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

November 18, 2014

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: Elizabeth Williams

Dear Lt. Colonel Litz:

NOAA's National Marine Fisheries Service (NMFS) reviewed public notice SAC 2011-857-DIJ, dated November 3, 2014. The South Carolina Department of Transportation (SCDOT) requests authorization from the Department of the Army to impact 1.25 acres of salt marsh and tidal waters and 0.6 acres of freshwater wetlands in order to replace the Spanish Wells Road (S-7-79) bridge over Jarvis Creek, Beaufort County. SCDOT would purchase credits from mitigation banks as compensatory mitigation. The Charleston District's initial determination is the proposed filling and clearing of salt marsh 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 (Magnuson-Stevens Act).

Description of the Proposed Project and Consultation History

SCDOT proposes to replace the Spanish Wells Road bridge over Jarvis Creek on a new alignment just eastward of the existing alignment. While new causeways would be built across the salt marsh leading to the new bridge, the new southern causeway would be considerably shorter than the causeway leading to the existing bridge. The bridge deck would be approximately 43.25 feet wide and 480 feet long to accommodate two 12-foot travel lanes with 8-foot shoulders. In total, the proposed bridge would be over six times longer than the existing bridge and the elevation approximately three feet higher to achieve roadway design guidelines. Once the new bridge is finished, the existing bridge and 0.48 acres of causeways leading to it would be removed and the material disposed in upland locations. Modifications to the intersections of Jarvis Creek Court, Seagrass Landing Court, and Summerville Court with Spanish Wells Road also would occur to accommodate the new bridge alignment. The intersection modifications would require filling 0.6 acres of freshwater wetlands.

In July 2012, SCDOT submitted an EFH Assessment (on behalf of the Federal Highway Administration) for this bridge replacement project and accompanied NMFS on a site visit on



July 16, 2012. At that time, the causeways SCDOT proposed were similar in length to the existing causeways. While NMFS acknowledged at that time the salt marsh along the southern side of Jarvis Creek appeared to be higher quality than the marsh along the northern side, NMFS recommended the entire marsh be spanned by the new bridge eliminating (or greatly reducing) the need for new fill. In an email dated December 10, 2012, SCDOT advised NMFS the bridge design had been modified to lengthen the span and thereby minimize impacts to the southern shore of Jarvis Creek, however the final EFH evaluation would be part of the USACE permitting process.

Essential Fish Habitat in the Project Area

The site of the proposed project includes salt marsh habitat, specifically estuarine emergent wetlands, intertidal non-vegetated flats, tidal creeks, oyster reefs, and unconsolidated bottom. The South Atlantic Fishery Management Council (SAFMC) identifies the two former habitats 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. SAFMC also identifies estuarine emergent vegetation, tidal creeks, oyster reefs, and unconsolidated bottom as EFH for estuarine-dependent species of the snapper-grouper complex. SAFMC provides additional information on the EFH for federally managed species in Volume IV of the *Fishery Ecosystem Plan of the South Atlantic Region*¹.

The waters of Jarvis 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 other fish managed under the Magnuson-Stevens Act, such as mackerels, snappers, groupers, billfish, and sharks. Red drum are important as a recreationally caught species, and estuarine wetlands within the project area provide habitat necessary for development and survival throughout all life stages of red drum.

Impacts to Essential Fish Habitat

The project would permanently fill 0.56 acres of salt marsh vegetation and intertidal flats, temporarily clear 0.41 acres of marsh, and permanently shade 0.28 acres of marsh and open water². Filled salt marsh would not provide nursery and foraging habitat for fishery species and their prey. To minimize impacts, SCDOT has elected to shorten the southern causeway leading to the bridge. Marsh vegetation on the northern side of Jarvis Creek is relatively less abundant than vegetation on the southern side of the creek, and the intertidal flats on the northern side of the creek also appear to be lower in quality than those on the southern side (NMFS observed machinery on the northern flats during the July 2012 site visit). This design also reduces impacts to the small tidal creek that intersects the southern shore of the Jarvis Creek near the new bridge. While the new bridge would still impact the salt marsh, intertidal flats, and tidal creek by shading, these impacts would be less severe than filling. NMFS appreciates SCDOT's decision

-

¹ Available at http://safmc.net/EcosystemLibrary/FEPVolumeIV

² Impact acreages identified in the public notice drawings differ from those in the public notice text. On November 17, 2014, SCDOT confirmed the 0.20 acres of fill impacts in wetland 1 on sheet 6 of 11 should read 0.02 acres.

to minimize EFH impacts in the southern portion of the new bridge, however, similar efforts should be taken in the northern area unless evidence is provided showing this is not practicable.

Compensatory Mitigation

SCDOT proposes to mitigate for the impacts to salt marsh by debiting 13.91 mitigation credits from SCDOT's Huspa Creek Mitigation Bank or another approved bank and by purchasing 0.6 freshwater mitigation credits from the Swallow Savannah or Sweetleaf Swamp mitigation bank. NMFS does not object to SCDOT using the Huspa Creek Mitigation Bank to offset impacts to tidal wetlands from this project; the impact and bank site are both within the Broad-St. Helena watershed (HUC 03050208). NMFS is unaware of other mitigation banks with tidal marsh credits in the area and would not support out-of-kind mitigation for this project. NMFS recommends SCDOT satisfy freshwater wetlands mitigation needs by purchasing credits from the Sweetleaf Swamp Mitigation Bank because it located within Jasper County. SCDOT has not proposed to include the 0.48 acres of causeway removal in the compensatory mitigation. NMFS recommends SCDOT ensure the post-removal elevations match existing marsh to promote colonization by salt marsh vegetation.

Conservation Recommendations

NMFS finds the proposed filling and clearing of salt marsh and intertidal 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 provides the following:

EFH Conservation Recommendations

- The permitted bridge design shall further avoid and minimize impacts to EFH by spanning the entire marsh.
- All permitted mitigation for impacts to tidal habitat shall be within the same watershed as Jarvis Creek (i.e., the Broad-St. Helena watershed).
- The permit shall require the new elevations in the causeway removal areas to match the elevations in nearby areas where marsh vegetation occurs.

In accordance with Section 305(b)(4)(B) of the Magnuson-Stevens Act and its implementing regulations at 50 CFR 600.920(k), the Charleston District must provide a detailed response to NMFS in writing within 30 days after receiving this letter. If it is not possible to provide a substantive response within 30 days, an interim response should be provided to NMFS. A detailed response must then 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.

We appreciate 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,

Pace Willer

/ for

Virginia M. Fay Assistant Regional Administrator Habitat Conservation Division

cc:

COE, Elizabeth.G.Williams@usace.army.mil DHEC, trumbumt@dhec.sc.gov SCDNR, DavisS@dnr.sc.gov SAFMC, Roger.Pugliese@safmc.net EPA, Laycock.Kelly@epa.gov FWS, Karen_Mcgee@fws.gov F/SER4, David.Dale@noaa.gov F/SER47, Jaclyn.Daly@noaa.gov