



DEPARTMENT OF THE ARMY

Wilmington District Corps of Engineers

Regulatory Division

69 Darlington Avenue

Wilmington, North Carolina 28403-1343

November 29, 2018

Wilmington Regulatory Field Office
SAW-2015-02235

Roy E. Crabtree, Ph.D, Administrator
Protected Resources Division
Southeast Regional Office
National Marine Fisheries Service
263 13th Avenue South
St. Petersburg, Florida 33701

Dear Mr. Crabtree:

Reference is made to a Department of the Army permit application submitted by the North Carolina State Ports Authority (NCSA), to conduct new dredging within the waters of the Cape Fear River, at the existing Port of Wilmington Turning Basin, in New Hanover County, North Carolina. The overall approximate 20-acre project area would involve expanding the turning basin from 1,400 feet wide to 1,524 feet wide by dredging the eastern and western sides of the present basin, deepening approximately 17.76 acres of shallow and deep soft bottom habitat to -42+3 feet (ft) Mean Low Low Water (MLLW), excavating approximately 1.4 acres of tidal wetlands, removing the existing Chevron pier, and installing a vertical submerged sheet pile toe wall along the eastern extent of the basin. While the turning basin is vacant, the dredge contractor plans to use a mechanical dredge via clamshell bucket and barge to dredge the project area in stages. Prior to initiating dredging, turbidity curtains would be used around the proposed dredge area. Removal of soil and sediments is proposed by using either a barge-mounted crane equipped with a bucket or a long reach excavator boom and bucket if rock or heavy debris is encountered. The dredged material would then be loaded into watertight barges or scows and transported across the Wilmington River where the dredging contractor will re-fluidize the sediments and hydraulically pump the dredged material to the Eagle Island confined disposal facility. Dredges will be brought in on barges and staged along the river depending on the phase of the project.

A total of 560,000 cubic yards of material is proposed to be removed. Approximately 1.4 acres of vegetated wetlands and 1.68 acres of shallow bottom habitat would be permanently converted to open waters, as a result of the proposed expansion. Construction of the proposed 1,416 linear ft toe wall consists of interlocking steel sheet piles with protective coatings that are 70-ft long and driven into the marl layer (see permit drawings). The proposed wall will be completely submerged at -10-ft MLLW and additional H-piles will be installed in the recess of the sheet piles with solar powered navigation lights installed on top of the pile at EL+10-ft MLLW. The proposed toe wall would consist of either 310 sheet piles and 15 H-piles, or 160 King-sheet piles and 160 pipe piles. Construction is proposed to be conducted from a working barge with piling driving equipment standard to the industry.

Work is proposed to take place prior to May 2019 in order for the NCSA Port of Wilmington to continue to service the European and Asian fleets as they continue to increase vessel size.

The proposed project has been assigned Action ID: SAW-2015-02235.

Based on an evaluation of the project's design and location, and additional information (including biological evaluations, environmental reports, or other studies), the U.S. Army Corps of Engineers (Corps) has determined that this project **may affect, and is likely to adversely affect or modify** the following species and their critical habitat protected under the Endangered Species Act (ESA):

Common Name	Latin Name	Listing	Critical Habitat (CH) Designated in North Carolina	Responsible Agency
Atlantic Sturgeon	<i>Acipenser oxyrinchus oxirichus</i>	Endangered	Yes-DPS Carolina CU 4 Cape Fear River and NE Cape Fear River	NMFS
Shortnose sturgeon	<i>Acipenser brevirostrum</i>	Endangered	No	NMFS

Analysis of Potential Routes of Effects to Species

The Action Area contains designated critical habitat for the Atlantic sturgeon and foraging and migration habitat for the shortnose sturgeon. The Cape Fear River supports a small population of Atlantic and shortnose sturgeon. Recent acoustic monitoring (NCDENR 2013) documented the occurrence of 46 Atlantic sturgeon (26 tagged, balance too small for tagging) and one shortnose sturgeon. While the likelihood of their presence in the affected areas is thought to be quite rare, past monitoring and collection efforts demonstrate they may occur in the harbor during their annual migrations up and down river (personal communication, Chip Collier, NCDMF 2013). Only adult and juvenile life stages could occur within the affected area, as eggs and larvae would not be present due to high salinities and lack of appropriate spawning habitat. Dredging effects on sturgeon may include abrasion of gills from sediment suspension, a temporary loss of the benthic community food source within the dredging footprint, and degradation in the benthic foraging habitat down current due to the deposition of suspended sediment. The above effects determinations were made due to the 2016 designation of critical habitat for Atlantic sturgeon and the amount of dredged material (approximately 560,000 cubic yards from 17.76 acres of shallow and deep soft bottom habitat) to be removed compared to that of the most recent modification to the turning basin, dated January 14, 2016, which authorized the removal of approximately 100,000 cubic yards from approximately 8.53 acres of soft bottom habitat, dredged to a depth of -42+2 ft. The current water depths within the project area range from 0 ft to -42 ft MLLW. The impacts associated with this proposal will result in the permanent loss of shallow bottom habitat.

With the above determination, the Corps further requests your **concurrence** pursuant to Section 7 of the ESA of 1973, as amended. Please reference the attached documents for the basis of our determinations.

Furthermore, the Corps has determined that the project would have **no effect** on any other federally listed threatened or endangered species managed by the NMFS, and/or modify their designated critical habitat.

If you have any questions regarding this letter, please contact Ms. Liz Hair at the letterhead address, by telephone at 910-251-4049 by fax at 910-251-4025, or by email at: Sarah.e.hair@usace.army.mil.

Sincerely,

Scott C. McLendon
Chief, Regulatory Division

Enclosures:

Corps Public Notice dated November 15, 2018

October 2018 Biological Assessment

Previous MANLAA Concurrence dated January 12, 2016 (NMFS SER-2015-17520)

Electronic Copy Furnished w/out enclosures:

Mr. Todd Walton, NC SPA

Mr. Steve Dial, Dial Cordy

Ms. Karen Higgins/Mr. Robb Mairs
Division of Water Resources
North Carolina Department of Environmental Quality

Dr. Pace Wilbur/Mr. Fritz Rohde/Ms. Twyla Cheatwood
National Marine Fisheries Service
Habitat Conservation Division

Mr. Doug Huggett/Ms. Heather Coats
Division of Coastal Management
North Carolina Department of Environmental Quality

Mr. Pete Benjamin/Ms. Kathy Matthews
USFWS-Raleigh Ecological Services Field Office