Calibration of state survey data is necessary to prevent overfishing. State surveys are meant to supplement and enhance, rather than replace MRIP.



Without calibration, the private angling component of red snapper landings threatens to trigger an overfishing status for the stock that will impact all sectors.

Calibration is a fundamental component of making data from state surveys applicable for in-season management and for their incorporation into stock assessments. While the state surveys represent methods to supplement the general Marine Recreational Information Program (MRIP) survey, they do not serve as a direct replacement for MRIP. As modelling has shown¹ and as has been confirmed by NMFS,² without calibrating state survey data, the private angling sector is set up to exceed its annual catch limit (ACL) by over 1.2 million pounds. If all sectors landed 100% of their respective ACLs, the calibrated landings would exceed the overfishing limit (OFL) by up almost 1 million pounds. This is a direct violation of the MSA prohibition on overfishing.³

Despite underages by other sectors, overages

from lack of calibration are still high enough



Calibration of 2020 landings show private angler landings are set up to trigger an overfishing status.

Private angler landings from each state were

not calibrated. When calibrated, landings

Figure 1: The calibrated landings for states are based on the calibration ratios passed by the SSC on August 11, 2020.

Though the state surveys have been certified by MRIP, certification is not the same as calibration.

MRIP certification of a state survey does not presume landings estimates produced represent the best scientific information available (BSIA) or imply that they are suitable for in-season management. Rather, certification indicates a data collection program meets a certain level of statistical rigor and that it qualifies for technical and financial support from NOAA Fisheries. After that, calibration is the process that accounts for differences between surveys and standardizes the estimates to a common currency, such as to a historical time series from MRIP.

<u>June-2020.pdf</u> Page 49. ³ 16 U.S.C. §§ 1851(a)(1), 1852(h)(6), 1853(a)(15).

¹ Alternative projections for red snapper in the Gulf of Mexico when constrained by recreational landings measured using state-specific landings estimates. Available at: <u>https://oceanconservancy.org/wp-content/uploads/2020/06/RedSnapperAssessmentModel_Report_FINAL.pdf</u>

² Gulf of Mexico Fishery Management Council. Reef Fish Management Committee. June 16,2020. Available at: <u>https://gulfcouncil.org/wp-content/uploads/GMFMC-Reef-Fish-</u>

NOAA Fisheries Definitions



"CERTIFIED survey designs and estimation methods meet a shared set of standards and undergo independent peer review" and means "a survey design or estimation method is eligible to receive technical and/or financial support from NOAA Fisheries for implementation and ongoing improvement."⁴

7



"CALIBRATION accounts for the sources of variation and bias that may be contributing to consistent differences between old and new survey estimates. It can be used to convert historical estimates to the "currency" of the new survey design."

Because the state surveys vary, they must be calibrated to a single standard.

The table below highlights the differences in methodology among the state survey programs. Because each state's survey is tailored to the needs of each state and its anglers, the surveys and the estimates they produce are not directly comparable. Using what scientists know about the differences among survey collection methods as shown in the table below,⁵ calibrations can be created to make the landings estimates among the surveys comparable to a standard unit of reporting, or a common currency.

Survey	Туре	Species	Harvest	Releases	Mode*	Coverage	State Coverage
MRIP (APAIS/FES)	General	All	Yes	Yes	PR, PC, SH	12 Months	AL, FL, MS, LAª
Louisiana LA Creel	General	All	Yes	Yes	PR, PC, SH	12 Months	LA
Florida State Reef Fish Survey	Supplemental	Reef Fish ^b	Yes	Yes	PR	12 Months	FL
Alabama Snapper Check	Supplemental	Red Snapper	Yes	Yes ^c	PR, PC	Season	AL
Mississippi Tails n' Scales	Supplemental	Red Snapper	Yes	Yes ^c	PR, PC	Season	MS
Texas Parks and Wildlife	General	All	Yes	No	PR, PC	12 Months	ТХ

^a MRIP coverage in LA was 1981-2013, 2015.

* PR=Private Recreational | PC=Private Charter | SH=Shore

^b Limited suite of species.
^c Limited to trips that targeted red snapper.

⁴ Available at: https://www.fisheries.noaa.gov/recreational-fishing-data/recreational-fishing-survey-design-certification Accessed July 10, 2020.

⁵ Table modified based on reported table on Page 5. *Red Snapper Workshop IV Report*. NOAA Fisheries, Office of Science and Technology/Gulf States Marine Fisheries Commission. New Orleans, LA. September 12-13, 2018.

Supplemental surveys are not a replacement for MRIP, but can enhance the data available as they are integrated into stock assessments and management.

Supplemental state survey programs were designed to complement MRIP and address the unique needs of each state. The data from state supplemental surveys are not intended as a replacement to MRIP, but instead to calibrate and integrate with the MRIP general survey. Without a calibration, the landings from state surveys stand alone and cannot be integrated to assess to stock population as a whole.⁶ The supplemental state survey modules, when calibrated with MRIP, can enhance the data available for in-season management and stock assessments, which can ultimately lead to better management of the stock.



⁶ NOAA Fisheries Recommends Source of Recreational Catch Statistics for Assessing Gulf Reef Fish Stocks <u>https://www.fisheries.noaa.gov/feature-story/noaa-fisheries-recommends-source-recreational-catch-statistics-assessing-gulf-reef</u> Published August 7, 2019 Accessed December 12, 2019.