



United States Department of the Interior

FISH AND WILDLIFE SERVICE
Florida Ecological Services Field Office



In Reply Refer To:
04EF3000-2022-I-0253

Memorandum:

To: Chief, Planning and Consultation Branch, Gulf Restoration Office, Fairhope, Al

From: Division Supervisor, Environmental Review

Subject: Informal Consultation for Proposed Project: Improving Resilience for Oysters by Linking Brood Reefs and Sink Reefs, Component 5, Applicant: Florida Fish and Wildlife Conservation Commission County: offshore of Dixie and Levy Counties, Service Consultation Code: 04EF3000-2022-I-0253.

The U.S. Fish and Wildlife Service (Service) has reviewed the Service's Deepwater Horizon Gulf Restoration Office request for consultation dated September 15, 2021, for Florida Fish and Wildlife Conservation Commission (FWC)'s Improving Resilience for Oysters by Linking Brood Reefs and Sink Reefs, Component 5 project. The Service determined that the proposed action may affect but is not likely to adversely affect the federally threatened West Indian manatee (*Trichechus manatus latirostris*). This letter is submitted in accordance with section 7 of the Endangered Species Act of 1973, as amended (ESA) (87 Stat. 884; 16 U.S.C. 1531 *et seq.*).

PROJECT DESCRIPTION

The project will create a network of high-vertical relief brood (protected) reefs which will be linked to sink (harvest or protected) reefs through larval transport, allowing for increased oyster population sustainability, and oyster reef resilience. Brood reefs will be built with large, high relief material and sink reefs will be constructed of cultch that will either permit or discourage harvesting based on the state's management goals. Based on the best available science, the reefs will be sited in such a way that larvae produced on the brood reefs will be transported to the sink reefs. To increase resilience, reefs will be placed along a salinity gradient based on local conditions. Given the annual variation in salinity, spawning success may vary from year to year within a site. Constructing reefs over a range of salinities will increase the likelihood that at least some reefs should be successful in each year. Furthermore, where possible, constructing reefs along an intertidal-subtidal gradient may restore the population linkage between these habitats. Reefs will be constructed at a depth range from fully submerged at low tide in water less than 10 feet deep (subtidal reef) to exposed at low tide (intertidal reef) to mimic the surrounding natural reef system to keep oysters out of hypoxic bottom waters. The vertical height will range from 0.5 feet to 3 feet depending on the site-specific needs. These newly constructed reefs will mimic the naturally occurring reefs.

Where possible, reefs will be constructed on suitable hard substrate that do not currently support oysters. The project involves the construction of approximately 30 to 40 acres of oyster reef by planting oyster cultch material by barge or small shallow draft vessel. Reef size acreage will be based on the final height of built reefs. Building taller reefs will decrease the acreage and building shorter reefs will increase the acreage. The applicant estimates the average height will be 1 foot above the surrounding bottom. Cultch materials that are suitable for oyster reef restoration include 1) fossilized oyster shell, 2) recycled oyster shell, or 3) crushed limestone. The material size will be like other restoration activities in the area where materials range in size, 3-inch minimum dimension up to 18–36-inch maximum dimension. Those dimensions are an overall size of flatter aggregate that increases rugosity. The height of the restored reefs (brood and sink) will not exceed the average of 1 foot above the substrate. These materials have proven successful in ongoing restoration activities at the Lone Cabbage restoration site by the University of Florida with funding from the National Fish and Wildlife Foundation. Cultch material shall be clean and reasonably free from soil, quarry fines, and containing no refuse.

The project will be located in Suwannee Sound (offshore of Dixie and Levy Counties) between Horseshoe Point (29.436309, -83.295980) and Cedar Key (29.126662, -83.056350). Specific restoration site(s) will be identified during the planning stage utilizing info from the habitat suitability analysis and mapping work that the Florida Trustee Implementation Group will be performing over the next couple of years.

The corners of each area for cultch planting will be demarcated by buoys. Buoys will be no smaller than 15-inch round orange anchor buoys with a minimum of 3/8 polypropylene rope attached to a 25-pound concrete anchor. The length of rope is calculated as the water depth plus 15% to account for tidal range. Buoys will be deployed immediately prior to the start of cultch planting and removed immediately after when the state surveys the contractors work. Although the in-water work component of the project is expected to last 1-2 years, the duration of buoy and rope deployment will be short-term as construction progresses from site to site resulting in both buoy and line deployment, retrieval, and redeployment.

Restoration sites will not be placed on seagrass nor will there be impacts to mangroves and the substrate varies across the project area but is largely comprised of sand, mud, silt, clay, limestone, and shell. Pre-construction oyster surveys will be conducted as well as post-construction surveys will be performed immediately after construction to ensure that the reefs are built to specifications.

THREATENED AND ENDANGERED SPECIES

West Indian manatee (*Trichechus manatus latirostris*)

Watercraft collisions with manatees are the leading cause of human-related mortality for this species in Florida, based on analyses of mortality data from the Manatee Carcass Salvage Program (Ackerman et al. 1995, Deutsch et al. 2002, Fonnesebeck and Runge 2007, Lightsey et al. 2006, O'Shea et al. 1985, Rommel et al. 2007; Wright et al. 1995). The risk of physical injury is discountable due to the species' ability to move away from the project site and into adjacent suitable habitat, if disturbed. If the species did enter project area, activities would halt

until the ESA-listed species departs of its own volition. Additionally, the applicant agrees to adhere to USFWS *Standard Manatee Conditions for In-Water Work* (2011).

Listed species may be entangled by in-water lines and other in-water equipment. The risk of entanglement is discountable because the applicant has agreed to USFWS *Standard Manatee Conditions for In-Water Work* (2011) and on-site personnel will check both the marker buoys and lines daily and these buoys and associated lines will be removed when the work is complete.

All personnel conducting the in-water project activities will adhere to all USFWS and FWC permit requirements, including conservation measures to reduce and minimize impacts on protected species. Any collision with or injury to a manatee shall be reported immediately to the FWC Hotline at 1-888-404-3922. Collision and/or injury should also be reported to the U.S. Fish and Wildlife Service in Jacksonville (1-904-731-3336) for north Florida or in Vero Beach (1-772-562-3909) for south Florida and emailed to FWC at ImperiledSpecies@myFWC.com.

Because all potential project effects to listed species were found to be discountable, USFWS concurs that the proposed action is not likely to adversely affect listed species. This letter fulfills the requirements of section 7 of the Act and further action is not required. If modifications are made to the action, if additional information involving potential effects to listed species becomes available, or if a new species is listed, reinitiation of consultation may be necessary.

Thank you for your cooperation in the effort to protect fish and wildlife resources. If you have any questions regarding this project, please contact Laura Wright, Fish and Wildlife Biologist, at laura_wright@fws.gov or 850-769-0552, ext 45227.

cc: electronic only
FWC, Gareth Leonard
Service, Jacksonville, Florida (Manatee Species Lead)

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