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F/SER25:FH

MEMORANDUM FOR: David Bernhart
Assistant Regional Administrator
Protected Resources Division

THROUGH: Andrew J. Strelcheck
Regional Administrator

FROM: John C. McGovern, Ph.D.
Assistant Regional Administrator
Sustainable Fisheries Division

SUBJECT: Request for Reinitiation of Endangered Species Act (ESA) Section 7 Consultation on the Authorization of the Southeast U.S. Shrimp Fisheries in Federal Waters under the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act) to Address Unanticipated Giant Manta Ray Mortalities in Shrimp Trawls and to Consider New Information on both Giant Manta Rays and Smalltooth Sawfish

I request reinitiation of Section 7 consultation on the subject action. I have determined that at least one of the four conditions requiring reinitiation of formal consultation specified at 50 C.F.R. § 402.16 has been met. In this memorandum, I summarize the last biological opinion on the subject action, document why reinitiation is required, and outline how our staff will work together to prepare a complete reinitiation package, including the steps involved and timing.

On April 26, 2021, the National Marine Fisheries Service Southeast Regional Office (SERO) issued a new biological opinion (i.e., the 2021 Shrimp Opinion) on the implementation of the sea turtle conservation regulations under the ESA and the authorization of the southeast U.S. shrimp fisheries in federal waters under the Magnuson-Stevens Act (i.e., the proposed action). SERO determined the proposed action is not likely to jeopardize the continued existence of Kemp's ridley, green North Atlantic and South Atlantic Distinct Population Segments (DPSs), loggerhead (Northwest Atlantic DPS), leatherback, and hawksbill sea turtles, as well as Atlantic sturgeon (all 5 DPSs), Gulf of Mexico (Gulf) sturgeon, giant manta ray, and smalltooth sawfish (U.S. DPS). An incidental take statement (ITS) was issued specifying the amount of anticipated incidental take for these species, including the non-lethal take of 16,780 giant manta rays over 10 years (averaging 1,678 giant manta rays per year) in shrimp trawls. No giant manta ray mortalities were anticipated because there were no records of lethal interactions at that time. The take estimate for giant manta ray was highly uncertain, being based on only one year of data and 12 interactions documented during that time (Carlson 2020).



Section 7 consultation is required for any federal action that may affect ESA-listed species or designated critical habitat (50 C.F.R. § 402.14). 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.

Between March 30 and April 2, 2023, an observer aboard a shrimp trawler fishing in federal waters off Louisiana documented four captures of giant manta rays during the same trip, including two mortalities, one unknown disposition, and one released alive. Your staff received this information from the Southeast Fisheries Science Center (SEFSC) Observer Program and shared it with me and my staff. Review of this and additional recent observer data indicate that while multiple captures during a trip or multiple captures in a day are not uncommon, this is the first time an observer had documented multiple mortalities during a single trip. However, there were two additional lethal giant manta ray takes observed in shrimp trawls since the 2021 Shrimp Opinion was signed in April (i.e. one in June 2021 and one in November 2021). These data show lethal giant manta ray takes are not the result of a one-time circumstance or are exceedingly rare events and are likely to occur again.

Lethal takes of giant manta rays were not anticipated in the 2021 Shrimp Opinion or specified in the ITS so the extent of the incidental take is exceeded. We believe the recent take data may also constitute new information revealing effects of southeast shrimp fisheries on giant manta rays not considered in the 2021 Shrimp Opinion. The majority of observed takes are concentrated off Louisiana (i.e., Mississippi River delta) in March through June and October through November, and include trips that had multiple observed takes. The seasonal occurrence and location of interactions are consistent with predictions made in Farmer et al.¹ that the highest nearshore occurrence of giant manta ray is around the Mississippi River delta from April to June and again from October to November. This publication was not available when the 2021 Shrimp Opinion was being developed.

There is also at least one new smalltooth sawfish publication which may constitute new information revealing effects of southeast shrimp fisheries on smalltooth sawfish not considered in the 2021 Shrimp Opinion. Graham et al.² highlight trawl threats and, for the first time, make a specific, expert recommendation to mitigate bycatch mortality with a year-round closure of shrimp trawling off much of Southwest Florida. Graham et al. also find that female smalltooth sawfish are at higher risk from shrimp trawl bycatch than males, due to their greater overlap with areas of shrimp trawling effort.

¹ Farmer, N.A., Garrison, L.P., Horn, C. et al. The distribution of manta rays in the western North Atlantic Ocean off the eastern United States. *Sci Rep* 12, 6544 (2022). <https://doi.org/10.1038/s41598-022-10482-8>.

² Graham, J., Kroetz, A.M., Poulakis, G.R., Scharer, R.M., Carlson, J.K., Lowerre-Barbieri, S.K. et al. (2022). Commercial fishery bycatch risk for large juvenile and adult smalltooth sawfish (*Pristis pectinata*) in Florida waters. *Aquatic Conservation: Marine and Freshwater Ecosystems*, 32 (3), 401–416. <https://doi.org/10.1002/aqc.3777>.

In summary, I have determined that at least one and likely two of the four conditions requiring reinitiation of the formal consultation specified at 50 C.F.R. § 402.16 have been met. Lethal takes have only been confirmed in Gulf federal waters, but take records in the Atlantic include several giant manta rays caught where the disposition was unknown. The new smalltooth sawfish information is applicable to both the Gulf and South Atlantic Regions. Therefore, reinitiation of consultation has been triggered on the authorization of the South Atlantic and the Gulf Shrimp Fishery Management Plans (FMPs) and their implementing regulations. Lastly, no reinitiation triggers have been met for any of the other species analyzed in the 2021 Shrimp Opinion so reinitiation of consultation will be limited to addressing only these two species and their management under the FMPs.

Information will be needed to complete our formal reinitiation package. Our staffs have started gathering data, but there is much to be done before the information needed will be complete. We (i.e., Sustainable Fisheries Division [SFD] and Protected Resources Division) will need to work with the SEFSC to obtain trawl effort data and other data needed for developing a biological opinion, and revise our bycatch estimates based on the recent observer data. We will need to re-evaluate what constitutes the best available data on giant manta rays and smalltooth sawfish, including the nature and the extent of the lethal trawl interactions (immediate and post-release mortalities). We are aware that the SEFSC is currently working on population viability analyses (PVA) for both smalltooth sawfish and giant manta rays, and these analyses will be important for understanding the impact of southeastern shrimp fisheries on these species. We will also need to keep attuned to any proposed Shrimp FMP-driven actions and activities and any shrimp actions the Gulf of Mexico Fishery Management Council (GMFMC) or South Atlantic Fishery Management Council (SAFMC) may wish to consider in response to new information as it becomes available.

Below I provide a tentative schedule for developing the information necessary to formally initiate consultation and for collaborating with the GMFMC and SAFMC during this development. I anticipate we will complete the reinitiation package by April 2024.

Please provide us with a written acknowledgement of this consultation request and our tentative plan. I plan to share this memorandum with our partners (e.g., GMFMC, SAFMC, and the Smalltooth Sawfish Recovery Team). Also, I recommend we both meet with SEFSC staff to review all of this information.

Table 1. Tentative actions and timeline for the reinitiation of the 2021 Shrimp Opinion to address giant manta rays and smalltooth sawfish.

Reinitiation Actions	Estimated Completion Date
Share reinitiation decision with the GMFMC and SAFMC	June 5-8 and June 12-16, 2023 - GMFMC and SAFMC meetings
Request new giant manta ray bycatch estimates and a manta ray PVA	June 2023
Update and present information to the GMFMC, if requested or advisable	August 14-17 - GMFMC meeting
Update and present information to the SAFMC, if requested or advisable	September 11-15, 2023 - SAFMC meeting
Publication of smalltooth sawfish PVA; Presentation of smalltooth sawfish PVA (virtual) to the GMFMC Shrimp Advisory Panel (AP), including discussion of giant manta ray takes, rationale for reinitiation, and tentative timeline	October 2023
Update and present information to the GMFMC, if requested or advisable	October 23-26, 2023 - GMFMC meeting
Improved bycatch estimates of giant manta rays	December 2023
Update and present information to the SAFMC, if requested or advisable	December 4-8, 2023 - SAFMC meeting
Update and present information to the GMFMC, if requested or advisable	January 29-February 1, 2024 - GMFMC meeting
SEFSC giant manta ray PVA completed	March 2024
Present the giant manta ray PVA and updated bycatch estimates to GMFMC Shrimp AP	March 2024
Presentation to GMFMC	April 2024
SFD reinitiation package ready	April 2024