



UNITED STATES DEPARTMENT OF COMMERCE

National Oceanic and Atmospheric Administration

NATIONAL MARINE FISHERIES SERVICE

Southeast Regional Office

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St. Petersburg, Florida 33701-5505

<http://sero.nmfs.noaa.gov>

April 10, 2015

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(Sent via Electronic Mail)

Lt. Col. John Litz, Commander
Charleston District, Corps of Engineers
69A Hagood Avenue
Charleston, South Carolina 29403-5107

Attention: David Chamberlain

Dear Lt. Colonel Litz:

NOAA's National Marine Fisheries Service (NMFS) reviewed public notice 2015-00317-2IY, dated March 26, 2015. The Ryland Group, Inc., requests authorization from the Department of the Army to fill 0.32 acres of freshwater wetlands to facilitate construction of a residential community on two islands, including a hammock island, in Berkeley County. As compensatory mitigation, the applicant would purchase credits from the Pigeon Pond Mitigation Bank or Congaree-Carton Mitigation Bank. The Charleston District's initial determination is the proposed filling of freshwater wetlands would not have substantial individual or cumulative adverse impacts on essential fish habitat (EFH) or federally managed fishery species. While NMFS agrees the wetlands proposed for impact are not EFH, there is a potential for indirect impacts to EFH from the development due to its close proximity of EFH. 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 (Magnuson-Stevens Act).

Description of the Proposed Project

The proposed project includes filling three wetlands to facilitate development of the Governor's Cay residential community within the northern portion of Thomas Island and the adjacent seven-acre hammock island. The applicant proposes to construct a total of 206 multi-family and single-family homes on approximately 33 acres; 38 single-family would be on the hammock island. The proposed wetland fills would allow construction of three multi-family homes and part of a stormwater pond. The applicant would maintain a 40-foot vegetated buffer between developed areas and salt marsh per City of Charleston regulations. The applicant would place under a conservation easement 10.16 acres of tidal wetlands and three smaller hammock islands, totaling 2.99 acres, connected to the development via boardwalks.

Essential Fish Habitat in the Project Area

A NMFS biologist conducted a site visit on April 6, 2015. The site of the proposed project includes high quality salt marsh and tidal creeks. 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*). 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 also identifies salt marsh and tidal creeks as EFH for estuarine-dependent species of the snapper-grouper complex. The SAFMC identifies EFH for federally managed species in Volume IV of the *Fishery Ecosystem Plan of the South Atlantic Region* (available at www.safmc.net).

The waters of Beresford Creek, 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.

Direct Impacts

NMFS believes the proposed fill is not consistent with the Environmental Protection Agency's Guidelines for Specification of Disposal Sites for Dredged or Fill Material. The fundamental precept stated in 40 CFR 230.1(c) that "dredged or fill material should not be discharged into the aquatic ecosystem unless it can be demonstrated that such a discharge will not have an unacceptable adverse impact either individually or in combination with known and/or probable impacts of other activities affecting the ecosystems of concern" would not be met by this project. The basic purpose of the project is to build a housing development. Based on guidance provided by 40 CFR 230.10(a)(3), a housing development does not require access or proximity to or siting within wetlands (i.e., it is not water dependent). In discussing the water dependency requirement, the guidelines state that for non-water dependent projects, practicable alternatives that do not involve special aquatic sites (e.g., wetlands at the project site) are presumed to be available. The applicant proposes to fill 0.32 acres of the 0.54 acres of freshwater wetlands at the site to create part of a stormwater pond and fill pads for three multi-family homes. NMFS recommends the site plan be redesigned to avoid these wetland impacts. If the Charleston District concludes the impacts to freshwater wetlands are unavoidable, NMFS recommends the applicant purchase credits from the Congaree-Carton Mitigation Bank, rather than the Pigeon Pond Mitigation Bank, because the landscape position of the former is a better match to the proposed impacts; i.e., the Congaree-Carton Mitigation Bank is adjacent to salt marsh associated with the Wando River.

Indirect Impacts

While no direct impacts to EFH would occur from the proposed wetland fills, there is a potential for indirect effects to EFH from the development, enabled by the wetland fills, due to the close proximity of EFH. The development would transform much of Thomas Island and the hammock island to impervious surface. Holland et al. (2004)¹ found measurable adverse changes in the physical and chemical environment when impervious land cover exceeded 10 to 20 percent in a

¹ Holland, A.F., Sanger, D.M., Gawle, C.P., Lerberg, S.B., Santiago, M.S., Riekerk, G.H.M., Zimmerman, L.E., and Scott, G.I. 2004. Linkages between tidal creek ecosystems and the landscape and demographic attributes of their watersheds. *Journal of Experimental Marine Biology and Ecology* 298:151-178.

watershed and the abundance of shrimp declined when impervious land cover exceeded 20 to 30 percent. The reasons for these biological, chemical, and physical impacts are due to the increased runoff, which alters salinity, temperature, and alkalinity regimes, and the quality of that runoff. NMFS recommends the project incorporate low-impact design principles to retain water on-site to the maximum extent practicable, including use of bioswales, pervious pavements, locating stormwater pond discharge pipes away from tidal wetlands, and a 50-foot vegetated buffer between all tidally influenced wetlands and development.

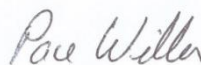
Recommendations

As detailed above, NMFS recommends:

- If the Charleston District concludes the impacts to freshwater wetlands are unavoidable, the permit require purchase credits from the Congaree-Carton Mitigation Bank.
- The permit require implementation of low-impact design principles to retain water on-site to the maximum extent practicable.

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.

Sincerely,



/ for

Virginia M. Fay
Assistant Regional Administrator
Habitat Conservation Division

cc:

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