

PRELIMINARY WORKING DRAFT

Senate language:

“The agreement includes \$2,000,000, from within the funding provided to support State management of red snapper, for NMFS to contract with a non-governmental entity with expertise in statistics and fisheries-dependent data collection to provide the following: (1) an independent assessment of the accuracy and precision of both the Federal and State recreational catch data programs in the Gulf of Mexico; (2) recommended improvements to be made to the Federal and State recreational catch data programs in the Gulf of Mexico to improve accuracy and precision; and (3) an independent assessment, based on the results of the two prior items, of how best to calibrate the Federal and State recreational catch data programs in the Gulf of Mexico to a common currency.”

Part I: Survey Evaluation

Request the CIE (or the Survey Research Methods Section of ASA, or another independent provider of expert reviewers) to empanel a group of 3 to 5 survey methodology experts (not necessarily fisheries survey experts) who have no history of involvement with NOAA’s MRIP program, the Gulf States’ marine fisheries programs, or with Gulf of Mexico fisheries research or management. Panelists’ qualifications should include expertise in survey methodology, sampling design, estimation, non-sampling errors, modeling, and calibration.

Statement of Task:

- Primary scope of task: Determine the relative strength and weakness of each current survey in providing the components of catch rates, effort and catch of red snapper in Gulf of Mexico private boat mode fisheries.
- Review available documentation of survey design and estimation methodology for the following surveys:
 - NOAA MRIP Fishing Effort Survey (FES) and Access Point Angler Intercept Survey (APAIS);
 - Florida Gulf Reef Fish Survey;
 - Alabama Snapper Check Survey;
 - Mississippi Tails ‘n Scales Survey;
 - Louisiana LA Creel Survey;
 - Texas Parks and Wildlife Coastal Creel Survey.
- Review available independent review reports for the surveys, including NOAA MRIP Certification files.
 - Review the alignment of estimation methods and survey designs as implemented
- Review completed and ongoing studies of the performance of the surveys, including studies related to sources of non-sampling error.

- Include an evaluation of the status of implementation of the surveys, and whether survey design requirements and required assumptions are being met.
- Identify, assess, and characterize known and potential sources of non-sampling error for each survey, including characterization of the probability and relative magnitude of such errors.
- Recommend actions to address non-sampling error for each survey, including:
 - Studies to be carried out to better understand the sources and magnitude of non-sampling error;
 - Survey design, sampling, and estimation modifications that could reduce the magnitude of error.
- Examine, compare, and characterize the precision of private boat mode red snapper catch estimates for each survey. Assess the accuracy of the surveys' estimates of precision. Identify and describe sources of error and uncertainty of the precision estimates.
- Recommend improvements in survey design and estimation procedures that would reduce variance of estimates and improve the accuracy of the estimates of precision for each survey.
- Determine whether each survey can provide the components of catch and effort estimates that are necessary to achieve agency mandates for fishery stock assessments and fishery management functions for the federally-managed Gulf of Mexico red snapper fisheries, and note relative strengths and weaknesses of each survey in meeting such requirements. (Note: Study Sponsor will provide guidance on the required components.)

Part II: Calibration Methodologies

With the same or a new panel, review available information related to the calibration of Gulf of Mexico red snapper catch estimates for the surveys reviewed in Part I.

Statement of Task:

- For reference, consider information provided by the Sponsor including NOAA workshop reports, associated methodology descriptions, the July 2019 “White Paper” on Recommended Use of the Current Gulf of Mexico Surveys of Marine Recreational Fishing in Stock Assessments, and NOAA calibration reports for calibration of the:
 - NOAA MRIP APAIS pre-2012 to post-2012 survey designs;
 - NOAA MRIP Coastal Household Telephone Survey (CHTS) to FES;
 - NOAA MRIP CHTS-based calibrated time series to each state survey;
 - NOAA MRIP FES-based calibrated time series to each state survey.
- Recommend preferred short and long term calibration methods to be applied to enable use of properly calibrated state catch estimates time series.

- Recommend alternate or modified calibration methodologies from those previously identified and reviewed.

Format of Report: Preferred format is a consensus report including the above-listed components and an executive summary that identifies the principal conclusions and recommendations and summary statement of rationale. If consensus is not possible, a majority and minority report each with the same components is acceptable.