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 http://sero.nmfs.noaa.gov

January 21, 2016

F/SER47:JAR/pw

(Sent via Electronic Mail)

Colonel Jason A. Kirk, Commander Jacksonville District Corps of Engineers P.O. Box 4970 Jacksonville, FL 32232-0019

Attention: Paul.M.DeMarco@usace.army.mil

Dear Colonel Kirk:

NOAA's National Marine Fisheries Service (NMFS) reviewed the Draft Environmental Impact (EIS) Statement for the Caño Martin Peña Ecosystem Restoration Project (CMP-ERP) dated September 11, 2015. The EIS and supporting documents were prepared for ENLACE, a public corporation co-managing the project. The NMFS concentrated its review on the Essential Fish Habitat Assessment Plan. The CMP-ERP is an urban ecosystem restoration project for Caño Martin Peña and the surrounding areas of the San Juan Bay Estuary. Restoration of the canal would re-establish the tidal connection between the San Jose Lagoon and the San Juan Bay, which would improve dissolved oxygen concentrations and salinity stratification, increase biodiversity by restoring fish habitat and benthic conditions, and improve the functional value of mangrove habitat within the estuary. The Tentatively Selected Plan (TSP) will restore the CMP to a 100-foot width and 10-foot depth and deposit the dredged sediments in existent pits within San Jose Lagoon. The deposited sediments would be capped with two feet of sand. The lands adjacent to the restored channel would be planted with four species of mangrove, which will result in 34.48 acres of mangrove habitat. The Jacksonville District's initial determination is the CMP-ERP would not have a substantial adverse impact on essential fish habitat (EFH) or federally managed fisheries in the U.S. Caribbean. As the nation's federal trustee for the conservation and management of marine, estuarine, and anadromous fishery resources, the NMFS provides the following comments and recommendations pursuant to authorities of the Fish and Wildlife Coordination Act and the Magnuson-Stevens Fishery Conservation and Management Act (Magnuson-Stevens Act).

The Caño Martin Peña eastern half is the channel between the Caño Martin Peña Bridge located on Ponce de Leon Avenue and the San Jose Lagoon, which is the main project channel area. The length of this segment is 2.2 miles with a width of 100 feet and a depth of 10 feet. This channel also extends for approximately 4,300 feet into San Jose Lagoon as a hydraulic transition from the canal. The depth of this transition zone would be 10 feet in the channel to 6 feet within San Jose Lagoon. Historically, the Caño Martin Peña width fluctuated from 200 to 400 feet and was navigable. Currently, the CMP width has narrowed due to years of encroachment and filling of the mangrove habitat along the channel, clogging the connection and impeding the tidal flow between San Juan Bay and San Jose Lagoon. Sedimentation rates are nearly twice those in other



parts of the San Juan Bay Estuary due to infilling and extremely limited water flow. Sediments include household refuse and other debris accounting for 10 percent of its composition. In some locations within the canal, this debris thickness is close to 10 feet. Open waters in the channel entrance on San Jose Lagoon have been lost, as the area has started to shift to an emergent wetland and uplands.

The site of the proposed project includes mangroves (*Rhizophora*, *Avicennia*, and *Laguncularia*), muddy bottom, seagrasses, and algal communities. The Caribbean Fishery Management Council (CFMC) identifies these habitats as EFH for several species, including juvenile and adult gray snapper (*Lutjanus griseus*); and juvenile mutton snapper (*Lutjanus analis*); juvenile Nassau (*Epinephelus striatus*) and goliath grouper (*Epinephelus itajara*); and juvenile spiny lobster (*Panulirus argus*) and Queen conch (*Strombus gigas*). Mangroves directly benefit the fishery resources of the Atlantic Ocean and the Caribbean Sea by providing nursery habitat. Seagrass habitat is part of a habitat complex that includes hard bottoms and coral reefs, and this habitat complex supports a diverse community of fish and invertebrates within the Atlantic Ocean and the Caribbean Sea. Seagrasses also provide important water quality maintenance functions such as oxygen production, stabilize sediments, attenuate wave action, and produce and export detritus (decaying organic material), which is an important component of marine and estuarine food chains. The CFMC provides additional information about these EFH designations and their support of fishery species in *Essential Fish Habitat (EFH) Generic Amendment to the Fishery Management Plans (FMPs) of the U.S. Caribbean*¹.

Recommendations

The ultimate goal of the proposed project is to achieve environmental restoration within the CMP and San Jose Lagoon. As proposed, the water residence time for the San Jose Lagoon would be reduced from 16.9 to approximately 3.9 days. Rainy season freshwater pulse events have historically caused anoxic zones within the system, which will remain for a minimum of four-day residence time, causing fish and invertebrate mortality. In order to improve environmental restoration, the NMFS recommends the Jacksonville District consider modifying the project design to reduce the minimum water residence time to one day or less.

The anoxic zones are a resultant of the nutrient input into CMP and San Jose Lagoon from the Juan Mendez Creek, San Anton Creek, and the DNER Baldorioty Avenue pump station into Los Corozos section of San Jose Lagoon. The nutrients accumulate when sanitary sewer lines discharge into storm sewer lines or when single septic tank drainage pipes discharge into these creeks during heavy rain events. The NMFS recommends the Jacksonville District ensure sanitary sewer lines are available for all the structures within the project watershed and the lines do not drain into the storm sewer lines. These steps seem essential to reducing the frequency of anoxic zones, and reducing or eliminating anoxic zones in the Caño Martin Peña and San Jose Lagoon system will ensure project environmental restoration success and protection of EFH resources.

Species protected under the Endangered Species Act (ESA) and under the jurisdiction of the NMFS may occur in vicinity of the proposed dredging. Impacts to endangered or threated species and their critical habitat may require consultation with the NMFS Protected Resources

-

¹ Available at *caribbeanfmc.com/fmp_efh.html*.

Division. Please direct questions about consultations under the ESA to Dr. Lisamarie Carrubba at Lisamarie.Carrubba@noaa.gov.

The NMFS appreciates the opportunity to provide these comments. Please direct related questions or comments to the attention of Mr. José A. Rivera at NOAA HCD, c/o US Army Corps of Engineers, Fundacion Angel Ramos, Annex Building, 2383 Franklin Delano Roosevelt Avenue, Suite 202, San Juan, Puerto Rico, 00918. He may be reached by telephone at 787-729-6829 or by e-mail at Jose.A.Rivera@noaa.gov.

Sincerely,

Pace Willer

/ for

Virginia M. Fay Assistant Regional Administrator Habitat Conservation Division

cc: COE, Paul.M.DeMarco@usace.army.mil CFMC, Graciela_CFMC@yahoo.com F/SER3, Lisamarie.Carrubba@noaa.gov F/SER4, David.Dale@noaa.gov F/SER47, Jose.A.Rivera@noaa.gov