



UNITED STATES DEPARTMENT OF COMMERCE
National Oceanic and Atmospheric Administration
NATIONAL MARINE FISHERIES SERVICE
Southeast Regional Office
263 13th Avenue South
St. Petersburg, Florida 33701-5505
<https://www.fisheries.noaa.gov/region/southeast>

MEMORANDUM FOR: Clay E. Porch, Ph.D.
Director, Southeast Fisheries Science Center (SEFSC)

FROM: Andrew J. Strelcheck
Regional Administrator

SUBJECT: Request for Information to Support Reinitiation of Endangered Species Act (ESA) Section 7 Consultation of the Southeast U.S. Shrimp Fisheries in Federal Waters under the Magnuson-Stevens Fishery Management and Conservation Act (Magnuson-Stevens Act)

I request data and analyses to support the reinitiation of ESA Section 7 consultation on the Southeast U.S. shrimp fisheries in federal waters under the Magnuson-Stevens Act to address bycatch of giant manta ray and smalltooth sawfish and compliance with the terms and conditions of the 2021 biological opinion's incidental take statement.

On April 26, 2021, the Southeast Regional Office (SERO) completed a biological opinion on the effects of the implementation of the sea turtle conservation regulations applicable to shrimp trawling and the authorization of southeast U.S. shrimp fisheries in federal waters on threatened and endangered species and designated critical habitat, in accordance with Section 7 of the ESA. The biological opinion was the result of an intra-agency consultation; SERO was both the action agency under our authorities to conserve sea turtles under the ESA and to manage federal shrimp fishing under the Magnuson-Stevens Act (16 U.S.C. §1801 et seq.) and the consulting agency.

On June 2, 2023, SERO's Sustainable Fisheries Division (SFD) (serving as the action agency) requested the Protected Resources Division (PRD) (serving as the consulting agency) reinitiate the subject consultation. Regulations at 50 C.F.R. § 402.16 require reinitiation of formal Section 7 consultation under the ESA if discretionary involvement or control over the action has been retained (or is authorized by law) and: (1) the amount or extent of the incidental take is exceeded; (2) new information reveals effects of the agency action that may affect listed species or critical habitat in a manner or to an extent not previously considered; (3) the agency action is subsequently modified in a manner that causes an effect to the listed species or critical habitat that was not previously considered; or (4) if a new species is listed or critical habitat designated that may be affected by the identified action. The subject fisheries have exceeded the anticipated incidental takes of giant manta ray (i.e., trigger #1) and SERO has received new smalltooth sawfish and giant manta ray bycatch information, which may trigger #2. In their reinitiation request, SFD summarized the last biological opinion on the subject action, documented why reinitiation is required, and outlined how SFD and PRD would need to work together to prepare a complete reinitiation package.

Data and analyses are needed to support the reinitiation. Specifically, we request the following:

- 1) Updated bycatch estimates for giant manta ray and smalltooth sawfish.
 - a. Previous bycatch estimates for these species considered data through 2019; please update estimates through 2022. Estimates will also be needed for 2023, when available.



- b. To the extent practicable, please generate model-based and design-based estimates of total annual bycatch in conjunction with the best currently available shrimp effort estimates, using BycatchEstimator (<https://ebabcock.github.io/BycatchEstimator/>) or similar approaches to consider the appropriate underlying statistical distribution for zero-inflated data and characterize uncertainty in resultant estimates.
 - c. To the extent practicable, please consider the underlying distribution of the species in the generation of bycatch estimates.
 - d. To the extent practicable, please generate spatiotemporally-explicit bycatch estimates to allow for the identification of seasons and/or areas with the greatest bycatch risk.
- 2) To the extent practicable, please provide a population viability analysis (PVA) for giant manta ray within the Western North Atlantic Ocean off the United States (e.g., Farmer et al. 2022), evaluating the population’s ability to recover in the context of ongoing bycatch as estimated in #1, above, and considering uncertainty in initial population size, reproductive periodicity, bycatch mortality, and other key parameters.
- 3) To the extent practicable, please assess the precision of the current sawfish bycatch estimate to potential future scenarios of increased observer effort. For example, how would increased levels (i.e., 1.1x, 1.25x, 1.5x, 2x, 5x, etc.) of observer effort reduce uncertainty (e.g., coefficient of variation) of sawfish bycatch estimates in the fishery?

Furthermore, the April 26, 2021, biological opinion on the shrimp fisheries requires new bycatch estimates to be completed for affected species within five years of the issuance of the opinion. Specifically, the terms and conditions of the opinion state the “SEFSC must provide an update on bycatch estimates for these species within 5 years of the issuance of this Opinion; new bycatch estimates for all affected species will be required by or before the end of that time.” The previous sea turtle bycatch estimates data were based primarily on bycatch data through 2015. Therefore, I also request the SEFSC formally initiate bycatch estimation for affected sea turtle species, for 2016-2020, consistent with the Bayesian model approach as documented in Babcock et al. (2018), which was employed in the April 26, 2021, biological opinion.

I request the SEFSC provide items #1 and #3 on or before May 3, 2024, and #2 on or before May 31, 2024, both using data through 2022. Also, please provide the required sea turtle bycatch estimates, along with the 2023 updates for #1 and #3 on or before October 1, 2024.

Please contact Jennifer Lee by e-mail at Jennifer.Lee@noaa.gov if you have any questions about the substance of this request or the requested response deadlines.

cc: SEFSC: Lisa Desfosse, John Walter, Braydon Mikesell, Larry Massey
 F/SER: Kim Amendola, Heather Blough, Richard Fickley
 F/SER2: Jack McGovern, Frank Helies
 F/SER31: Dennis Klemm, Michael Barnette, Jennifer Lee, Nick Farmer, Calusa Horn, Adam Brame