

Preliminary Response to Recommendations Provided by Peer Reviewers of the FES/CHTS Calibration Model Proposed by MRIP

Recommendations for the Calibration Model

The Marine Recreational Information Program (MRIP) Team developed a protocol for additional work and analyses aimed at evaluating the performance and robustness of the peer reviewed Coastal Household Telephone Survey (CHTS)/Fishing Effort Survey (FES) calibration model when the third year of benchmarking data became available in mid-April of 2018. This protocol was vetted by the MRIP Transition Team's Atlantic and Gulf Subgroup (Transition Team Subgroup) to ensure open communication with all partners. The protocol includes the following:

1. The MRIP Team will re-evaluate the possible effects of different covariates upon inclusion of the third year of side-by-side FES and CHTS data into the calibration model. In addition, the Team will look at the possible significant effects of additional covariates and make sure to consider those suggested by the reviewers.
2. Upon inclusion of the third year of benchmarking data, the MRIP Team will conduct further analyses to evaluate the performance of the calibration model and the relative stability of its statistical outputs. These analyses will be based on model development with and without the third year of data.
3. The MRIP Team will revisit the potential suitability of alternative modeling approaches upon inclusion of the third year of benchmarking data and will document the advantages and disadvantages of considered alternatives relative to the preferred approach in the final report describing the calibration model.

One reviewer recommended extending the benchmarking period for the FES and the CHTS beyond three years. The MRIP Team understands the potential benefits of extending the benchmarking period, but NOAA Fisheries decided not to continue the CHTS beyond 2017. We did not feel we could justify continuing to fund and conduct the CHTS as a survey of fishing effort given its apparent reporting errors and its continuously declining coverage and response rates.

Recommendations for the Calibration Model Report

The MRIP Team will revise the report on the calibration model after inclusion of the third year of benchmarking data and the planned conduct of further analyses to evaluate its performance. At that time, more information will be provided on vetting alternative modeling approaches, the details of estimated results, and the effects of potential explanatory covariates. The final report on the model will be completed and available to the public in July 2018.

Recommendations for Communications

MRIP understands the importance of developing appropriate proactive communication approaches to explain the rationale for transitioning from the CHTS to the new FES, developing a calibration model for converting past CHTS estimates into FES equivalents, and using the calibrated effort and catch statistics in future stock assessments and fisheries management. MRIP also recognizes it will be important to share what we have learned from our ongoing research about the possible causes of the large differences between FES and CHTS estimates of private boat and shore fishing effort, as well as why we have more confidence in the FES estimates. The MRIP Communications and Education Team (CET) developed a strategic communications plan aimed at a wide variety of audiences with different levels of statistical expertise. The CET has been vetting that strategy with the Subgroup and working collaboratively with them to effectively execute it.

Through engagement and two-way dialogue, the MRIP Team and members of the Transition Team Subgroup have been educating and informing internal and external partners on the transition process through updates presented at council and interstate commission meetings, as well as other fishery management and scientific forums. The Team has also been providing information through the MRIP website and NOAA Fisheries newscasts. These efforts will continue. Also through engagement and two-way dialogue, the MRIP Team will educate and inform stakeholders, including Congress, anglers, and eNGOs to secure support of the FES and its effects on fisheries management.

Recommendations for Future Peer Reviews

The MRIP Team incorporated many of the reviewers' recommendations for improving future peer reviews in its planning for the March 2018 workshop to peer review the proposed Access Point Angler Intercept Survey design-change calibration model. In particular, The Team took the following actions:

1. We shared the Terms of Reference (ToR) collaboratively developed by the members of the MRIP Team and Transition Team Subgroup with all presenters and peer reviewers at least one month prior to the planned workshop.
2. We asked the authors of the report on the proposed calibration model to specifically address the ToR in their report.
3. We asked all presenters who provided background information and/or potential impacts of the planned calibration to address the ToR in their workshop presentations.
4. Prior to the workshop, we convened a meeting of the collaborators involved in the development of the calibration model, the authors of the calibration model report, and all of the invited presenters to coordinate how they would address the ToR at the workshop.
5. We provided the reviewers with access to all pertinent background material three weeks prior to the workshop. Pertinent materials included reports on APAIS pilot studies, the new weighted estimation method for the APAIS, and the new sampling design. In addition, we provided access to all previous peer reviews of the new APAIS methods, including what was provided in the 2017 National Academies review of MRIP.

6. We asked the authors of the report on the proposed statistical approach to complete it at least two weeks prior to the workshop, so we could provide it to the reviewers at that time. In the report, we asked the authors to explain how the models proposed in the 2014 Southeast Data Assessment and Review (SEDAR)/MRIP workshop were evaluated and provide the rationale for selecting the proposed method as the best to account for any changes in APAIS estimates caused by the change to an improved sampling design.
7. We asked the authors to provide a webinar explaining the proposed approach to the members of the Transition Team Subgroup two weeks prior to the workshop, and we made a recording of that webinar available to the peer reviewers prior to the workshop.
8. We asked the authors of the report on the proposed statistical approach to take into account varying levels of statistical expertise among the reviewers of the report to be sure that their description of the technical approach is easily understood by both statisticians and non-statisticians.

One reviewer recommended approaching future statistical reviews more like a stock assessment review process with reviewers having access to models and data, so they can contribute in a give and take process for understanding the method. The MRIP Team recognizes that this recommended approach would be useful for at least some future statistical reviews but decided not to use this approach for the peer review of the APAIS design-change calibration model in March 2018. This was largely because a collaborative process was used in 2014 to propose and begin evaluation of three alternative approaches for the APAIS calibration in the MRIP/SEDAR calibration workshop. The March peer review assessed MRIP's final evaluation of those approaches along with its justification for a new preferred method to account for the APAIS design change.