



**US Army Corps
of Engineers®**
Wilmington District

**ENVIRONMENTAL ASSESSMENT
&
FINDING OF NO SIGNIFICANT IMPACT**

**Water Injection Maintenance Dredging
Port of Wilmington
Wilmington, NC**

January 2018

1.0 INTRODUCTION

The Wilmington District, Regulatory Division, received an application from the North Carolina State Ports Authority seeking Department of the Army (D.A.) authorization under 33 USC 408, as implemented in Engineer Circular (EC) 1165-2-216 (Section 408), to incorporate the use of water injection dredging (WID) 4-8 times annually to maintain the berthing areas and turning basin at the Port of Wilmington on the Cape Fear River. The facility is located at 1 Shipyard Boulevard, on the east side of the Cape Fear River, in Wilmington, New Hanover County, NC (Figure 1). The proposed action has the potential to affect the Wilmington Harbor, North Carolina Federal navigation project. Section 408 authorizes the Secretary of the Army to grant permission for the alteration, occupation or use of the project if the Secretary determines that the activity will not be injurious to the public interest and will not impair the usefulness of the project. A decision on a Section 408 request is a federal action, and therefore subject to the National Environmental Policy Act (NEPA) and other environmental compliance requirements.

In accordance with EC 1165-2-216, Para. 7.c.(3)(c), a comprehensive environmental analysis for the proposed work has been conducted by the USACE Wilmington Regulatory Field Office, pursuant to their analysis under Section 404 of the Clean Water Act and Section 10 of the Rivers and Harbors Act of 1899. Compliance with the National Environmental Policy Act (NEPA) is documented by Regulatory through a Statement of Findings/Environmental Assessment (Attachment). Compliance with all other applicable laws and regulations will be completed prior to issuance of the DA permit. This Environmental Assessment and Finding of No Significant Impact (EA/FONSI) has been prepared as part of the 408 analysis, and incorporates by reference the general analysis performed by the Regulatory Field Office, but also addresses any potential concerns that were determined to require additional consideration.

2.0 PURPOSE AND NEED FOR THE PROPOSED ACTION

The Port of Wilmington has commercial berthing operations and storage areas for containers and cargo located on 1 Shipyard Boulevard in Wilmington, NC. The berthing area, which is used for the periodic docking of large container ships, has an authorized depth of -42 feet. However, due to accelerated shoaling within the berthing areas, depths in some areas can get to be as shallow as -27 feet. Depths more shallow than -42 feet pose a grounding and potential hull breach concern for the vessels utilizing the Port, so maintenance dredging is necessary. Typically, the berthing area is maintained by mechanical excavation or by a hydraulic pipeline dredge with material deposited at a suitable high-ground (upland) disposal site. However, due to accelerated shoaling in the berthing area, the Port of Wilmington has requested approval to include water injection dredging as part of their maintenance dredging operations to restore and maintain the authorized -42 feet berthing depth. Use of water injection dredging would provide the Port of Wilmington added flexibility in maintaining safe depths in the berthing area.

3.0 INCORPORATION BY REFERENCE

This Environmental Assessment and Finding of No Significant Impact (EA/FONSI) has been prepared as part of the 408 analysis, and incorporates by reference the general analysis performed by the Regulatory Field Office in Memorandum for Record (MFR), Subject: Department of the Army Memorandum Documenting Nationwide Permit/Regional/Programmatic General Permit No. SAW-1986-00493 (Attachment). However, this EA also addresses any potential concerns that were determined to require additional consideration.

4.0 ALTERNATIVES

4.1 Proposed Action: Water Injection Maintenance Dredging at the Port of Wilmington

The Port of Wilmington proposes to incorporate the use of water injection dredging (WID) 4-8 times annually to maintain the berthing areas and turning basin at the Port of Wilmington on the Cape Fear River. Dredging will take place on outgoing tides between August 1 and January 31 of any given year. The total area of berths 1-9 and the turning basin proposed for dredging is ~2,106,138 sq. ft. (-48.35 acres). The existing berths are approximately 7,500' in length by 100' in width, and the turning basin has a diameter of 1,400', for a total project area of 2,106,138 square feet. Proposed dredging depths will not exceed -42 feet + 2 feet overdepth below Mean Low Water (MLW), which coincides with the depth of the federal channel adjacent to this facility, as currently authorized. Removal amounts are proposed to be about 8,500 cubic yards of material per year that will be temporarily suspended into the river system during outgoing tides. The proposed dredging methodology would utilize high volumes of low pressure water pumped through a series of nozzles on a horizontal jetbar to disrupt the internal friction and cohesive properties of the sediment to create a fluidized soil layer. The layer of sediment moved would remain close to the bottom and would move out of the project area during outgoing tides (Figure 2).

4.2 No Action: Mechanical or Hydraulic Maintenance Dredging at the Port of Wilmington

Under the No Action alternative, the Port of Wilmington would continue to accomplish maintenance dredging of the berthing area using either mechanical or hydraulic dredging with disposal of dredged material in a previously approved upland disposal site.

5.0 IMPACTS ON SIGNIFICANT RESOURCES

5.1 Physical Environment

5.1.1 Sediments

In 2008, sediment samples were taken in the berthing areas. The grain-size of the sediment consisted of 54.7% silt, 41.0% clay, and 4.3% sand, which are within the design and operational capabilities for this system.

The proposed action will result in the temporary resuspension of a negligible volume of fine-grained material during outgoing tides. Under the no action plan, dredged material would be completely removed from the river system and disposed of in an approved upland site. Implementation of either the proposed action or the no action alternative would result in minor impacts to sediments.

5.1.2 Water Quality

Water quality impacts associated with the proposed action are expected to be minor. Pursuant to Section 401 of the Clean Water Act, a General Certification, with conditions, was issued by the North Carolina Division of Water Resources (DWR) on September 26, 2017 (Attachment).

Impacts associated with the no action plan would also be minor.

5.1.3 Air Quality

Areas of the country where air pollution levels persistently exceed the national ambient air quality standards may be designated as "non-attainment" areas. The project area is within an attainment area and there are no known air quality problems in the project area.

Air emissions would increase during construction under both the proposed action and no action alternatives; however, impacts to air quality would be considered negligible with implementation of the proposed action or no action. The proposed action is in compliance with Section 176 (c) of the Clean Air Act, as amended.

5.1.4 Noise

Noise levels vary in the vicinity of the project area. Typical noises include those created by commercial and recreational vessels, as well as noise associated with land-based vehicular traffic.

Implementation of either the proposed action or no action may result in a slight increase in noise in the immediate vicinity of the berthing areas; however, any impacts would be minor and of short duration. Periodic maintenance dredging by any method will not result in significant or sustained amounts of noise.

5.1.5 Cultural Resources

There are no historic resources within the project area; therefore, maintenance dredging by any method (proposed action or no action) would not result in impacts to cultural resources. Reference Attachment for a summary of coordination with the State Historic Preservation Office.

5.1.6 Hazardous, Toxic and Radioactive Wastes (HTRW)

Review of documentation and HTRW databases indicate that there is no evidence of hazardous, toxic, or radioactive waste (HTRW) in the project area, therefore, it is not expected that any hazardous and toxic waste sites would be encountered during maintenance of the berthing areas. Neither the proposed action nor the no action alternatives would result in the production of hazardous waste.

5.2 Natural Resources

5.2.1 Essential Fish Habitat (EFH)

Essential Fish Habitat potentially present in the project area and impacts of the proposed action are addressed in the Attachment. Impacts of the no action alternative would be similar to impacts of the proposed action.

5.2.2 Endangered and Threatened Species

Endangered and Threatened Species potentially present and impacted by the proposed water injection dredging are addressed in the Attachment. Impacts of the no action alternative would be similar to impacts of the proposed action.

5.3 Commerce and Recreation

The navigation channel in the vicinity of the Port of Wilmington allows various-sized vessels to navigate the Cape Fear River, as well as providing a connection to the AIWW and the Atlantic Ocean, for commerce, fishing, and recreation. The fill material that will be moved from the shoaled berthing areas via water injection dredging is a negligible volume of fine-grained material that will be temporarily resuspended during outgoing tides. It is anticipated that the material will disperse downstream of the dredging location over a broad area and will be unobservable in the navigation channel. Under the no action alternative, shoaled material would be completely removed from the system and placed in an approved upland disposal site. Impacts of the proposed water injection dredging and no action alternatives would be short-term and temporary and; therefore, would not adversely affect public uses of the federal channel or the aquatic ecosystem.

6.0 EXECUTIVE ORDERS

Executive Order 11988 (Floodplain Management): Neither the proposed action nor the no action alternative would involve placement of fill material in the floodplain, affect storm flows associated with the 100 -year flood frequency elevation, or affect the impacts of floods on human safety, health, and welfare.

Executive Order 11990 (Protection of Wetlands): This order requires agencies to minimize the destruction, loss or degradation of wetlands, and to preserve and enhance the natural and beneficial values of wetlands in carrying out the agency's responsibilities. Neither the proposed action nor the no action alternative involve placement of fill material in wetlands.

Executive Order 12898 (Federal Actions to Address Environmental Justice in Minority Populations and Low Income Communities and Low Income Populations): The EPA defines environmental justice as the fair treatment and meaningful involvement of all people, regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. Fair treatment means that no group of people; including a racial, ethnic, or socioeconomic group; should bear a disproportionate share of the negative environmental consequences of industrial, municipal, or commercial operations or the execution of federal, state, local, or tribal programs and policies. Neither the proposed action nor the no action alternative would have the potential for disproportionate health or environmental effects on minorities or low-income populations or communities.

Executive Order 13045 (Protection of Children from Environmental Health Risks): This order mandates federal agencies identify and assess environmental health and safety risks that may disproportionately affect children as a result of the implementation of federal policies, programs, activities, and standards (63 Federal Register 19883-19888). Neither the proposed action nor the no action alternative would disproportionately affect children.

Executive Order 13186 (Protection of Migratory Birds): Neither the proposed action nor the no action alternative would result in any significant adverse impacts to migratory bird species or their habitat. There would be no taking of birds.

7.0 CUMULATIVE IMPACTS

The CEQ regulations (40 CFR 1508.7) require assessment of cumulative impacts in the decision-making process for federal projects. Cumulative impacts are defined as "the impact on the environment which results from the incremental impact of the action when added to other past, present, and reasonably foreseeable future actions regardless of what agency (federal or non-Federal) or person undertakes such other actions."

Maintenance dredging of the berthing area at the Port of Wilmington would involve the temporary resuspension of approximately 8,500 cubic yards of dredged material annually in the Cape Fear River. The USACE removes approximately 1 million cubic yards of dredged material from the Cape Fear River navigation channel annually. The negligible volume of dredged material that will be removed at the berthing areas would have no impact on the adjacent navigation channel and would not contribute to environmental impacts when added to other past, present and reasonably foreseeable future actions.

8.0 COORDINATION OF THIS DOCUMENT

This EA/FONSI will be posted on the USACE, Wilmington District website, making it available to the public.

9.0 POINT OF CONTACT

Any questions regarding this EA/FONSI should be addressed to Jennifer L. Owens, Chief, Environmental Resources Section at jennifer.l.owens@usace.army.mil or by phone at 910-251-4757

10.0 FINDING OF NO SIGNIFICANT IMPACT

It is my determination that the Recommended Plan does not constitute a major federal action that would significantly affect the quality of the human environment; therefore, preparation of an Environmental Impact Statement is not required.



Robert J. Clark
Colonel, U.S. Army
District Commander

Date: 23 JAN 18

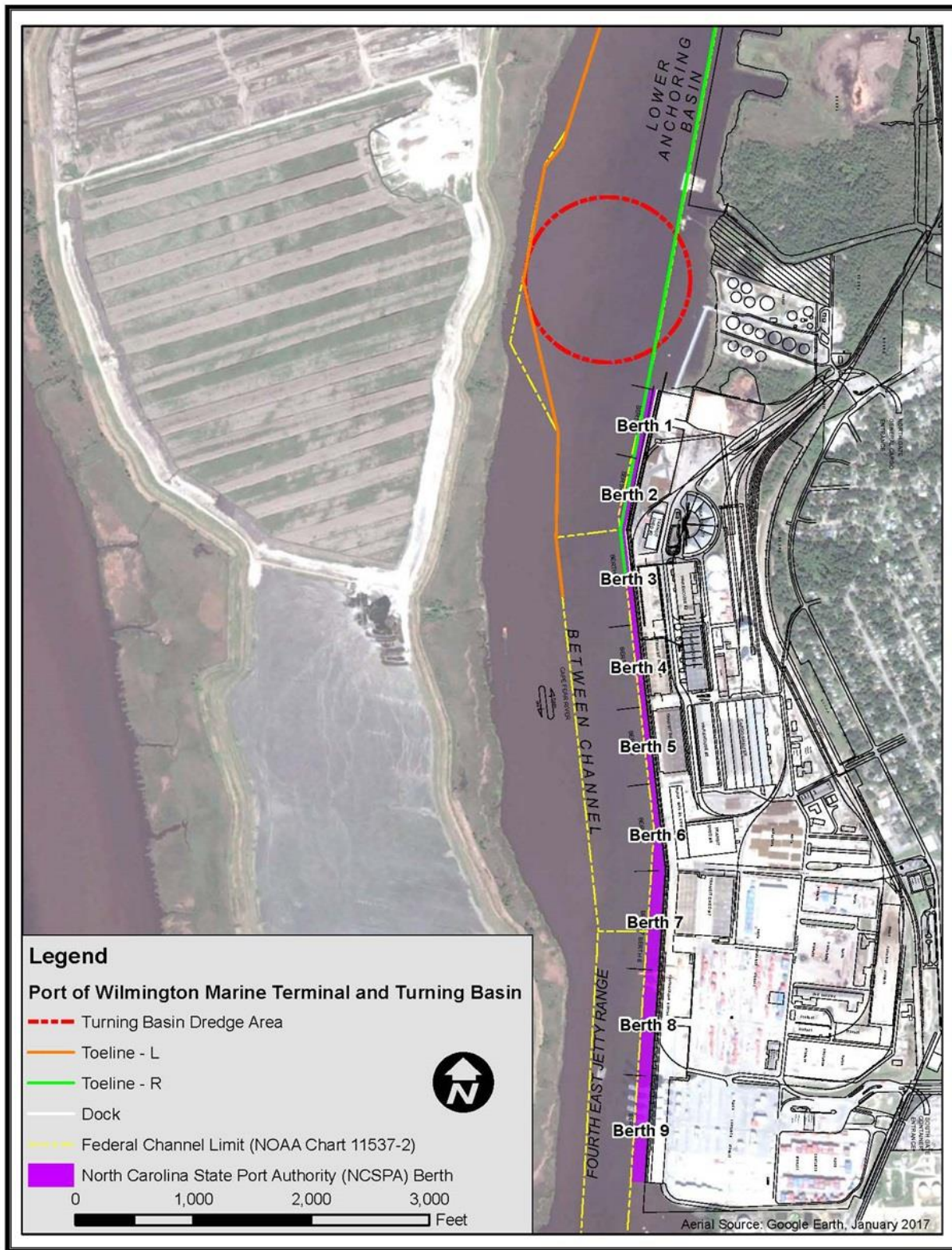


Figure 1. Port of Wilmington Marine Terminal and Turning Basin

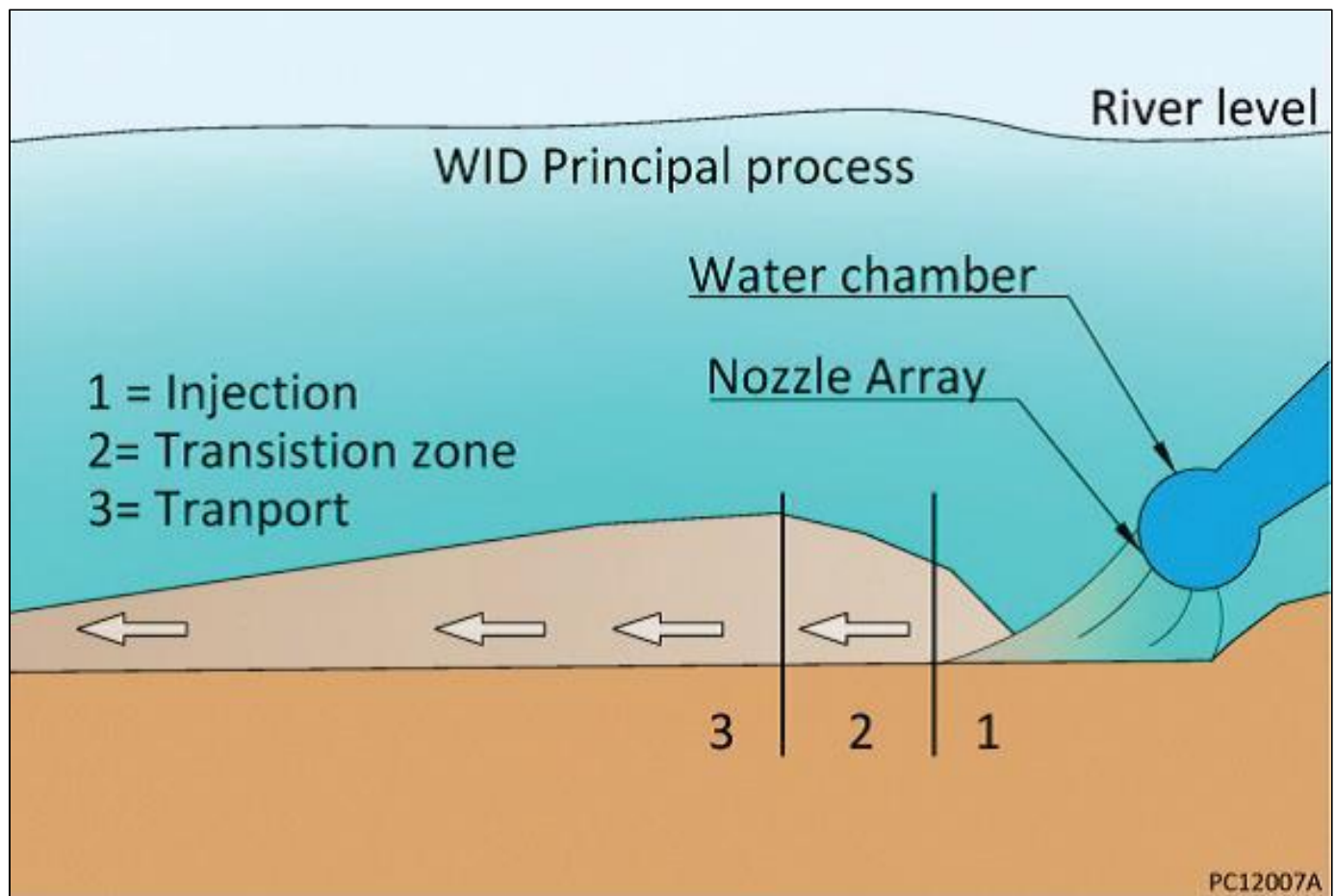


Figure 2. Water Injection Dredging Principal Process

ATTACHMENT

69 Darlington Avenue
Wilmington, North Carolina 28403

Application No. SAW-1986-00493

MEMORANDUM FOR RECORD

SUBJECT: Department of the Army Memorandum Documenting Nationwide Permit/Regional/Programmatic General Permit Verification

1. **Applicant:** North Carolina State Ports Authority, Mr. Paul Cozza
2. **Project Location** (*Waterway, Section, Township, Range, City, County, State*):

Nearest Waterway: Cape Fear River

Nearest Town: Wilmington

County: New Hanover

State: NC

USGS HUC: 03030005

Location description: The project encompasses the entirety of the Port of Wilmington Turning Basin and Berths 1-9 located at 1 Shipyard Boulevard, within the Cape Fear River, Wilmington, New Hanover County, North Carolina.

3. **Pre-Construction Notification Receipt Date:** June 6, 2017

Complete? ☒ Yes ☐ No

4. **Additional Information Requested Date:**

5. **Pre-Construction Notification Complete Date:** June 6, 2017

6. **Waters of the US:**

*Previous Jurisdictional Determinations conducted on previous permit issuances. Under this authorization, no JD is required as the aquatic resource is a TNW (Cape Fear River).

7. **Authority:** Section 10/404

8. **Project Description** (*Describe activities in waters of the U.S. considered for verification*): The applicant (NCSPA) proposes to modify the existing, previously approved, dredging methodology to conduct Water Injection Dredging (WID) also known as jet scour, to maintain authorized shipping berth depths at -42+2 ft. The project has a previous Action ID: SAW-1986-00493, State Permit No.47-87 and encompasses the entirety of the Port of Wilmington Turning Basin and Berths 1-9 located at 1 Shipyard Boulevard, within the Cape Fear River, Wilmington, New Hanover County, North Carolina.

The proposed dredging at the berths and turning basin consist of open water impacts to approximately 2,106,138 sf to previously impacted, unconsolidated, mud bottom and downstream receiving waters. Dredging depths will not exceed -42 feet (plus 2' over-dredge) below MLW, as currently authorized. The

current authorized dredging methodologies include hydraulic cutterhead dredging, mechanical, and Agitation Maintenance Dredging (AMD) also known as sled dragging or bed leveling. This project location has previously been analyzed in the BA and EFHA and subsequent coordination with resource agencies in 2014 for use of AMD.

Maintenance dredging of the federal channel and turning basin is typically performed by the Wilmington District USACE. A large hydraulic cutterhead dredge, contracted by the USACE, is used annually for maintenance dredging of the harbor and turning basin. This includes annual dredging of berths of the NCSPA. Disposal has historically been to the Eagle Island disposal area west of the Port of Wilmington. Both clamshell dredging and hydraulic cutterhead dredging are typically employed for new construction or berth dredging. However, these methods are also included in the maintenance dredging permits to allow for some flexibility in the use of the most cost effective method. This Proposed Action is considered similar to agitation dredging methods as permitted for the POW and other marine terminals (USACE - GP 291 dated 2014). Unlike agitation dredging that disperses the sediment into the whole water column; WID fluidizes sediment into a narrow controlled density gradient that remains just above the bed. As such, the overlying water layers are not affected by WID. On falling tides, the dense plume would be carried into the federal channel and river downstream of the port. Supplemental dredging by the dredging contractor for the NCSPA averaged 31,000 cubic yards (CY) between 2007 and 2015. Agitation dredging by the NCSPA averages 8,500 CY per year. These averages are proposed to be the same utilizing the new methodology.

9. Type of Permit Requested: GP 291

10. Pre-construction Notification Required: ☒Yes ☐No

11. Waiver required to begin work (see GC 27 (a)(2) as applied to appropriate NWP(s):

☐Yes ☒No

Rationale:

12. Coordination with Agencies/Tribes Needed: ☒Yes ☐No Date: July 11, 2017

Resolution: The Corps provided a public notice to resource agencies (USEPA, NMFS, USFWS, USCG, and other SAW branches) as part of the GP 291 process with the language and determinations below:

Pursuant to the CAMA-Corps Programmatic Permit process, the North Carolina Division of Coastal Management (NCDCM) has forwarded to our office a copy of the CAMA permit modification request, Field Investigation Report, and BioReport for the subject project. The attached notice requests federal agency comments on these project by August 10, 2017

EFH: This notice initiates the Essential Fish Habitat (EFH) consultation requirements of the Magnuson-Stevens Fishery Conservation and Management Act. The Corps' initial determination is that the proposed projects may affect, and likely adversely affect EFH or associated fisheries managed by the South Atlantic or Mid Atlantic Fishery Management Councils or the National Marine Fisheries Service. Impacts are expected to be minimized

however, through the implementation of the conservation measures proposed in the attached project description. The waters within the project area are designated as PNA. SAV is not expected to be present based on aerial imagery of the project location, the high energy of the system, and ongoing dredging activities. On March 5, 2014, NMFS determined that the projects previously permitted under AMD may adversely affect EFH and provided three EFH Conservation Recommendations. The Corps will incorporate the Conservation Recommendations below into any authorization of the current proposals.

-Agitation dredging shall not be allowed within a berth when agitation dredging is occurring within another berth is less than 5, 000 feet away.

-All requests for agitation dredging outside the period October 1 to January 31 shall be coordinated with NMFS and shall include an explanation as to why the dredging could not abide by the dredging window and the additional measures that will be taken to ensure impacts to fishery resources are minimal.

-Agitation dredging shall only be conducted during outgoing/falling tides.

ESA: The Corps has reviewed the project area, examined all information provided by the applicant and consulted the latest North Carolina Natural Heritage Database. Based on available information, the Corps has determined that the project will affect, but not likely adversely affect the West Indian Manatee. The project will not affect any other species managed by the USFWS and listed as threatened or endangered or their critical habitat formally designated pursuant to the Endangered Species Act of 1973 (ESA) within the project area. The previous authorizations for AMD included the current proposal locations for the berths and turning basin in the BA and EFHA. The use of Manatee Guidelines will be required as a permit condition and work windows will be required as proposed in any conservation recommendations.

Effects to Sturgeon and other species managed by the NMFS PRD will be addressed through coordination.

NHPA: Pursuant to Section 106 of the National Historic Preservation Act (NHPA) of 1966, Appendix C of 33 CFR Part 325, and the 2005 Revised Interim Guidance for Implementing Appendix C, the District Engineer consulted district files and records and the latest published version of the National Register of Historic Places and initially determines that no historic properties, nor properties eligible for inclusion in the National Register, are present within the Corps' permit area: therefore, there will be no historic properties affected by this change in methodology.

408: The Corps will coordinate internally and fulfill all required analysis under Section 408 in separate correspondence.

13. Commenting Agencies:

a. US Fish and Wildlife Service: In a letter dated August 10, 2017, the USFWS stated that they concur that the project may affect, but is not likely to adversely affect the West Indian

Manatee. They stated that they believe the requirements of section 7(a)(2) of the ESA have been satisfied for this project.

b. US Environmental Protection Agency: In an email dated July 21, 2017 the EPA wrote: “At this time the EPA has no comments or concerns with the project as described per the documents forwarded to us.”

c. National Marine Fisheries Service: NMFS EFH-by email on July 25, 2017 the NMFS HCD replied to the public notice: “The NMFS has reviewed your email correspondence, dated July 11, 2017, regarding water injection dredging for North Carolina State Ports Authority (SAW-1986-00493). The NMFS has no objection to the Wilmington District moving forward with authorization for this project provided the permit include Conservation Recommendations as practicable measures to reduce environmental impacts. The NMFS appreciates the Wilmington District’s consistent approach with harbor projects to conserve habitat and protect fish populations within the Cape Fear River. As with authorized agitation maintenance projects within the Port of Wilmington, the NMFS recommends: (1) water injection dredging shall not be allowed within a berth when dredging is occurring within another berth is less than 5,000 feet away; (2) All requests for water injection dredging outside the period 1 October to 31 January shall be coordinated with NMFS and shall include an explanation as to why the dredging could not abide by the dredging window and the additional measures that will be taken to ensure impacts to fishery resources are minimal; and (3) Water injection dredging shall only be conducted during outgoing/falling tides to promote downstream movement of unconsolidated alluvial material.”

NMFS T&E - The Corps initially determined that the project MANLAA the shortnose sturgeon and the Atlantic sturgeon. Request for informal consultation was sent to NMFS PRD on July 13, 2017. The project was logged into PCTS tracking for consultation on July 14, 2017.

d. State Agency (list commenting state agencies):

e. State Historic Preservation Office: Acknowledgment of receipt of Public Notice was transmitted to the Corps on July 11, 2017. No further response from SHPO was received.

f. Other: USCG-Previously expressed concern about affects to the federal navigation project from the deposition of suspended sediments. Conditions have been added to the verification, as recommended by the Corps Navigation Branch. The applicant will be required to survey the channel to ensure that any shoaling does not affect the federal channel.

USACE Navigation Branch- Stated that the material should be deposited in the federal channel. Navigation has been involved throughout the process and they helped develop permit conditions to protect the federal channel. All conditions will be incorporated into the verification. The conditions require the applicant to coordinate with Navigation and Regulatory prior to any dredging and surveys of the dredged area and the federal channel before and after any dredging activity. The applicant will be required to remove

accumulated sediments in the federal channel if any sedimentation interferes with navigation.

14. Substantive Issues Raised and Corps Resolution (*Consideration of Comments*): None

15. Compliance with Other Federal Laws (*If specific law is not applicable write N/A*):

a. Endangered Species Act:

(1) Name of species present: West Indian Manatee, Sturgeon Species

(2) Effects determination: May affect, not likely to adversely affect. Based on available information, the Corps has determined that the project may affect, but not likely adversely affect the West Indian Manatee. The project will not affect any other species managed by the USFWS and listed as threatened or endangered or their critical habitat formally designated pursuant to the Endangered Species Act of 1973 (ESA) within the project area. The use of Manatee Guidelines will be required as a permit condition and work windows will be required as proposed in any conservation recommendations.

(3) Date of Service(s) concurrence: In a letter dated August 10, 2017, the USFWS stated that they concur that the project may affect, but is not likely to adversely affect the West Indian Manatee. They stated that they believe the requirements of section 7(a)(2) of the ESA have been satisfied for this project. The use of Manatee Guidelines will be required as a permit condition. The Corps initially determined that the project MANLAA the shortnose sturgeon and the Atlantic sturgeon.

(4) Basis for “no effect” determination:

(5) Additional information (optional):

b. Magnuson-Stevens Act (Essential Fish Habitat):

(1) Name of species present: The river and estuarine waters contain unconsolidated bottom habitat for larval, juvenile, and adult finfishes of the snapper/grouper complex, coastal demersals, coastal pelagic, pinead shrimp/invertebrates, and two shark species.

(2) Effects determination: The Corps' initial determination is that the proposed projects may affect, and likely adversely affect EFH or associated fisheries managed by the South Atlantic or Mid Atlantic Fishery Management Councils or the National Marine Fisheries Service. Impacts are expected to be minimized however, through the implementation of the conservation measures proposed in the attached EFHA.

(3) Date of Service(s) concurrence: By email on July 25, 2017 the NMFS HCD replied to the public notice: “The NMFS has reviewed your email correspondence, dated July 11, 2017, regarding water injection dredging for North Carolina State Ports Authority (SAW-1986-00493).

The NMFS has no objection to the Wilmington District moving forward with authorization for this project provided the permit include Conservation Recommendations as practicable measures to reduce environmental impacts. The NMFS appreciates the Wilmington District's consistent approach with harbor projects to conserve habitat and protect fish populations within the Cape Fear River. As with authorized agitation maintenance projects within the Port of Wilmington, the NMFS recommends: (1) water injection dredging shall not be allowed within a berth when dredging is occurring within another berth is less than 5,000 feet away; (2) All requests for water injection dredging outside the period 1 October to 31 January shall be coordinated with NMFS and shall include an explanation as to why the dredging could not abide by the dredging window and the additional measures that will be taken to ensure impacts to fishery resources are minimal; and (3) Water injection dredging shall only be conducted during outgoing/falling tides to promote downstream movement of unconsolidated alluvial material."

(4) Basis for "no effect" determination:

(5) Additional information (optional): The three EFH Conservation Recommendations will be added as special conditions of the DA authorization

c. Section 106 of the National Historic Preservation Act:

- (1) Known site present: ☐ yes ☒ no
- (2) Survey required/conducted: ☐ yes ☒ no
- (3) Effects determination: no potential to effect
- (4) Rationale: no resources present
- (5) Date consultation complete (if necessary):
- (6) Additional information (optional):

d. Section 401 Water Quality Certification:

- (1) Individual certification required: ☐ yes ☒ no
- (2) Individual Certification: ☐ Issued ☐ Waived ☐ Denied
- (2) General Certification: ☒ Yes ☐ No
- (4) Additional Information (optional): GC, with conditions, received on September 26, 2017

e. Coastal Zone Management Act:

- (1) Individual certification (CAMA Major) required: ☐ yes ☒ no

(2) Individual certification: ☐ Issued ☐ Waived ☐ Denied

(3) General Certification: ☒ yes ☐ no

(4) Additional Information (optional): CAMA permit issued on and received

f. Wild and Scenic Rivers Act:

(1) Project located on designated or "study" river: ☐ yes ☒ no

(2) Managing Agency:

(3) Date written determination provided that the project will not adversely affect the Wild and Scenic River designation or study status:

(4) Additional information (optional):

g. Other

16. Special Conditions Required (*include rationale for each required condition/explanation for requiring no special conditions*): ☒ yes ☐ no

a. The activity is conducted in accordance with the information submitted and meets the conditions applicable to the General Permit, as described in the Programmatic General Permit GP 291.

b. Special conditions are required to protect EFH, T&E, navigation and the federal project.

Special Conditions

SAW-1986-00493

Jet Scour Modification

1. All work authorized by this permit must be performed in strict compliance with the attached plans, which are a part of this permit. Any modification to these plans must be approved by the U.S. Army Corps of Engineers, Wilmington District (USACE) prior to implementation.

2. Except as authorized by this permit or any USACE approved modification to this permit, no excavation, fill or mechanized land-clearing activities shall take place at any time in the construction or maintenance of this project, within waters or wetlands. This permit does not authorize temporary placement or double handling of excavated or fill material within waters or wetlands outside the permitted area. This prohibition applies to all borrow and fill activities connected with this project.

3. All mechanized equipment will be regularly inspected and maintained to prevent contamination of waters and wetlands from fuels, lubricants, hydraulic fluids, or other toxic materials. In the event of a spill of petroleum products or any other hazardous waste, the permittee shall immediately report it to the N.C. Division of Water Quality at (919) 733-5083, Ext. 526 or (800) 662-7956 and provisions of the North Carolina Oil Pollution and Hazardous Substances Control Act will be followed.

4. If the permittee discovers any previously unknown historic or archeological remains while accomplishing the authorized work, he will immediately notify USACE who will initiate the required coordination procedures.
5. The permittee shall require its contractors and/or agents to comply with the terms and conditions of this permit in the construction and maintenance of this project, and shall provide each of its contractors and/or agents associated with the construction or maintenance of this project with a copy of this permit. A copy of this permit, including all conditions, shall be available at the project site during construction and maintenance of this project.
6. The permittee, upon receipt of a notice of revocation of this permit or upon its expiration before completion of the work will, without expense to the United States and in such time and manner as the Secretary of the Army or his authorized representative may direct, restore the water or wetland to its pre-project condition.
7. Violations of these conditions or violations of Section 404 of the Clean Water Act or Section 10 of the Rivers and Harbors Act must be reported in writing to USACE within 24 hours of the permittee's discovery of the violation.

Navigation Conditions

8. The authorized activity must not interfere with the public's right to free navigation on all navigable waters of the United States. No attempt will be made by the permittee to prevent the full and free use by the public of all navigable waters at or adjacent to the authorized work for reason other than safety.
9. The permittee shall assign a permanent maintenance dredging point of contact (POC) for the authorized berth facility (i.e., Berth POC) and shall submit the name, phone number, mailing address, and email address of the Berth POC to USACE within 30 days of the date of permit issuance. The permittee shall notify USACE of any change in the Berth POC. USACE Navigation and Regulatory POCs are listed below. The preferred method of information exchange, dredging request, report submissions, etc., is electronic.

U.S. Army Corps of Engineers
Operations Division, Navigation Branch
Attention: Chief of Navigation
69 Darlington Avenue
Wilmington, North Carolina 28403
(910) 251-4822
Roger.D.Bullock@usace.army.mil

U.S. Army Corps of Engineers
Regulatory Division,
Attention: Tyler Crumbley
69 Darlington Avenue
Wilmington, North Carolina 28403
(910) 251-4170
Tyler.Crumbley@usace.army.mil

10. The permittee shall notify NOAA/NATIONAL OCEAN SERVICE Chief Source Data Unit N CS261, 1315 E West HWY - RM 7316, Silver Spring, MD 20910-3282 at least two weeks prior to beginning work and upon completion of work.

11. The permittee is only authorized to use agitation dredging in the identified berth/slip for the removal of accumulated sediments to maintain the facility at its authorized depth by dragging an I-beam or other similar device for the purpose of re-suspending accumulated sediment.

12. At least 7 days in advance of a planned maintenance dredging event, the permittee shall provide the Navigation POC with copies of the before dredging surveys/maps of the berth/slip and adjacent federal channel(s) in order to obtain Corps approval. The permittee will be informed whether the proposed dredging can be conducted as scheduled and that proposed dredging events may be subject to postponement or modification. The permittee shall be responsible for resolving scheduling conflicts.

13. The following harbor conditions will be considered by the Navigation POC when scheduling a dredging event, and may result in event postponement and/or modification:

- a. An approved or ongoing dredging event is within 3000' upstream or downstream of a berth where an agitation dredging event is proposed.
- b. Agitation dredging in any berth that is located within 2000' upstream or downstream of a shoal in the federal channel.
- c. Ongoing or scheduled dredging in the federal channel within 5000' upstream or downstream of a berth where an agitation dredging event is proposed.

14. The permittee shall perform required hydrographic surveys in accordance with criteria and procedures contained in the "US Army Corps of Engineers Hydrographic Surveying Manual," EM 1110-2-1003. Required hydrographic surveys shall be provided to Navigation POC as plan views and shall include the shoreline and berthing facilities, stationed to match the USACE conducted surveys.

15. The permittee shall conduct a hydrographic survey of the berth/slip no more than 15 days before and no more than 7 days after each maintenance dredging event. An event includes all maintenance dredging work performed during one or more ebb tides, in the accomplishment of one maintenance dredging cycle. In instances where a post dredging survey is not performed within 7 days of completing the dredging event, the permittee shall calculate the volume of material dredged by using the pre-event survey and the authorized berth depth (i.e., USACE will assume that the berth was dredged to its authorized depth). At least 24 hours prior to conducting the before and after dredging hydrographic surveys, the permittee will notify the Navigation POC of the scheduled survey, in the event USACE would also like to run a comparable survey at the same time.

16. The permittee shall also conduct a hydrographic survey of the federal channel before and after every agitation event of a slip. Channel surveys shall be performed no more than 15 days before and within 7 days of completing the dredging event. Surveys are required of the federal channel for a distance of approximately 2000' downstream and 1000' upstream of the point where dredging occurred. The permittee is required to survey the entire width of the federal channel.

17. Reporting. Within 20 days of the completion of an approved dredging event, the permittee shall submit the following minimum information to the USACE Regulatory and Navigation POC:

- a. Berth location and authorized depth
- b. Dredging begin and end date(s) and time(s)
- c. Calculated volume of material removed from berthing facility/slip(s)

d. Copies of both pre and post dredging hydrographic survey sounding data (XYZ) and map of the berth/slip(s) in DWG, DGN or PDF format.

e. Copies of both pre and post dredging hydrographic survey sounding data (XYZ) and map of the adjacent federal channel(s) in DWG, DGN, or PDF format.

18. To obtain approval from the Navigation POC to conduct a maintenance dredging event, the permittee must be in compliance with all permit conditions including the reporting requirements listed in Special Condition 19. Failure by the permittee to maintain accurate maintenance dredging documentation, and to submit accurate and timely dredging information will result in disapproval by the Navigation POC of a request to conduct a maintenance dredging event. If the permittee is found to be non-compliant with reporting requirements, the Navigation POC will not grant approval for a requested maintenance dredging until after the permittee has posted delinquent reporting requirements and is found to be compliant with all permit conditions.

19. As determined by the District Engineer, any accumulated sediment in the federal channel caused by the agitation dredging activities shall be removed by the permittee if the accumulated sediments are determined to interfere with navigation.

EFH Conditions

20. Agitation dredging shall not be allowed within a berth when agitation dredging is concurrently ongoing within another berth that is less than 5,000 feet away.

21. All requests for agitation dredging outside the period October 1 to January 31 shall be coordinated with NMFS and shall include an explanation as to why the dredging could not be conducted within the sturgeon and anadromous fish work windows (October 1 to January 31), and shall provide additional measures that will be taken to ensure impacts to fishery resources are minimal.

22. Agitation dredging shall only be conducted during outgoing/falling tides.

ESA Conditions

23. All in-water work must be conducted outside the Atlantic and Shortnose sturgeon moratoria dates from February 1 to September 30.

24. In order to further protect the endangered West Indian Manatee, *Trichechus manatus*, the applicant must implement the U.S. Fish and Wildlife Service's Manatee Guidelines, and strictly adhere to all requirements therein. The guidelines can be found at <https://www.fws.gov/nc-es/mammal/manatee.html>

End Special Conditions

17. Compensatory Mitigation Determination: The applicant has avoided and minimized impacts to the maximum extent practicable.

a. Is compensatory mitigation required for unavoidable impacts to jurisdictional aquatic resources to reduce the individual and cumulative adverse environmental effects to a minimal level?

☐ yes ☒ No Impacts occur in deep, open water aquatic habitat. No special aquatic sites are will be impacted.

b. Is the impact in the service area of an approved mitigation bank? ☐ yes ☐ no

(1) Does the mitigation bank have appropriate number and resource type of credits available? ☐ yes ☐ no

c. Is the impact in the service area of an approved in-lieu fee program? ☐ yes ☐ no

(a) Does the in-lieu fee program have appropriate number and resource type of credits available? ☐ yes ☐ no

d. Check the selected compensatory mitigation option(s):

☐ mitigation bank credits

☐ in-lieu fee program credits

☐ permittee-responsible mitigation under a watershed approach

☐ permittee-responsible mitigation, on-site and in-kind

☐ permittee-responsible mitigation, off-site and out-of-kind

e. If a selected compensatory mitigation option deviates from the order of the options presented in §332.3(b)(2)-(6), explain why the selected compensatory mitigation option is environmentally preferable. Address the criteria provided in §332.3(a)(1) (i.e., the likelihood for ecological success and sustainability, the location of the compensation site relative to the impact site and their significance within the watershed, and the costs of the compensatory mitigation project):

Determination (*Reference General Condition 27(e)*):

The proposed activity, with proposed mitigation (if applicable) would result in no more than minimal individual and cumulative adverse environmental effects and would not be contrary to the public interest provided the special conditions and/or modifications identified in the above sections are incorporated. This project complies with all terms and conditions of GP 291, including any applicable regional conditions.

PREPARED BY:

Tyler Crumbley

Date: January 10, 2018