios for everything with ACLs
 - Major strategic resource planning issue
 - Coordination will be essential to avoid chaos
 - Ad Hoc Working Group Needed
 - May need to be done again in a year or two with upcoming changes to intercept and effort surveys.

Homework

- Who is responsible for creating methods for calibration?
- Can Centers and Commission develop lists of species that are likely problematic now?
 - Probably yes and may be only a handful of species.
 - Should include a common statistic (s) RE: the magnitude of change.
 - Correlation, magnitude of difference, Rec's fraction of total catch, magnitude of discards (J. Walter's metrics)

Homework (cont)

- Metrics
 - Rec's fraction of total catch (tricky for rarer species)
 - Magnitude of discards b_2/AB_1
 - Correlation MRFSS to MRIP
 - Randomization Test
 - Magnitude of difference (deviance metric - % error)
 - Sum of Square Error
 - Sum of Error
 - Deviance relative to CIs – parametric statistics
 - How often was MRFSS outside of the MRIP CIs
 - Threshold for occurrences that raise a red flag
 - Absolute level of landings

Homework (cont)

- Metrics
 - Importance of most recent year
 - What ratios are used (backcast and forward)
 - Should metrics be applied separately for retained catch and discards?
 - Need to determine if catch at age is affected by re-estimation
 - Task metric finalization to workgroup
 - Certain metrics may cause lots of species to drop out as priorities.

Homework (cont)

- Staff involved in developing CPUE indices need to examine impact on CPUEs from re-weighting
 - Medium-term to do list
- Working Group Representation
 - Centers (2) & S&T (1) & Commissions (2)
 - Provide names by COB Friday April 6th.
 - TOR
 - Tech info on prioritization for incorporating new #s
 - Tech approach to hind-casts and forecasts

Homework (cont)

- TOR
 - Tech info on prioritization for incorporating new #s
 - May 1 for Prioritization
 - How to Implement hind-casts and forecasts (ratios) (inc. April 30 for Prioritization variance inflation)
 - May 1 (July assessments impending)

Cleanup Topics

- Treatment of historical intercept records
 - Ones that were design based vs ones that were not
- Imputation of Weights needs clarification
- Should we be using numbers instead of weight for monitoring.

- Will be followed up with S&T after meeting.