



**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>

September 29, 2015

F/SER47:JD/pw

(Sent via Electronic Mail)

Colonel Marvin Griffin, Commander  
Savannah District Corps of Engineers  
100 W. Oglethorpe Avenue  
Savannah, Georgia 31402-0889

Attention: Sarah Wise

Dear Colonel Griffin:

NOAA's National Marine Fisheries Service (NMFS) reviewed public notice 2015-00279, dated September 3, 2015. The Causton Bluff Home Owners Association (HOA) requests authorization from the Department of the Army to impact 0.60 acres of salt marsh to repair and replace portions of an earthen dike in Chatham County. As compensatory mitigation for impacts to tidal wetlands, the applicant proposes to purchase 3.27 freshwater wetland credits from the AA Shaw Mitigation Bank. The Savannah District's initial determination is the proposed fill would not have substantial individual or cumulative adverse impacts on essential fish habitat (EFH) or federally managed fishery species. As the nation's federal trustee for the conservation and management of marine, estuarine, and anadromous fishery resources, the following comments and recommendations are provided pursuant to authorities of the Fish and Wildlife Coordination Act and the Magnuson-Stevens Fishery Conservation and Management Act.

*Description of the Proposed Project*

An earthen dike once used for mosquito control bounds the northern side of the Causton Bluff neighborhood; salt marsh occurs north of the dike, and a 4.6-acre lagoon occurs to the south and is part of a stormwater detention system. For many years, water topping the dike during high tides compromised the integrity of the dike and a severe storm breached the eastern end of the dike during 2012. Because of the breach, tidal waters are flowing into the lagoon at a velocity and volume causing lagoon bank erosion and threatening properties. The lagoon was brackish prior to the breach and contains some salt marsh vegetation near the dike.

The HOA would place fill in 0.33 acres of tidal wetlands at two breach locations and replace the existing water control structure. The completed berm would be seven feet high with an eight-foot wide surface access way. Slope and toe fill needed to accommodate these dimensions would be placed on the lagoon side of the existing berm. To control tidal flow, a pipe 40 feet long and 24 inches in diameter would be embedded into the berm. The pipe would have a top elevation of approximately four feet while bottom elevation would be 2.0 feet on the lagoon side and 1.80 feet on the marsh side. On the marsh side of the berm, a headwall (three feet by three feet) would be installed to support the pipe and a metal flap gate would remain fully open on the pipe unless lagoon maintenance is necessary. On the lagoon side, a concrete box (four feet by four feet) would surround the pipe opening, and stop logs in the box would allow the lagoon pool elevation to match levels existing prior to the dike failure and allow for water level fluctuations of six to 12 inches. An emergency spillway would be constructed on top of the berm at an elevation of six feet to prevent the topping of the berm during significant storm events. To accommodate construction of the dike and new water control structure, the HOA would also clear 0.27 acres of existing berm vegetation and lagoon-side marsh vegetation during construction.



### *Essential Fish Habitat in the Project Area*

A NMFS biologist visited the site on September 22, 2015. The area includes salt marsh wetlands. The South Atlantic Fishery Management Council (SAFMC) identifies salt marsh as EFH for penaeid shrimp, including white shrimp (*Litopenaeus setiferus*) and brown shrimp (*Farfantepenaeus aztecus*), and estuarine-dependent species of the snapper-grouper complex. Salt marshes are EFH because larvae and juveniles concentrate and feed extensively and shelter within these habitats. As a consequence, growth rates are high and predation rates are low, which makes these habitats effective nursery areas. The SAFMC provides additional information on EFH and its support of federally managed species in Volume IV of the *Fishery Ecosystem Plan of the South Atlantic Region*<sup>1</sup>.

The waters of the Wilmington River, the tidal creeks connected to it, and the surrounding coastal marsh also serve as nursery and forage habitat for other species, such as red drum (*Sciaenops ocellatus*), black drum (*Pogonias cromis*), Atlantic menhaden (*Brevoortia tyrannus*), and blue crab (*Callinectes sapidus*). Many of these species are prey for fish managed under the Magnuson-Stevens Act, such as mackerels, snappers, groupers, billfish, and sharks. Red drum is an important state-managed fishery, and estuarine wetlands within the project area provide habitat for all life stages of red drum.

### *Impacts to Essential Fish Habitat*

The proposed dike rehabilitation would result in the permanent loss of 0.33 acres of EFH from fill and temporary loss of 0.27 acres of marsh from clearing. Some marsh vegetation is present on the interior of the berm near the breach but most of the lagoon has remained unvegetated and back erosion is severe. Some marsh loss on the upper edges of the lagoon bank may occur because water levels would be lower after the berm is repaired; however, the management of the water control structure would retain tidal flow in and out of the lagoon. Any access to the impounded marsh by fishery species or their prey would be via the water control structure.

### *Avoidance, Minimization, and Mitigation*

The applicant has avoided and minimized impacts of the project by placing fill within the footprint of the existing berm and lagoon. Because of this design, hydrology and vegetation on the marsh side of the berm would not be permanently impacted. In addition, retaining flow throughout the tidal cycle in the lagoon, although limited, may allow the lagoon to retain some value to fishery resources.

As compensatory mitigation, the applicant proposes to purchase freshwater wetland credits from the AA Shaw Mitigation Bank which constitutes out-of-kind mitigation. During the site visit, the NMFS proposed two on-site alternatives to provide in-kind compensatory mitigation: 1) remove remnant spoil piles located adjacent to the existing berm on the marsh side and 2) protect existing fringing marsh along the neighborhood's bank of the Wilmington River by creating natural erosion structures (e.g., oyster bags or castles). During the site visit, the consultant agreed to further investigate these alternatives; however, a decision has yet to be made. If these on-site mitigation alternatives are not feasible, the NMFS would prefer the HOA purchase credits from the Ogeechee River Mitigation Bank because this bank supports brackish habitat that is a much better match to the proposed impacts than the habitat at the AA Shaw Mitigation Bank.

### **EFH Conservation Recommendation**

Section 305(b)(4)(A) of the Magnuson-Stevens Act requires the NMFS to provide EFH Conservation Recommendations for any federal action or permit which may result in adverse impacts to EFH. Therefore, the NMFS recommends the following to ensure the conservation of EFH and associated fishery resources:

- The permit should require in-kind compensation for the unavoidable impacts to EFH.

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<sup>1</sup> Available at <http://safmc.net/EcosystemLibrary/FEPVolumeIV>

Section 305(b)(4)(B) of the Magnuson-Stevens Act and implementing regulation at 50 CFR Section 600.920(k) require the Savannah District to provide a written response to this letter within 30 days of its receipt. If it is not possible to provide a substantive response within 30 days, an interim response should be provided to the NMFS. A detailed response then must be provided ten days prior to final approval of the action. The detailed response must include a description of measures proposed by the Savannah District to avoid, mitigate, or offset the adverse impacts of the activity. If the response is inconsistent with an EFH conservation recommendation, a substantive discussion justifying the reasons for not following the recommendation must be provided.

In accordance with section 7 of the Endangered Species Act of 1973, as amended, it is the responsibility of the Savannah District to review and identify any proposed activity that may affect endangered or threatened species and their designated critical habitat. Determinations involving species under NMFS jurisdiction should be reported to NMFS' Protected Resources Division at the letterhead address.

NMFS appreciates the opportunity to provide these comments. Please direct related correspondence to the attention of Ms. Jaclyn Daly-Fuchs at our Charleston Area Office. She may be reached at (843) 762-8610 or by e-mail at [Jaclyn.Daly@noaa.gov](mailto:Jaclyn.Daly@noaa.gov).

Sincerely,



/ for

Virginia M. Fay  
Assistant Regional Administrator  
Habitat Conservation Division

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