



**NOAA
FISHERIES**

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Findings of the Expert Review Panel for the Project Report “Commercial and Recreational Allocation for Summer Flounder”

Mid-Atlantic Fisheries Management Council

December 12, 2016

Peer Review Panelists – 11/18/2016

- MAFMC SSC Members
 - Dr. Lee Anderson (University of DE, Retired)
 - Dr. Mark Holliday (NMFS, Office of Policy, Retired)
 - Dr. Doug Lipton (NMFS, Chief Economist)
 - Dr. David Tomberlin (NMFS, Science & Technology)
- External Expert
 - Dr. Jorge Holzer (University of Maryland)
- Moderator
 - Dr. Eric Thunberg (NMFS, NEFSC)
- Staff
 - ASMFC – Kirby Roots-Murdy
 - MAFMC – Kiley Dancy

TOR #1

- Were the theoretical and statistical model specifications for the recreational valuation module done in a manner consistent with professional standards?
 - Are the statistical methods themselves compliant with theory?
 - Are the statistical methods appropriate for the problem being addressed?
 - How appropriate were the data used in the analysis? Are the data sufficient to estimate the model? Do missing data pose a risk of biasing the parameter estimates or the model results? Are appropriate reasons listed for not including specific data sets? What proxy data are used and was it the most appropriate data to use?
 - Were alternative model specifications investigated and tested? Were assumptions underlying the statistical analysis of the models clearly stated?

Response Summary: Yes, RUM model is professional standard estimated with MRIP data. No economic add-on survey available limited approach, but accounted for in analysis. Continuously changing regulatory and biophysical environment is challenging.

TOR #2

- Were the theoretical and statistical model specifications for the commercial module done in a manner consistent with professional standards?.....

Response Summary: Mostly yes, but want revised Random Utility Model to conform to theory in terms of marginal utility of revenue being the same for all species. Since the model is for prediction of fishing site choice based on observations, results will probably not change significantly.

TOR #3

- **TOR 3: Was the link between the commercial module and recreational module done in a manner consistent with professional standards?**

Yes. Models were developed with this linkage in mind. Panel comments mostly to make sure similar level of transparency and documentation.

TOR #4

- TOR 4: Were the results of the analysis (synthesis of the two modules) clearly interpreted? Can the model be used to map out a benefit curve given changes in allocation across commercial and recreational fisheries and can the results be used for management purposes? Can the model be used to consider allocation alternatives that were not specifically analyzed? Is it possible to make modifications to the current model that would allow for the measurement of benefits (both total and marginal) in situations where allocations are not binding?

Yes to all the above. Model is considered best available science and can be used for management purposes. Some discussion of “sorting” issue.

TOR #5

- TOR 5: Can this model be used to assess allocation in other fisheries? Could future models be run by other individuals without major modifications (e.g., Council and/or ASMFC staff)? Can the model be easily updated to support new MRIP estimates?

Model is not turnkey. Summer flounder is relatively data rich compared to many species, particular in regard to recreational targeting and encounters. Approach is complex and computer resource intensive. Updating for MRIP with appropriate modifications is feasible.

Thoughts on Future Allocation Review Process (Lipton only)

- Allocation Decisions Can Have Large Consequences
- Commercial and Recreational Allocation Models Are As Complex As Benchmark Stock Assessments
 - Analysts make many choices
 - Model approach
 - Data to use in estimation
 - How simulations are run
- Suggest SAW/SARC Like Process
 - Analysts present initial ideas/choices
 - Workshop to consensus approach
 - Peer Review