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

April 1, 2015 F/SER47:JD/pw

(Sent via Electronic Mail)

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

Attention: Debra King

Dear Colonel Litz:

NOAA's National Marine Fisheries Service (NMFS) reviewed public notice 2015-00220-1W, dated February 26, 2015, and the Essential Fish Habitat (EFH) Assessment contained within Appendix I of the applicant's permit application, dated February 10, 2015. The Town of Hilton Head Island, Beaufort County, requests authorization from the Department of the Army to place up to 60,000 cubic yards (cy) of sand along 2,000 feet of Port Royal Sound shorefront north of Fish Haul Creek. The beach fill would impact approximately 6.95 acres of intertidal and subtidal flats and 0.09 acres of salt marsh. The source of the sand would be either upland mines or ten acres of an offshore area known as Bay Point Shoals. The applicant expects the fill to restore an eroded area for eight to ten years. The Charleston District's initial determination is the proposed dredging and filling would not have substantial individual or cumulative adverse impacts on 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 (Magnuson-Stevens Act).

Description of the Proposed Project
The proposed project would place, between March 1 and October 31, up to 60,000 cy of sand along 2,000 feet of Port Royal Sound shorefront that includes Mitchelville Beach Park (about 1,000 feet) and private properties, the largest being a development known as "The Spa." Fish Haul Creek Park is just outside the southeastern boundary of the proposed fill template. The proposed fill template is a portion of the template used for the island-wide Hilton Head nourishment constructed under permit SAC-2004-1W-319-P during 2006 and 2007. During 2007, six detached, rock breakwaters were constructed offshore from private properties and Fish Haul Creek Park, and *Spartina* planted between the groins and uplands to promote re-establishment of historic salt marsh habitat within a rapidly eroding area. *Spartina* has since flourished in the lee of the breakwaters. To avoid and minimize potential impacts to salt marsh vegetation from the proposed beach fill, the proposed length and volume of fill were reduced, as compared to the 2006/2007 fill template, and the construction profile steepened so the toe-of-fill remains landward of the *Spartina* in the portions of the project behind the breakwaters. To further reduce impacts to *Spartina*, the applicant's proposed construction plan uses hydraulic placement along Mitchell Beach Park and mechanical placement behind the breakwaters. As a result of these measures, the proposed impacts to *Spartina* is 0.09 acres.

The applicant proposes to conduct the project in conjunction with the Port Royal Sound and "The Heel" segments of the proposed Hilton Head Island Beach Renourishment Project (PN 014-00680-1W) during

2015 and 2016; Bay Point Shoals is the proposed sand source for this project. The public notice and application package do not describe dredge depths or dredging methods or state the dredging would be done in a manner consistent with the proposed island-wide Hilton Head project. However, if this is the case, NMFS expects the applicant would limit dredge depths to -30 feet NGVD29, and dredging would start at the edge of the shoals and work inward, avoiding creation of deep pits. In coordinating with the island-wide Hilton Head project is not practicable, the applicant request authorization to use sand from the Deerfield Mine in Hardeeville and/or the Murray Sand Pit near Summerville. The Charleston District has previously authorized use of sand from these mines for beach nourishment. Construction is expected to require less than 20 days if Bay Point Shoals is the sand source, and 90 days if the upland mines are the sand source.

Essential Fish Habitat in the Project Area

Sections 2 and 3 in the EFH Assessment discuss EFH and federally managed fisheries, respectively. These sections are incomplete. NMFS is not requesting the Charleston District submit a revised EFH Assessment; however, the following changes should be incorporated into future EFH assessments.

- Table 1 and subsequent sections 2.2 and 2.3 should include all relevant EFH designations and identify Habitat Areas of Particular Concern (HAPCs), defined as a subset of EFH that is either rare, particularly susceptible to human-induced degradation, especially important ecologically, or located in an environmentally stressed area.
    - Coastal inlets are a HAPC for peneaid shrimp and the snapper-grouper complex.
    - Sandy shoals of capes and offshore bars and the surf zone are EFH for coastal migratory pelagic species (e.g., Spanish mackerel and cobia).
    - Oyster reefs are a HAPC for estuarine-dependent snapper-grouper species.
    - Tidal creeks are EFH for estuarine-dependent snapper-grouper species.
    - Unconsolidated bottom is EFH for snapper-grouper species.
    - The water column is not EFH (unless referring to the spawning area in the water column above snapper-grouper adult habitat); Section 2.2.1 is not relevant for this project and could be deleted.
- Section 2.1 should identify two HAPCs (coastal inlet and oysters) are present within the project area.
- Species within the snapper-grouper fishery management plan (FMP) other than black sea bass (e.g., gray snapper, mutton snapper) will enter the estuary and potentially use the project area; it is unclear why black sea bass are singled out in the discussion on page 23.
- Section 3.4.1 should be removed; Atlantic red drum are not managed under a federal fishery management plan and therefore do not have designated EFH.
- Section 3.4.2 and 3.4.3 should be corrected to state that bluefish and summer flounder are jointly managed by the Atlantic States Marine Fisheries Commission and the Mid-Atlantic Fishery Management Council under a federal FMP and therefore have designated EFH; MAFMC provides details about the EFH requirements of species it manages in amendments to individual fishery management plans and in technical reports[1].
- Coastal sharks may be present within the action area and are included in the Highly Migratory Species FMP; NMFS manages this fishery and EFH designations can be found in *Amendment 1 to the 2006 Consolidated HMS Fishery Management Plan: Essential Fish Habitat*[2].
- The EFH Assessment should include a description of the project with respect to dredging the borrow site and impacts associated with this action.

[1] Available at *http://www.greateratlantic.fisheries.noaa.gov/hcd/*

[2] Available *at http://www.nmfs.noaa.gov/sfa/hms/documents/fmp/am1/index.html*

Impacts to Essential Fish Habitat
The EFH Assessment states sand placement on the beach would result in near complete mortality of benthic infauna, temporarily reducing prey availability for six months to one year based upon the compatibility of the sand source with the existing beach. In slight contrast, the Biological Assessment provided in Appendix H of the permit application states disruptions in the foraging food base of piping plovers could persist for one to two years following fill placement. No citations are provided to support these statements. Based on studies conducted in South Carolina and Georgia on nourished beaches, NMFS expects the benthic community serving as forage for fish would likely recover within one to two years of construction provided fill sediment characteristics, such as grain size, are similar to existing beach conditions (Van Dolah et al. 1992, Bergquist and Crowe 2009). Appendix G of the permit application indicates the upland sands are classified as poorly-graded, medium to fine grained sand-sized quartz, which is slightly larger than the sediments at the fill site, which are classified as poorly-graded, fine grained quartz with traces of silt and shell. The sediments from Bay Point Shoals more closely match the beach sediments.

As noted above, the proposed impact to *Spartina* marsh is 0.09 acres. The applicant expects this impact will be offset by *Spartina* colonizing some of the new intertidal areas created by the beach fill. Based on the project history, NMFS agrees this expectation is reasonable, but some monitoring should be conducted to verify expectations are met.

The EFH Assessment does not address impacts from dredging Bay Point Shoals, should the shoals be the sand source for the project. Impacts from dredging Bay Point Shoals is being evaluated in connection with the island-wide nourishment project proposed for construction during 2015 and 2016 (P/N 2014-00680-1W). The Bay Point Shoals borrow area occupies approximately 169 acres of seafloor and contains an estimated 2.8 million cy of beach-compatible sand as measured above -30 feet NGVD29. The South Carolina Department of Natural Resources (SCDNR) monitored the biological and physical responses of Bay Point Shoals from the previous Hilton Head nourishment project, which extracted approximately 950,000 cubic yards of sand at a maximum dredge depth of -20 feet NAVG29 (Bergquist et al. 2009, Crowe and Sanger 2014). The shoal changed modestly following dredging but retained many characteristics of the nearby reference area six months to one year after dredging. SCDNR also concluded conditions are favorable at Bay Point Shoal for infilling of beach-compatible sands suitable for future nourishment projects in Hilton Head. The major difference between the previous nourishment projects and the proposed project is dredge depth (-20 feet versus -30 feet NAVG29). NMFS indicated in its August 7, 2014, comment letter for the island-wide project that impacts to shoal fauna would be minimized by the avoiding creation of pits in the shoals, leaving areas of high leave, and leaving a sand lens at the bottom of the dredged areas.

EFH Conservation Recommendations
NMFS finds the proposed dredging and filling would adversely affect EFH. Section 305(b)(4)(A) of the Magnuson-Stevens Act requires NMFS to provide EFH conservation recommendations when an activity is expected to adversely affect EFH. Based on this requirement, NMFS recommends:

- The permit require quantification of the *Spartina* acreage before and after the project to determine if mitigation is needed.
- The permit limit dredge depths to -30 feet NAVG29, require maintenance of a sand-lens at the bottom of dredged areas, and prohibit creation of pit-like features in the borrow area.

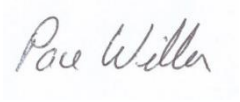
Section 305(b)(4)(B) of the Magnuson-Stevens Act and implementing regulation at 50 CFR Section 600.920(k) require the Charleston District to provide a written response to this letter within 30 days of its receipt. If it is not possible to provide a substantive response within 30 days, an interim response should be provided to NMFS. A detailed response then must be provided 10 days prior to final approval of the

action. The detailed response must include a description of measures proposed by the Charleston 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 Charleston 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.

Sincerely,



/ for

Virginia M. Fay
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Habitat Conservation Division

cc:

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References

Bergquist, D. and S. Crowe. 2009. *Using Historical Data and Meta-analysis to Improve Beach Nourishment Monitoring and Related Beach Management Policy*. Final Report prepared by the South Carolina Marine Resources Research Institute, South Carolina Marine Resources Division, Charleston, SC for the South Carolina Department of Health and Environmental Control, Office of Ocean and Coastal Resource Management. 99 pages.

Bergquist, D., S. Crowe, and M. Levisen. 2009. *The 2006-2007 Hilton Head Island Renourishment Project: Physical and Biological Response of the Joiner and Barrett Shoals Borrow Areas to Dredging*, report prepared for Town of Hilton Head Island by the Marine Resources Research Institute, Marine Resources Division, SCDNR, Charleston, SC. 112 pages.

Crowe, S. and D. Sanger. 2014. *The 2011-2012 Port Royal Sound Shoreline Restoration and Stabilization Project: Sediment and Benthic Community Responses to the Bay Point Borrow Area*

Dredging, report prepared for Olsen Associates, Inc., by the Marine Resources Research Institute, Marine Resources Division, SCDNR, Charleston, SC. 70 pages.

Van Dolah, R.F., P.H. Wendt, R.M. Martore, M.V. Levisen, and W. Roumillat, W. 1992. *A Physical and Biological Monitoring Study of the Hilton Head Beach Nourishment Project*. Final Report submitted to the Town of Hilton Head Island and the South Carolina Coastal Council. 159 pages.