



**Wilmington Harbor, North Carolina  
Navigation Improvement Project**

**Integrated  
Section 203 Study  
&  
Environmental Report**

**APPENDIX Q  
PUBLIC AND AGENCY INVOLVEMENT  
CORRESPONDENCE**

**June 2019**

# Table of Contents

1	Introduction.....	1
2	Summary of Activities .....	2
2.1	Public Notification of Study.....	2
2.2	Public Notification of Stakeholder Information Meeting .....	2
2.3	Public Information Meeting .....	2
2.4	Agency Engagement Meeting .....	2
3	Summary of Public and Agency Comments Received.....	3
3.1	Public Comments Received .....	3
3.2	Agency Meeting Summary.....	4
4	Technical Working Groups.....	7
4.1	Schedule and Goals for Meetings.....	7
4.1.1	Wetland Working Group.....	7
4.1.2	Fish and Fisheries Habitat Working Group .....	8
4.1.3	Beneficial Use of Dredged Material Working Group.....	8
4.1.4	Technical Working Group Members .....	8
4.1.5	Meeting Summaries .....	11
APPENDIX A	Public Involvement Correspondence and Notices	
APPENDIX B	Interagency Meeting Correspondence and Notices	

## List of Tables

Table 1. Wilmington Harbor Study public information meeting list of attendees.....	3
Table 2. Comments received from the public following the public workshop.....	4
Table 3. Wilmington Harbor Study interagency meeting list of attendees.....	5
Table 4. Summary of comments from state and federal agencies. ....	6
Table 5. Wilmington Harbor Improvement Section 203 Study.....	9
Table 6. Wilmington Harbor Improvement Section 203 Study.....	10
Table 7. Wilmington Harbor Improvement Section 203 Study.....	10

# **1 INTRODUCTION**

This report summarizes the public and agency involvement activities conducted by the North Carolina State Ports Authority (NCSPA) for the Wilmington Harbor Navigation Improvement Feasibility and Environmental Study Report during the informal scoping period of the study. Since the United States Army Corps of Engineers (USACE) will not be engaged in the National Environmental Policy Act (NEPA) coordination process until the ASA's office reviews the draft study report and authorizes the Wilmington District to conduct the NEPA coordination process, formal scoping can't be performed. However, in order to produce a technically sound document early coordination with the regulatory agencies and public of the study process was deemed crucial. The purpose of public involvement and outreach was to notify and inform the stakeholders and the public about the scope of the analysis and process, including relevant environmental issues and the range of viable alternatives.

## **2 SUMMARY OF ACTIVITIES**

### **2.1 Public Notification of Study**

A notification of initiation of the study was published on the NCSPA's website on 20 June 2018 and in the Wilmington Star News newspaper on 1 July 2018. A copy of this notice is provided in Appendix A. This notice described the scope of the study and the study process.

### **2.2 Public Notification of Stakeholder Information Meeting**

Stakeholders were informed of the scheduled Public Information meeting, held on 8 August 2018, through notice in the Wilmington Star News newspaper on 1 July 2018 and on the NCSPA's website. Notices are provided in Appendix A. Interviews were performed by port staff with the Wilmington Star News, Coastal Carolina Review and the State Port Pilot.

### **2.3 Public Information Meeting**

The public information meeting was held on 8 August 2018 at the Coastline Convention Center from 5:00 to 7:00 pm as an informal workshop, with boards serving to illustrate the study process, alternatives and environmental issues to be assessed. A copy of the boards presented is provided in Appendix A.

### **2.4 Agency Engagement Meeting**

Through coordination with the North Carolina Department of Environmental Quality (NCDEQ) Division of Coastal Management (NCDCM), an interagency coordination meeting was held on 9 August 2018 at the Wilmington NCDCM office at 10:00 am to inform the state and federal agencies of the key technical aspects of the effects analysis, and the range of alternatives to be considered. The NCDCM coordinated the date and time of the meeting with all involved to ensure good attendance. A copy of the meeting agenda and presentation is provided in Appendix B.

### 3 SUMMARY OF PUBLIC AND AGENCY COMMENTS RECEIVED

#### 3.1 Public Comments Received

A total of 30 people attended the public information meeting (Table 1) and other than the project team and port staff, attendees included two agency personnel, five members of local non-profit organizations, six local government officials, and eight members of the public.

Due to the informal nature of the workshop, no one provided written comments at the meeting or to the port since the meeting. General comments received verbally at the meeting related to understanding the study process, alternatives being considered, whether the port planned on developing the Southport property and the project schedule. Emails of two comments received are summarized in Table 2 below and provided in full in Appendix A.

**Table 1. Wilmington Harbor Study public information meeting list of attendees.**

Name	Address	Affiliation	Email
Kit Adcock	9 Dowitcher Tr. Box 3044 Bald Head Island, NC	Village of Bald Head Island	<a href="mailto:kadcock@villagebhi.org">kadcock@villagebhi.org</a>
Jenn Allen	605 N. Gate Morehead City, NC	Coastal Review Online	<a href="mailto:jennifera@nccoast.org">jennifera@nccoast.org</a>
Todd Walton	PO Box 9002 Wilmington, NC 28402	NCSPA	<a href="mailto:WH203study@ncports.com">WH203study@ncports.com</a>
Anne Terry	402 Mainship Ct. Carolina Beach, NC 28428	Cape Fear River Watch (CFRW)	<a href="mailto:annebterry113@gmail.com">annebterry113@gmail.com</a>
Doug Huggett		NCDCM	<a href="mailto:doug.huggett@ncdenr.gov">doug.huggett@ncdenr.gov</a>
Heather Coats		NCDCM	<a href="mailto:heather.coats@ncdenr.gov">heather.coats@ncdenr.gov</a>
Greg Finch		Land Management Group	<a href="mailto:gfinch@lmgroup.net">gfinch@lmgroup.net</a>
Michael Rice	2012 Bonner Bussells Dr Southport, NC 28461	Save the Cape	<a href="mailto:mike@savethecape.org">mike@savethecape.org</a>
Frank Yelverton	617 Sunny St. Wilmington, NC 28401	CFRW	<a href="mailto:frank@cfrw.us">frank@cfrw.us</a>
Kerri Allen	744 Antler Dr. Wilmington, NC	North Carolina Coastal Federation	<a href="mailto:kerria@nccoast.org">kerria@nccoast.org</a>
Julia Berger	4709 College Acres Dr. #2 Wilmington, NC	CZR Inc.	<a href="mailto:jberger@czi-inc.com">jberger@czi-inc.com</a>
Karen Mosteller	310 N. Atlantic Ave Southport, NC 28461	City of Southport	
Chris McCall	PO Box 3009 Bald Head Island, NC 28461	Village of Bald Head Island	<a href="mailto:cmccall@villagebhi.org">cmccall@villagebhi.org</a>

**Table 1. (concluded).**

Name	Address	Affiliation	Email
Paul Masten		AECOM	<a href="mailto:paul.masten@aecom.com">paul.masten@aecom.com</a>
Carrie Moffeet	PO Box 3030 Bald Head Island, NC 28461	Bald Head Association	<a href="mailto:carrie@baldheadassociation.com">carrie@baldheadassociation.com</a>
Charles Baldwin		Village of Bald Head Island	<a href="mailto:cbaldwin@brookspierce.com">cbaldwin@brookspierce.com</a>
Andy Sayre		Village of Bald Head Island	<a href="mailto:andy@wwpbaldhead.com">andy@wwpbaldhead.com</a>
Debbie Maurer		The Nature Conservancy	<a href="mailto:dmaurer@tnc.org">dmaurer@tnc.org</a>
Phillip Todd		Atlantic Reef Maker	<a href="mailto:ptodd@atlanticreefmaker.com">ptodd@atlanticreefmaker.com</a>
Paul Lawler		City of Wilmington	<a href="mailto:paul.lawler@wilmingtonnc.gov">paul.lawler@wilmingtonnc.gov</a>
Brayton Willis	Leland	Resident	<a href="mailto:shoesand@ec.rr.com">shoesand@ec.rr.com</a>
Robert Neal	Wilmington	Moffatt and Nichol	<a href="mailto:rneal@moffattnichol.com">rneal@moffattnichol.com</a>
Lora Sharkey	Southport	Resident	<a href="mailto:lsharkey63@gmail.com">lsharkey63@gmail.com</a>

**Table 2. Comments received from the public following the public workshop.**

Source / Affiliation	Specific Request
Maria Farmer / citizen	<ul style="list-style-type: none"> <li>Access to other reports and information</li> </ul>
Dr Robert Parr / citizen	<ul style="list-style-type: none"> <li>Requesting access to another information and to be added to future mailing list</li> </ul>

### 3.2 Agency Meeting Summary

The agencies in attendance included state agency staff from the NCDCM, North Carolina Division of Marine Fisheries, and North Carolina Water Resources Commission (NCWRC) and federal staff from the National Marine Fisheries Service (NMFS), United States Fish and Wildlife Service (USFWS), United States Environmental Protection Agency (USEPA), and the United States Coast Guard. The Bureau of Ocean Energy Management (BOEM) could not attend, but was provided supporting agenda and a copy of the presentation. The USACE did not attend the meeting, other than a representative from the Regulatory Division, since they have not been authorized by the ASA's office to participate. A list of attendees is provided in Table 3, below. A presentation was made first and followed by discussion of topical items included in the agenda. Comments provided verbally are summarized below, in terms of recommendations from those attending (Table 4).

**Table 3. Wilmington Harbor Study interagency meeting list of attendees.**

Name	Agency	Phone	Email
Cameron Weaver	NCDEQ-Department of Environmental Assistance and Customer Service	910-796-7265	Cameron.Weaver@ncdenr.gov
*Daniel Holliman	USEPA	404-562-9531	Holliman.Daniel@epa.gov
Doug Huggett	NCDCM	252-808-2808	Doug.Huggett@ncdenr.gov
Todd Walton	NCSPA	910-251-5678	Todd.Walton@ncports.com
Heather Coats	NCDCM	910-796-7302	Heather.Coats@ncdenr.gov
Debbie Wilson	NCDCM	910-796-7266	Debra.Wilson@ncdenr.gov
Brooks Sorgan	NCDCM	910-796-7270	Brooks.Sorgan@ncdenr.gov
Chad Coburn	North Carolina Division of Water Resources-401	910-796-7379	Chad.Coburn@ncdenr.gov
Curt Weychert	NCDCM-Fisheries	252-808-2808	Curt.Weychert@ncdenr.gov
*Andy Herndon	National Oceanic and Atmospheric Administration-NMFS	727 824-5312	andrew.herndon@noaa.gov
*John Ellis	USFWS	919-856-4520 x 26	John_Ellis@fws.gov
*Maria Dunn	NCWRC	252-948-3842	Maria.Dunn@ncdenr.gov
Steve Dial	Dial Cordy and Associates Inc.	910-251-9790	SDial@DialCordy.com
Keith Walls	Dial Cordy and Associates Inc.	910-251-9790	KWalls@DialCordy.com
Matt Tyson	United States Coast Guard	910-772-2221	Matthew.I.Tyson@uscg.mil
Joshua O' Rourke	United States Coast Guard	910-772-2227	Joshua.P.ORourke@uscg.mil
Thomas Dunn	United States Coast Guard	910-772-2227	Thomas.P.Dunn@uscg.mil
Jeff Shelden	Moffatt & Nichol Engineers	919-781-4626	JShelden@MoffattNichol.com
Liz Hair	USACE	910-251-4049	Sarah.E.Hair@usace.army.mil
Rahlff Ingle	Dial Cordy and Associates Inc.	910-228-0212	RIngle@DialCordy.com
James Hargrove	Dial Cordy and Associates Inc.	704-914-6174	JHargrove@DialCordy.com
Fritz Rohde	NMFS	727-824-5301	Fritz.Rohde@noaa.gov
Doug Piatkowski (did not attend)	BOEM	703-787-1833	<a href="mailto:Douglas.Piatkowski@boem.gov">Douglas.Piatkowski@boem.gov</a>

\*Denotes those that called in for the meeting

**Table 4. Summary of comments from state and federal agencies.**

<b>Resource Area /Topic</b>	<b>Issue or Concern</b>
Navigation/Coast Guard ATON's	<ul style="list-style-type: none"> <li>• Moved and or replaced and paid by Port</li> <li>• Avoid MOTSU buoys and channels</li> <li>• Advance notice needed</li> </ul>
Alternatives/Widening	<ul style="list-style-type: none"> <li>• Justification for widening and how much</li> <li>• Assess effects on Primary Nursery Area and minimize effects</li> </ul>
Alternative/Blasting	<ul style="list-style-type: none"> <li>• Concern for how much blasting needed and effects on fish.</li> </ul>
Protected resources/Ship strikes	<ul style="list-style-type: none"> <li>• Effects of on sturgeon within critical habitat</li> </ul>
Fish and fisheries/Models	<ul style="list-style-type: none"> <li>• Concern for site specific application of Habitat Suitability Index models</li> </ul>
Sand management/ Beneficial use	<ul style="list-style-type: none"> <li>• Revisit 2001 Sand Management Plan, especially for beneficial use and for Bald Head /Oak Island</li> </ul>
Shoreline erosion/Vessel wakes	<ul style="list-style-type: none"> <li>• Need to evaluate erosional threats to area influenced</li> </ul>
Groundwater/Dredging effects	<ul style="list-style-type: none"> <li>• Need to evaluate effects of dredging on groundwater aquifer</li> </ul>
Fish and fisheries/Effects of dredging	<ul style="list-style-type: none"> <li>• Need thorough evaluation of effects</li> </ul>
Secondary and cumulative effects/All resources	<ul style="list-style-type: none"> <li>• Need complete analysis on all resources</li> </ul>
Transportation/Change in vessel frequency and truck and train frequency	<ul style="list-style-type: none"> <li>• Assess effects on changes in transportation frequency</li> </ul>
Construction/Timing and environmental windows	<ul style="list-style-type: none"> <li>• Address ability to meet environmental windows for turtles and anadromous species</li> </ul>
Mitigation requirements/Timing of mitigation	<ul style="list-style-type: none"> <li>• Upfront mitigation concurrent with construction</li> </ul>
Congressional approval/Timing and probability of support	<ul style="list-style-type: none"> <li>• Understand process and probability of congressional approval</li> </ul>
Study process/Cooperating federal agency	<ul style="list-style-type: none"> <li>• Can port consider a cooperating agency agreement</li> </ul>

## 4 TECHNICAL WORKING GROUPS

The purpose of the technical working groups (TWGs) is to assemble the applicable experts from the agencies who can offer technical guidance towards assessing the effects of the proposed project on tidal freshwater wetlands, fish and fisheries habitat, and to provide concepts for the beneficial use of dredging material. The overall framework of the TWG's will be to 1) review available data sources for baseline conditions, 2) concur on assessment methods to be used, 3) provide technical review and input on the existing conditions and effects analysis for wetland and fish/fisheries habitat, and 4) discuss applicable options for mitigating any adverse effects. For the Beneficial Use TWG, the overall goal will be to identify potential uses for future dredged material, including beach placement, bird islands, marine resource restoration/enhancement etc. that can be further assessed by our team for suitability and cost. The working group meetings will be informal and held locally in the Wilmington area. It is anticipated that each meeting would last about two-hours. Each committee will be chaired by a member of the port consultant team and other team members brought in as needed for review of modeling results, alternatives, engineering analysis etc. The overall goal is preparation of a technical report which describes the effected resources, methods used, effects analysis comments and consensus, ranked mitigation options for each resource (wetland and fish/fisheries habitat). For the Beneficial Use TWG, a summary of recommendations will be prepared for further use by the consultant team in developing the overall beneficial use study report.

### 4.1 Schedule and Goals for Meetings

We expect the overall time frame for coordination with the TWG's would be periodic meetings prior to USACE engagement and monthly once they are engaged for NEPA and compliance coordination. Goals and objectives for each TWG is outlined below:

#### 4.1.1 Wetland Working Group

December 2018 - review proposed project alternatives [existing, Future without Project (FWOP) and Tentatively Selected Plan (TSP) alternative]; new wetland mapping of the Cape Fear River; proposed assessment methodology for direct, indirect and cumulative effects analysis; functional assessment for determining mitigation requirements, and summary of existing conditions and mapping efforts completed.

April 2019- present overall modeling information for study: GIS analysis of proposed effects based on use of wetland mapping and salinity modeling; and approach to functional assessment.

July 2019 - review team comments on draft report sent out in July and determine overall consensus of group on significance of effect, discuss mitigation options analysis and functional assessment schedule for running Uniform Mitigation Assessment Method analysis on project and mitigation sites.

August 2019 - schedule site visits for mitigation sites and Uniform Mitigation Assessment Method scoring, port team develop technical summary of functional analysis and provide to TWG for review and comment

October 2019 - review comments on draft technical summary for functional assessment, review preferred mitigation measures, and develop monitoring program concepts for project

#### **4.1.2 Fish and Fisheries Habitat Working Group**

December 2018 - review of goals, objectives and schedule for TWG, proposed project alternatives (existing, FWOP and TSP alternative), hydrodynamic modeling results, resources to be assessed by group, method(s) to be used to quantify effects on selected species and habitats, available data for running Habitat Suitability Index (HSI) models and selection of target species for analysis.

July 2019 - review draft HSI report provided in early July; discuss effects analysis on targeted species and habitats; approach to qualitative evaluation of effects on sturgeon species and critical habitat, Essential Fish Habitat/Habitat Areas of Particular Concern, and Primary Nursery Area resources, discuss blasting effects and monitoring, mitigation options for project effects and development of monitoring criteria for blasting and overall project monitoring.

August 2019 - review team comments on draft report provided in July and determine overall consensus of group as to final summary of HSI effects; review effects analysis on Primary Nursery Area, Essential Fish Habitat and Habitat Areas of Particular Concern analysis; discuss mitigation options available and rank mitigation options; and review Habitat Evaluation Procedure scoring protocol for project impacts and mitigation measures.

September 2019 - convene working group to develop Habitat Evaluation Procedure scoring of project effects and mitigation measures, provide summary report to TWG by end of September

October 2019 - review comments on draft report, consensus on mitigation plan, discuss monitoring program as facilitated by port team and with academia attending, update report after meeting and send to team for review and comment

#### **4.1.3 Beneficial Use of Dredged Material Working Group**

February 2018 - review of goals, objectives and schedule for TWG; proposed project alternatives (existing, FWOP and TSP alternative), quantity and quality of sediment available, past and present regional uses of sediment, identify new options for sediment use that provides sustainable ecological benefits, review available reports and sources of information, review lower Cape Fear River regional actions by agencies and non-profit organizations for resource enhancement and restoration.

August 2019 - provide draft memorandum to team for consensus on ecological benefits derived for each option and summary of TWG findings outlined as a team. Draft plan to be provided to TWG for review and comment. The material developed by the team will be used in preparation of the Dredged Material Management Plan for the project and during Pre-Construction Engineering and Design.

All of the working groups' findings will be prepared as technical reports for inclusion in the feasibility study appendices and for use in preparation of the draft study report.

#### **4.1.4 Technical Working Group Members**

The following tables indicate the members for each of the three technical working groups. Members attending may change, but these are who were assigned by the respective agencies.

**Table 5. Wilmington Harbor Improvement Section 203 Study  
 Wetland Technical Working Group**

	Moderator: Rahlff Ingle
<b>Name</b>	<b>Affiliation</b>
Mike Wicker	USFWS, Raleigh
Anne Deaton	NCDEQ- DMR Wilmington
Courtney Spears	NCDEQ- DCM Wilmington
Maria Dunn	NCWRC -Raleigh
Twyla Cheatwood	NMFS, NC
Curt Weichert	NCDEQ-DMF
Casey Knight	NCDEQ-DMF
Dan Holliman	USEPA
<b>Invited Agency Guests</b>	
Jenny Owens	USACE
<b>Attending Consultants</b>	
Keith Walls	Dial Cordy and Associates Inc.
Jeff Shelden	Moffatt & Nichol
Steve Dial	Dial Cordy and Associates Inc.
Rahlff Ingle	Dial Cordy and Associates Inc.
<b>Attending Port Staff</b>	
Todd Walton	NCSPA

**Table 6. Wilmington Harbor Improvement Section 203 Study  
Fish and Fish Habitat Technical Working Group**

	Moderator: Keith Walls
<b>Name</b>	<b>Affiliation</b>
Mike Wicker	USFWS, Raleigh
Fritz Rohde	NMFS, NC
Anne Deaton	NCDEQ- DMR Wilmington
Maria Dunn	NCWRC -Raleigh
Curt Weichert	NCDEQ-DMF
Casey Knight	NCDEQ-DMF
Kyle Rachels	NCWRC -Raleigh
Andy Herndon	NMFS St Pete
<b>Attending Consultants</b>	
Keith Walls	Dial Cordy and Associates Inc.
Jeff Shelden	Moffatt & Nichol
Steve Dial	Dial Cordy and Associates Inc.
James Hargrove	Dial Cordy and Associates Inc.
<b>Attending Port Staff</b>	
Todd Walton	NCSPA

**Table 7. Wilmington Harbor Improvement Section 203 Study  
Beneficial Use Technical Working Groups**

	Moderator: Steve Dial
<b>Name</b>	<b>Affiliation</b>
Mike Wicker	USFWS, Raleigh
Anne Deaton	NCDEQ- DMR Wilmington
Heather Coats	NCDEQ- DCM Wilmington
Maria Dunn	NCWRC -Raleigh
Twyla Cheatwood	NMFS, NC
Curt Weichert	NCDEQ-DMF
Andy Herndon	NMFS St Pete
Dan Holliman	USEPA
Walker Golder	NC Audubon

**Table 7. (concluded).**

<b>Name</b>	<b>Affiliation</b>
<b>Attending Consultants</b>	
Keith Walls	Dial Cordy and Associates Inc.
Steve Dial	Dial Cordy and Associates Inc.
<b>Attending Port Member</b>	
Todd Walton	NCSPA
<b>Attending Port Staff</b>	
Todd Walton	NCSPA

#### **4.1.5 Meeting Summaries**

##### **4.1.5.1 Wetland Technical Working Group – 20 December 2018**

Meeting was held at the NCDWM Wilmington office and those attending are shown in the attached sign-in sheet. Most of the time was spent by the port team summarizing information about the study, the existing modeling efforts, wetlands mapping conducted and discussing the framework for assessing impacts to tidal wetlands. Minimal input was provided other than questions concerning the models being used and comparisons to other deepening studies.

##### **4.1.5.2 Fish and Fish Habitat Technical Working Group – 20 December 2018**

Meeting was held at the NCDWM Wilmington office and those attending are shown in the attached sign-in sheet. Most of the time was spent by the port team summarizing information about the study, the existing modeling efforts that will be providing salinity shift isopleths for the HSI modeling efforts, and discussing the available data for fish species models. The team reviewed the available fish models and selected the six species for the assessment. The USFWS indicated that they really didn't see the benefit in the modeling effort, but realized that the USACE needs to quantify effects. Follow-up emails to the team were provided after the meeting to confer on available data-sets and notification of the model information to be used for the six species.

##### **4.1.5.3 Beneficial Use Technical Working Group – 19 February 2019**

Meeting was held at the NCDWM Wilmington office and those attending are shown in the attached sign-in sheet. The port team presented information on the study and reviewed goals for this team. Walker Golder presented NC Audubon's bird island efforts in the river and recommendations for new projects. A discussion of each potential project then followed leading to the formulation of a list of projects, as well as benefits and construction approached for each. The next meeting will be held this summer after sending out the draft technical report on beneficial uses to the team.

#### 4.1.5.4 Wetland Technical Working Group – 10 April 2019

Meeting was held at the NCDCM Wilmington office and those attending are shown in the attached sign-in sheet. The port team presented preliminary results of the wetland effects analysis, including a summary of the modelled changes in salinity isopleths and anticipated changes in the acreage of tidal wetlands potentially affected. Discussions centered on concerns on the salinity changes projected, which are very small, and the extent of potential effects. The next meeting will include submittal of report prior to meeting to center focus on discussion of results of the analysis.

## **APPENDIX A**

### **PUBLIC INVOLVEMENT CORRESPONDENCE AND NOTICES**



June 12, 2018

## Public Notice

### Wilmington Harbor Improvement Project Section 203 Study

The North Carolina State Ports Authority (NCSPA) has initiated the Wilmington Harbor Improvement Project (WHIP) feasibility study of potential improvements to the federal channels that access the Port of Wilmington, NC, under the authority of Section 203 of the Water Resources Development Act, 1986 (WRDA), as amended by Section 1014 of WRRDA 2014. Section 203 states (in part) that "A non-federal interest may on its own undertake a feasibility study of a proposed harbor or inland harbor project and submit it to the Secretary of the Army." The feasibility study is being funded by NCSPA operating revenues.

The purpose of the feasibility study is to evaluate modifications to the federal channel at Wilmington Harbor to accommodate larger, more fully laden deep draft vessels and provide net positive local, state, and federal economic benefit, while protecting our nation's environment. The objectives of the NCSPA is to prepare a Section 203 Report that fully complies with all federal laws and regulations applicable to navigation project General Investigation feasibility studies, and to enable the Assistant Secretary of the Army for Civil Works [ASA (CW)] to make appropriate recommendations to Congress regarding authorization of the federal navigation improvements project for the Port of Wilmington.

The feasibility study will consider effects on marine resources, protected species, water quality, fish and wildlife resources, cultural resources, essential fish habitat, socio-economics resources, coastal processes, aesthetics and recreation, and other effects to be identified through public involvement and agency coordination. To this end, Interagency Technical Working Groups will be established to provide input into the various environmental resource effects analyses being performed for the feasibility study.

The NCSPA believes that an Environmental Impact Statement (EIS) will be required under the National Environmental Policy Act (NEPA). The United States Army Corps of Engineers (USACE) will be the lead federal agency should the ASA (CW) approve the feasibility study. USACE implementation guidance for Section 203 prohibits the USACE from participating in development of the NEPA document until the feasibility study has been adopted by the federal government. The USACE will perform its National Environmental Policy Act responsibilities after the report is approved by the ASA (CW). A letter from the USACE Wilmington District



Deputy District Engineer explaining the USACE role in the Section 203 feasibility study is attached.

Informational meetings will be held to encourage federal, state, and local agencies and public collaboration to define the resources (or topical elements) and alternatives to be addressed in the feasibility study. All parties are invited to participate in the informational process by identifying any additional concerns on issues, studies needed, alternatives, procedures, and other matters related to the feasibility level investigations.

The NCSPA looks forward to working with all agencies and the public on the Section 203 study of needed improvements to Wilmington Harbor. This project is vital to the economy of North Carolina and to our port customers.

To request additional information please contact [WH203@ncports.com](mailto:WH203@ncports.com) or write to us at:

North Carolina State Ports Authority  
Attn: Wilmington Harbor 203  
PO Box 9002  
Wilmington NC 28402

A handwritten signature in blue ink, appearing to read "Paul J. Cozza", with a stylized flourish at the end.

Paul J. Cozza  
Executive Director



June 12, 2018

## **Public Notice**

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The NCSPA believes that an Environmental Impact Statement (EIS) will be required under the National Environmental Policy Act (NEPA). The United States Army Corps of Engineers (USACE) will be the lead federal agency should the ASA (CW) approve the feasibility study. USACE implementation guidance for Section 203 prohibits the USACE from participating in development of the NEPA document until the feasibility study has been adopted by the federal government. The USACE will perform its National Environmental Policy Act responsibilities after the report is approved by the ASA (CW).

Informational meetings will be held to encourage federal, state, and local agencies and public collaboration to define the resources (or topical elements) and alternatives to be addressed in the



feasibility study. All parties are invited to participate in the informational process by identifying any additional concerns on issues, studies needed, alternatives, procedures, and other matters related to the feasibility level investigations.

The NCSPA looks forward to working with all agencies and the public on the Section 203 study of needed improvements to Wilmington Harbor. This project is vital to the economy of North Carolina and to our port customers.

A Public Information Meeting will be held at 5:00pm -7:00pm on August 8, 2018 at the Coastline Conference and Event Center located at 503 Nutt Street, Wilmington, NC. 28401

To request additional information please contact [WH203@ncports.com](mailto:WH203@ncports.com) or write to us at:

North Carolina State Ports Authority  
Attn: Wilmington Harbor 203  
PO Box 9002  
Wilmington NC 28402



DEPARTMENT OF THE ARMY  
WILMINGTON DISTRICT, CORPS OF ENGINEERS  
69 DARLINGTON AVENUE  
WILMINGTON, NORTH CAROLINA 28403-1343

June 5, 2018

Mr. Paul Cozza  
2202 Burnett Boulevard  
PO Box 9002  
Wilmington, NC 28402

Dear Mr. Cozza,

We understand that the North Carolina State Ports Authority (NCSPA) is pursuing its own study of the potential deepening and/or widening of Wilmington Harbor pursuant to Section 203 of the Water Resources Development Act (WRDA) of 1986. That authority, commonly known as the Section 203 authority, allows non-Federal interests to undertake feasibility studies of proposed water resources development projects for submission to the Assistant Secretary of the Army for Civil Works (ASA(CW)). The Section 203 authority, as amended, allows the U.S. Army Corps of Engineers (USACE), upon request, to provide limited technical assistance to non-Federal interests. Pursuant to the Memorandum of Agreement (MOA) between the Department of the Army and the North Carolina State Ports Authority (NCSPA) for Technical Assistance Related to Navigation Improvements at Wilmington Harbor, North Carolina, dated October 23, 2017, the Wilmington District has begun to provide limited technical assistance as allowed under Section 203. At the first coordination meeting on May 10, 2018, your staff requested a letter from the Corps summarizing the Section 203 authority and clarifying the role of the Corps under this authority for use by the NCSPA as you coordinate with stakeholders and the interested public in the development of your feasibility study. This letter serves to provide that information.

Under Section 203 of the Water Resources Development Act (WRDA) of 1986, a non-Federal interest may develop its own feasibility report for submittal directly to the Assistant Secretary of the Army for Civil Works (ASA(CW)) for approval. Although WRDA 2016 amended Section 203 to allow (but not require) the Corps to provide technical assistance to the non-Federal interest in the development of its study, this technical assistance is limited to discrete work efforts involving analysis or services for which Corps has special expertise. Subsequent to your request that the Corps provide the NCSPA with technical assistance in the development of your feasibility study, we executed the above-referenced MOA and are refining the specific scope of these technical services.

Implementation guidance received from Corps Headquarters has clarified that this technical assistance cannot consist of services that are readily available to you outside

the Government, as the feasibility report is considered a non-Federal work product. Accordingly, we cannot provide document reviews, participate on Technical Advisory Working Groups, or assist with National Environmental Policy Act (NEPA) documentation or consultation. Services we can provide include the provision of readily available technical information, clarification of existing technical guidance, and the running of models (like ship simulation and Harbor Sym). If your report is recommended for approval by ASA(CW), we would conduct NEPA and other applicable Federal compliance activities at that time.

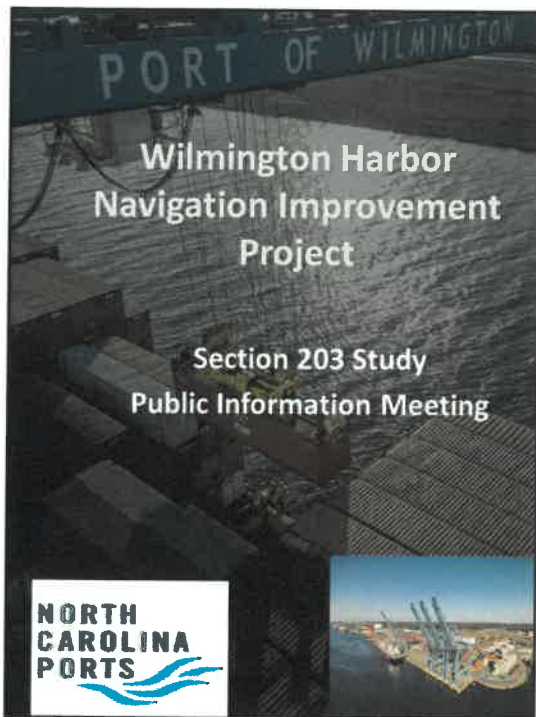
We understand that you would like to conduct coordination with applicable resource agencies and stakeholders as you formulate your proposed actions and consider alternate measures to meet your identified purpose and need. Please be clear with those agencies that the study you are undertaking is not a USACE study, and this agency is neither providing guidance nor direction to the NCSPA, nor are we accepting comments related to your proposed measures. If your study is approved by ASA (CW), we will conduct appropriate coordination and consultation at that time.

Please let me know if any further clarification of the Corps' role under Section 203 would be of assistance as you work with stakeholders in the conduct of your study.

Sincerely,

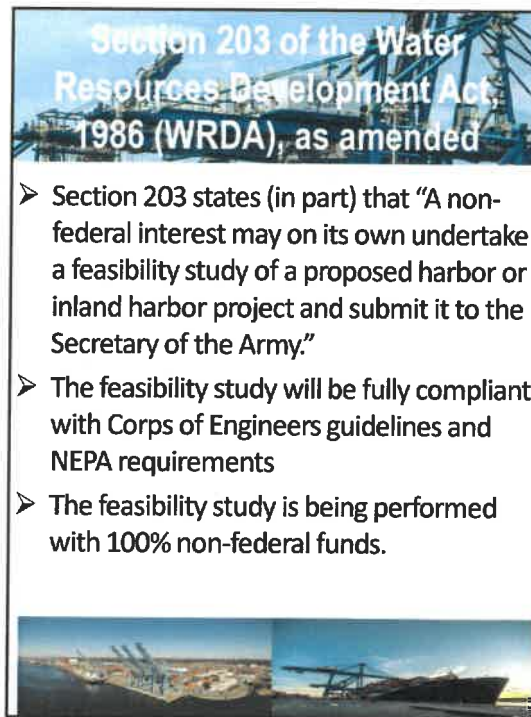


A handwritten signature in black ink that reads "Christine M. Brayman". The signature is written in a cursive style with a long horizontal flourish at the end.

Christine M. Brayman  
Deputy District Engineer for  
Programs and Project Management



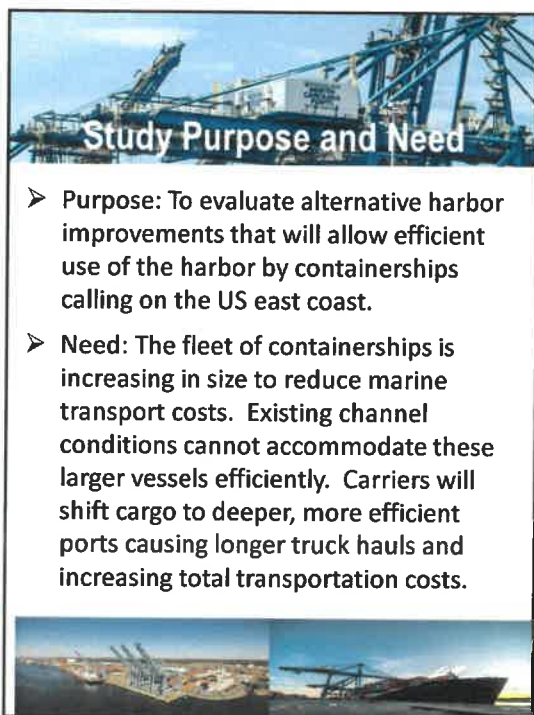

**Wilmington Harbor  
Navigation Improvement  
Project**

**Section 203 Study  
Public Information Meeting**



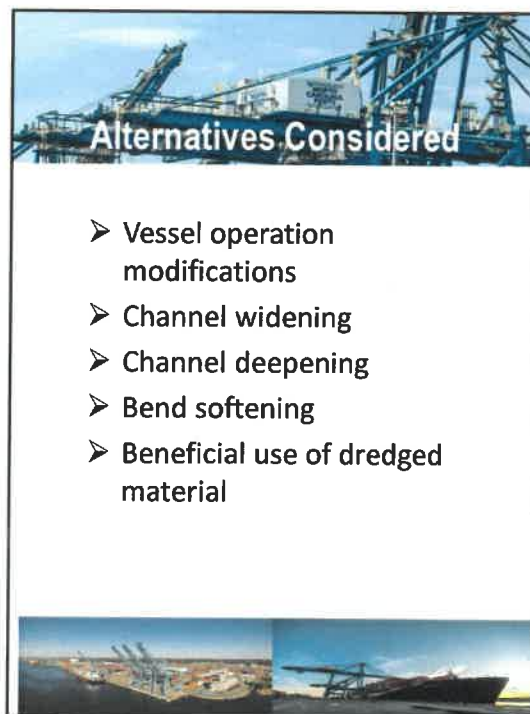

**Section 203 of the Water  
Resources Development Act,  
1986 (WRDA), as amended**

- Section 203 states (in part) that “A non-federal interest may on its own undertake a feasibility study of a proposed harbor or inland harbor project and submit it to the Secretary of the Army.”
- The feasibility study will be fully compliant with Corps of Engineers guidelines and NEPA requirements
- The feasibility study is being performed with 100% non-federal funds.




**Study Purpose and Need**


- **Purpose:** To evaluate alternative harbor improvements that will allow efficient use of the harbor by containerships calling on the US east coast.
- **Need:** The fleet of containerships is increasing in size to reduce marine transport costs. Existing channel conditions cannot accommodate these larger vessels efficiently. Carriers will shift cargo to deeper, more efficient ports causing longer truck hauls and increasing total transportation costs.



**Alternatives Considered**


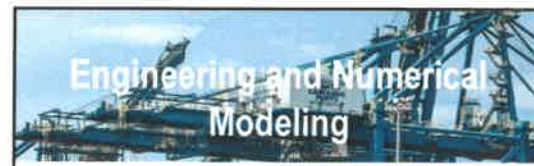
- Vessel operation modifications
- Channel widening
- Channel deepening
- Bend softening
- Beneficial use of dredged material






## Schedule and Milestones

- Existing Conditions & Baseline Modeling
  - August 2017 – August 2018
- Alternative Plan Evaluation
  - August 2018 – April 2019
- Report Submittal to Assistant Secretary of Army for Review and Approval (180 day review)
  - September 2019
- Corps of Engineers Requested to Move Forward with Processing Feasibility Study / EIS (NEPA)
  - Fall 2019
- Corps of Engineers Issues Record of Decision
  - Spring 2021
- Congressional authorization for PED and Construction
  - Spring 2021


## Engineering and Numerical Modeling

- Data Collection
- Numerical Modeling
  - Hydrodynamic, Wave Transformation and Shoreline Evolution
  - Salinity, Cohesive Sediment and Inlet Morphology
  - Groundwater and Water Quality
- Vessel Maneuvering Simulations
- Channel Alignment and Width
- Vessel Wakes
- Dredging Quantities and Costs





## Economic Analysis


- Project future commodities and future fleet
- Project future vessel loading and operations
- Assess Wilmington Harbor logistics with consideration of alternative ports
- Identify most likely commodity volume and vessel operations at Port of Wilmington under various alternative plans
- Identify the most efficient plan

## Environmental and Cultural Resources to be Assessed

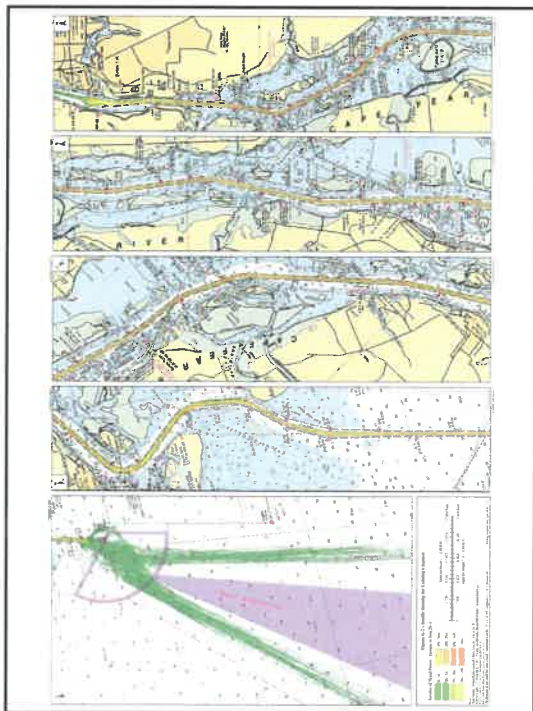

- Coastal and Marine Processes
- Sea-Level Changes
- Water Quality (Surface and Groundwater)
- Wetlands
- Fish and Wildlife
- Marine Biological Resources
- Essential Fish Habitat
- Protected Species
- Noise and Air Quality
- Cultural and Historic Resources
- Socio-economics





### How You Can Participate

- Submit comments in writing to [WH203@NCPorts.com](mailto:WH203@NCPorts.com)
- Review and comment on draft study during NEPA process
- Attend future scoping and public meetings





Campbell Island to Wilmington

**Steve Dial**

---

**From:** walton, todd <todd.walton@ncports.com>  
**Sent:** Monday, August 27, 2018 9:40 AM  
**To:** Steve Dial  
**Subject:** emails in relation to 203 public info meeting

[External] Wilmington Harbor Study



farmgrl@bellsouth.net

**Reply all**

Wed 8/15, 7:20 AM

Study, WH

Inbox

To help protect your privacy, some content in this message has been blocked. To re-enable the blocked features, click here.

To always show content from this sender, click here.

You replied on 8/15/2018 7:57 AM.

**CAUTION: External email. Do not click links or open attachments unless verified. Send all suspicious email as an attachment to Report Spam.**

I read the August 14 Coastal Review article "Wilmington Port Looks to Lure Bigger Ships"

(<https://www.coastalreview.org/2018/08/wilmington-port-looks-to-lure-bigger-ships/> and would like to better understand what makes up Wilmington Harbor. A quick google search showed the term used in several sites, but lacked a clear definition.

I had opportunity to participate in a tour of the Wilmington facility in the past year or so and have found the port's role, management and future plans in our area to be interesting. If you could provide links to COE that would be appreciated too. Any information would be for personal interest only as I am not affiliated with any political or environmental group.

Thank you and

Best Regards,

Mary Farmer

[External] Proposed Wilmington Harbor/Cape Fear River Dredging Project



robert a parr <rparr@ec.rr.com>

Mon 8/20, 5:20 PM

Study, WH

Inbox

You replied on 8/22/2018 11:15 AM.

CAUTION: External email. Do not click links or open attachments unless verified. Send all suspicious email as an attachment to Report Spam.<<mailto:report.spam@nc.gov>>

Please add my name to interested parties in this matter.

Please send me the links to any already completed reports, future reports and any meetings that are scheduled on this topic.

Thank you,

Dr. Robert Parr

| **Todd Walton**

| NORTH CAROLINA PORTS

| Senior Environmental Analyst

| 251-5678 Direct

| 800-336-2405 Toll Free

*ncports.com*

Email to and from this address is public record and may be disclosed to authorized third parties.

## **APPENDIX B**

### **INTERAGENCY MEETING CORRESPONDENCE AND NOTICES**

## Steve Dial

---

**From:** Steve Dial  
**Sent:** Monday, July 2, 2018 3:31 PM  
**To:** Weaver, Cameron; Coats, Heather; doug.huggett@ncdenr.gov  
**Cc:** Rahlff Ingle; walton, todd; Jerry Diamantides; Shelden, Jeff (JShelden@moffatnichol.com); Blake, Mark  
**Subject:** Wilmington Harbor Improvement Project Section 203 Study Agency Coordination Meeting  
**Attachments:** Scoping Meeting Request 7.2.18.pdf; WHIP Section 203 Study Public Notice 6.12.18.pdf; Wilmington District Letter 6-2018.pdf; Wilmington Harbor Section 203 Study Outline 6.12.18.pdf

Cameron, attached please find the completed scoping form, the NCSPA Pubic Notice for the Study and a letter from the Wilmington District, as to their involvement. I would suggest passing all of these along to the agencies.

Since we are already scheduled for a Public Information meeting on the evening of August 8<sup>th</sup>, it would be convenient to also schedule this interagency meeting for either the morning of August 8<sup>th</sup> or anytime on the 7<sup>th</sup> or 9<sup>th</sup>. I know this is not always possible, but thought I would let you know as to our preference.

Please advise if you need anything else. I would also suggest sending to EPA, Pace Wilber at NMFS, and the NC State archeologist at Ft Fisher, if not on your mailing list. You can send to Pam, Elden and Jenny at the Wilmington District and also include all those copied on this email.

We appreciate your assistance in getting this scheduled. I also assume you can host the meeting in your office? If not, we can use the ports conference room, but I am unsure at present as to availability for that week.

Regards,

R. Steve Dial  
President

Dial Cordy and Associates Inc.  
201 N Front St. Suite 307  
Wilmington NC 28401  
904-568-5406 Mobile  
910-251-9790 Office  
[www.dialcordy.com](http://www.dialcordy.com)

North Carolina Department of Environmental Quality  
SCOPING MEETING REQUEST

Please complete all the information below. Call and email the appropriate coordinator with the completed form.

- Asheville Region - Alison Davidson 828-296-4698; [alison.davidson@ncdenr.gov](mailto:alison.davidson@ncdenr.gov)
- Fayetteville and Raleigh Regions - David Lee 919-791-4204; [david.lee@ncdenr.gov](mailto:david.lee@ncdenr.gov)
- Mooresville and Winston-Salem Regions - Marcia Allocco 704-235-2107; [marcia.allocco@ncdenr.gov](mailto:marcia.allocco@ncdenr.gov)
- Washington Region - Lyn Hardison 252-948-3842; [lyn.hardison@ncdenr.gov](mailto:lyn.hardison@ncdenr.gov)
- Wilmington Region - Cameron Weaver 910-796-7265; [cameron.weaver@ncdenr.gov](mailto:cameron.weaver@ncdenr.gov)

Project Name: Wilmington Harbor Navigation Improvement Project Section 203 Study County: New Hanover and Brunswick

Applicant: Todd Walton Company: NCSPA  
Address: 2202 Burnett Boulevard City: Wilmington State: NC Zip: 28401

Phone: 910-763-1621 Fax: 910-343-6237 Email: todd.walton@ncports.com  
Physical Location of Project: Cape Fear River/Atlantic Ocean

Engineer/Consultant: Steve Dial Company: Dial Cordy and Associates Inc.  
Address: 201 North Front St. Suite 307 City: Wilmington State: NC Zip: 28401  
Phone: 910-251-9790 Fax: 910-251-9409 Email: sdial@dialcordy.com

Please provide a DETAILED project narrative, pdf site plan and a vicinity map with road names along with this Request form.

The project narrative should include the following when available:

Existing Conditions- List of existing permits, previous project name(s) or owner name(s), existing compliance or pollution incidents, current conditions or development on site, size of tract, streams or wetlands on site\*, stream name and classification, historical significance of property, seasonal high water table elevation, riparian buffers, areas of environmental concern, setbacks

Proposed- **Full scope of project** with development phase plan, acreage to be disturbed, wetlands to be disturbed, waste treatment & water supply proposed, soils report availability, % impervious surface, stormwater treatment and number of bmps, public or private funding.

*\*Relative To Wetlands – Federal and coastal wetlands must be delineated by a US Army Corps Regulatory Official, Coastal Management Field Rep or a qualified environmental consultant prior to undertaking work such as filling, excavating or land clearing. The delineations must be approved by the US Army Corps of Engineers (USACE) and/or the Division of Coastal Management. Wetland delineations are valid for a period not to exceed five years from date of USACE approval.*

Please provide estimated investment & expected employment numbers: \$ N/A,                      Jobs

For the scoping meeting, it is best to provide a list of questions and topics of concern. It is helpful to know what you hope to gain from the meeting. Please have thoughts and presentations organized as much as possible to make the best use of time.

Agencies Involved: Check all agencies that may be involved with project:

- Marine Fisheries       National Marine Fisheries       U.S. Fish & Wildlife       NC Wildlife Resources
- Coastal Management       Land Resources ( Stormwater  Erosion Control)  U.S. Army Corps of Engineers
- Shellfish Sanitation       Water Resources: ( 401/buffer  NPDES  Non-discharge  Public Water Supply)
- Air Quality       Solid Waste       UST  Hazardous Waste \_\_\_\_\_      X Other EPA      X Other Coast Guard
- Other \_\_\_\_\_       Other \_\_\_\_\_       Other \_\_\_\_\_

## **Wilmington Harbor Improvement Project Section 203 Feasibility Study Topical Element Outline and Public/Agency Coordination**

The following topical outline provides an overview of the contents to be included within the preliminary draft feasibility study and environmental report. While no regulatory compliance review will be provided by the Corps of Engineers until released by the ASA's office to initiate the NEPA process, full coordination with state and federal resource agencies in the development of the study is needed. To facilitate agency and public engagement the study team will conduct a Public Information meeting (August 8, 2018), Agency Coordination meetings (no dates scheduled), and frequent coordination meetings with agencies through development of Technical Working Groups for the three major technical areas of analysis (Wetlands, Fish Habitat (including EFH, projected species, managed species and other marine resources), and Water Quality (surface and groundwater). It is anticipated the study groups will review and concur with baseline conditions, analysis methods and effects analysis prepared by the study team. A Technical Memorandum will be prepared for each study group and included as appendices in the draft document. Facilitation of each group will be provided by the study team, with consensus of opinion driving the decisions made as to the effects analysis and conclusions drawn. Models proposed to be used for wetland and fish assessments must be ones that have been accepted by the Corps of Engineers for past studies,

### **1.0 Study Information**

- 1.1. Introduction
- 1.2. Study Authority
- 1.3. Federal Policy and Procedures
- 1.4. Objectives
- 1.5. Purpose and Need
- 1.6. Study Area
- 1.7. Existing Project
- 1.8. Prior Reports and Studies
- 1.9. Report Organization

### **2.0 Existing and Future without Project Conditions/NEPA Affected Environment**

- 2.1. General Setting
- 2.2. Economic Conditions
  - 2.2.1. Relative Trade Volume and Trends
  - 2.2.2. Existing Fleet - Vessel Classes
  - 2.2.3. Existing Sailing and Design Drafts
  - 2.2.4. Port Hinterland and Clients
- 2.3. Navigation Features
  - 2.3.1. Navigation History
  - 2.3.2. Existing Navigation Configuration and Dimensions
  - 2.3.3. Port Facilities
  - 2.3.4. Maintenance Dredging/Dredged Material Disposal
- 2.4. Environmental Conditions
  - 2.4.1. Wind and Wave Climate
  - 2.4.2. Tides
  - 2.4.3. Currents
  - 2.4.4. Relative Sea-Level Change/Salinity Intrusion
  - 2.4.5. Geology, Soils, and Sediments
  - 2.4.6. Protected Managed Lands and Impoundments

- 2.4.7. Surface Water Quality
- 2.4.8. Groundwater
- 2.4.9. Wetlands
- 2.4.10. Hardbottom Habitat
- 2.4.11. Essential Fish Habitat
- 2.4.12. Protected Species
- 2.4.13. Marine Mammals
- 2.4.14. Fisheries
- 2.4.15. Birds
- 2.4.16. Invasive Species
- 2.4.17. Air Quality
- 2.4.18. Hazardous, Toxic, and Radioactive Waste
- 2.4.19. Noise
- 2.4.20. Coastal Barrier Resources
- 2.4.21. Cultural and Historic Resources
- 2.4.22. Aesthetics and Recreation
- 2.4.23. Socioeconomics

### 3.0 Plan Formulation

- 3.1. Problems, Opportunities, and Constraints
  - 3.1.1. Problems
  - 3.1.2. Opportunities
  - 3.1.3. Constraints
- 3.2. Objectives
- 3.3. Assumptions
- 3.4. Development of Management Measures
  - 3.4.1. Structural Measures
  - 3.4.2. Nonstructural Measures
  - 3.4.3. Development of Planning Segments
  - 3.4.4. Screening of Measures
  - 3.4.5. Measures Carried Forward
  - 3.4.6. Focused Array of Alternatives
- 3.5. Comparison of the Final Array of Alternatives
  - 3.5.1. National Economic Development
  - 3.5.2. Regional Economic Development
  - 3.5.3. Environmental Quality
  - 3.5.4. Other Social Effects
- 3.6. Plan Selection
  - 3.6.1. Deviation from the NED Plan - Reasons for the LPP
  - 3.6.2. Recommended Plan
  - 3.6.3. Optimization of the Recommended Plan

### 4.0 Recommended Plan (RP)

- 4.1. Description of the Recommended Plan
  - 4.1.1. General Navigation Features
  - 4.1.2. Environmental Mitigation
- 4.2. Dredging and Dredged Material Management
  - 4.2.1. Material Placement Options
  - 4.2.2. Construction Methodology
  - 4.2.3. Type of Dredging Equipment
  - 4.2.4. Dredge Material Transport Vessels

- 4.2.5. Disposal Area Modifications
- 4.2.6. Beneficial Use of Dredged Material
- 4.2.7. Operations and Maintenance Considerations
- 4.3. Mitigation Plan
- 4.4. Lands Easements Rights of Way and Relocation Considerations
- 4.5. Detailed Cost Estimates and Benefits
  - 4.5.1. Project Costs and Cost Sharing NED Plan
  - 4.5.2. Project Schedule and Interest during Preconstruction Engineering and Design (PED)/Construction
  - 4.5.3. Operation, Maintenance, Repair, Rehabilitation, and Replacement (OMRR&R)
  - 4.5.4. Financial Analysis of Non-Federal Sponsor's Capabilities
  - 4.5.5. View of Non-Federal Sponsor
  - 4.5.6. Summary of Accounts
  - 4.5.7. Risk and Uncertainty
  - 4.5.8. With-Project Sea Level Change
  - 4.5.9. Storm Surge and Coastal Erosion

## 5.0 Environmental Effects of the Proposed Project

- 5.1. General Setting
- 5.2. Economic Conditions
  - 5.2.1. Trade Volume
  - 5.2.2. Port Hinterland and Clients
  - 5.2.3. Fleet Characterization
- 5.3. Navigation Environment
  - 5.3.1. Navigation History
  - 5.3.2. Navigation Configuration and Dimensions
  - 5.3.3. Port Facilities
  - 5.3.4. Dredged Material Disposal
- 5.4. Environmental Conditions
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  - 5.4.19. Noise
  - 5.4.20. Coastal Barrier Resources
  - 5.4.21. Cultural and Historic Resources
  - 5.4.22. Aesthetics and Recreation

- 5.4.23. Socioeconomics
- 5.4.24. Summary of Cumulative Impacts
- 5.4.25. Irreversible and Irrecoverable Commitment of Resources

## 6.0 Environmental Compliance and Commitments

- 6.1. Table of Compliance
- 6.2. National Environmental Policy Act of 1969 (NEPA)
- 6.3. Clean Water Act
  - 6.3.1. Wetlands
  - 6.3.2. Federal Coastal Zone Management Act (CZMA)
  - 6.3.3. Clean Air Act (CAA)
  - 6.3.4. US Fish and Wildlife Coordination Act
  - 6.3.5. Endangered Species Act
  - 6.3.6. Magnuson-Stevens Fishery Conservation and Management Act (MSA)
  - 6.3.7. Anadromous Fish Conservation Act
  - 6.3.8. Marine Mammal Protection Act (MMPA)
  - 6.3.9. Sections 106 and 110(f) of the National Historic Preservation Act (NHPA)
  - 6.3.10. Resource Conservation and Recovery Act (RCRA)
  - 6.3.11. Comprehensive Environmental Response, Compensation and Liability Act (CERCLA or Superfund)
  - 6.3.12. Marine Protection, Research and Sanctuaries Act
  - 6.3.13. Executive Order 11988, Floodplain Management
  - 6.3.14. Executive Order 11990, Protection of Wetlands
  - 6.3.15. Executive Order 13112, Invasive Species
  - 6.3.16. Executive Order 12898, Federal Actions to address Environmental Justice in Minority Populations and Low Income Populations
  - 6.3.17. Executive Order 13045, Protection of Children from Environmental Health Risks and Safety Risks
  - 6.3.18. Migratory Bird Treaty Act, Executive Order 13186, Responsibilities of Federal Agencies to Protect Migratory Birds
  - 6.3.19. Executive Order 13653, Preparing the United States for the Impacts of Climate Change
  - 6.3.20. Environmental Commitments

## 7.0 Public/Agency Participation and Commenting

## 8.0 List of Preparers

## 9.0 Recommendations

## 10.0 References

## 11.0 Index

- Appendix A Engineering
- Appendix B Geotechnical
- Appendix C Economics
- Appendix D Cost Engineering
- Appendix E Real Estate
- Appendix F Biological Assessment of Threatened and Endangered Species
- Appendix G Noise Assessment

Appendix H	Essential Fish Habitat Assessment
Appendix I	Hardbottom Resources
Appendix J	Section 103 Sediment Evaluation
Appendix K	Fish Habitat Assessment
Appendix L	Wetlands Impact Assessment
Appendix M	404(b)(1) Evaluation
Appendix N	Air Emission Inventory
Appendix O	Cumulative Impact Assessment
Appendix P	Mitigation, Monitoring, and Adaptive Management
Appendix Q	Correspondence



DEPARTMENT OF THE ARMY  
WILMINGTON DISTRICT, CORPS OF ENGINEERS  
69 DARLINGTON AVENUE  
WILMINGTON, NORTH CAROLINA 28403-1343

June 5, 2018

Mr. Paul Cozza  
2202 Burnett Boulevard  
PO Box 9002  
Wilmington, NC 28402

Dear Mr. Cozza,

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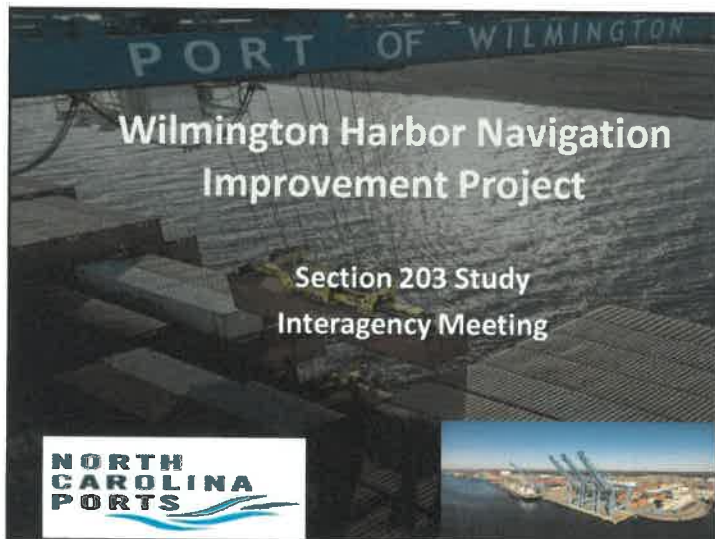
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Sincerely,



A handwritten signature in black ink that reads "Christine M. Brayman". The signature is written in a cursive style with a long horizontal flourish at the end.

Christine M. Brayman  
Deputy District Engineer for  
Programs and Project Management



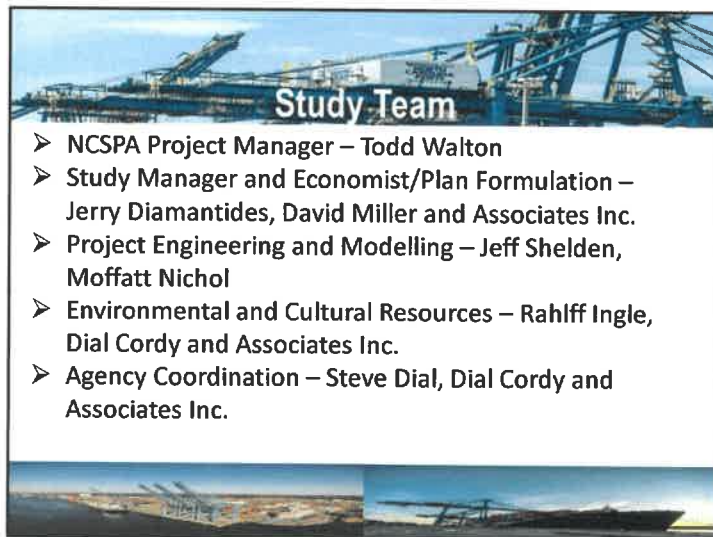
## Wilmington Harbor Navigation Improvement Project

Section 203 Study  
Interagency Meeting



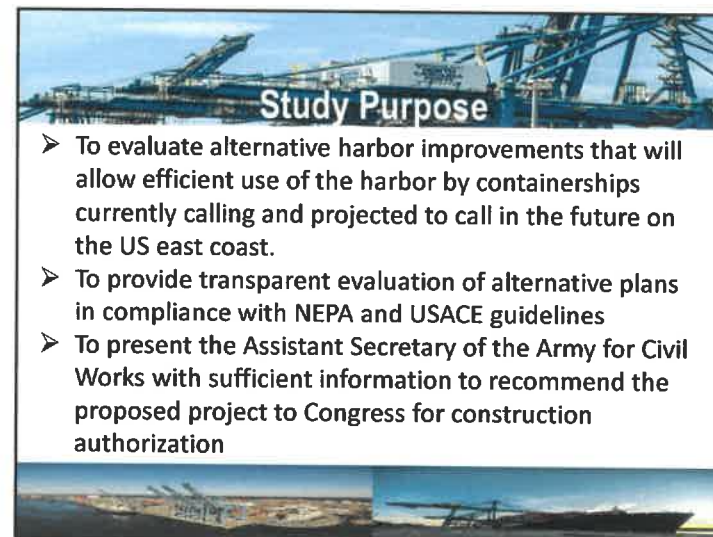

## Agenda

- Study Purpose and Need
- Study Process and Schedule
- Plan Formulation Process
- Hydrodynamic and Water Quality Modelling
- Engineering and Design
- Environmental and Cultural Resources
- Tidal Wetland Assessment
- Fisheries Habitat Assessments
- Role of Technical Advisory Committees
- Topical Element Study Report Outline
- Work Completed to Date
- Work to be Performed through FY 2019
- Recommendations and Questions




## Study Team

- NCSA Project Manager – Todd Walton
- Study Manager and Economist/Plan Formulation – Jerry Diamantides, David Miller and Associates Inc.
- Project Engineering and Modelling – Jeff Shelden, Moffatt Nichol
- Environmental and Cultural Resources – Rahlff Ingle, Dial Cordy and Associates Inc.
- Agency Coordination – Steve Dial, Dial Cordy and Associates Inc.



## Study Purpose

- To evaluate alternative harbor improvements that will allow efficient use of the harbor by containerhips currently calling and projected to call in the future on the US east coast.
- To provide transparent evaluation of alternative plans in compliance with NEPA and USACE guidelines
- To present the Assistant Secretary of the Army for Civil Works with sufficient information to recommend the proposed project to Congress for construction authorization

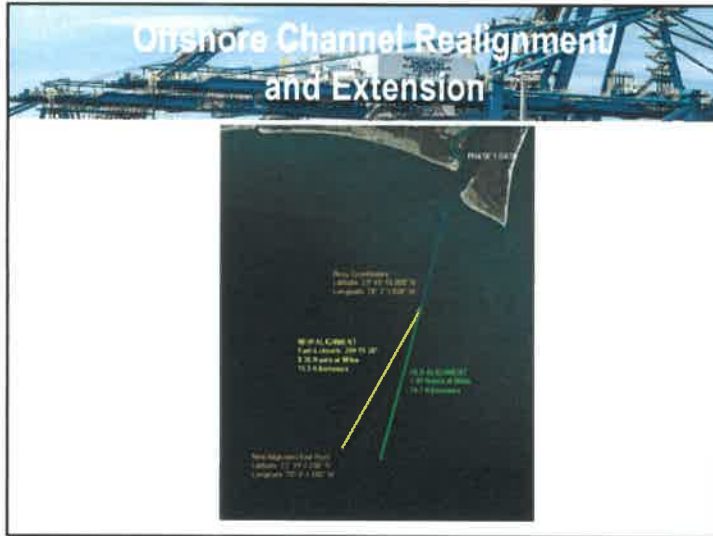




### Study Need

- The fleet of containerships is increasing in size to reduce marine transport costs. Existing channel conditions cannot accommodate these larger vessels efficiently. Carriers will shift cargo to deeper, more efficient ports causing longer truck hauls and increasing total transportation costs.

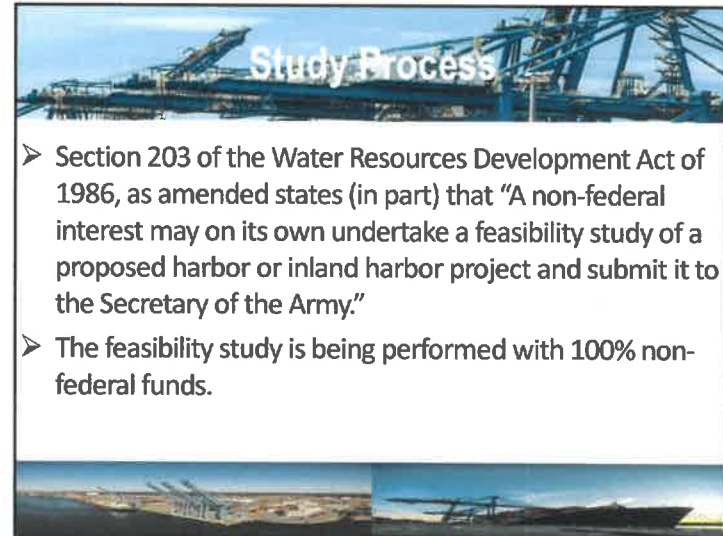




**Offshore Channel Realignment and Extension**

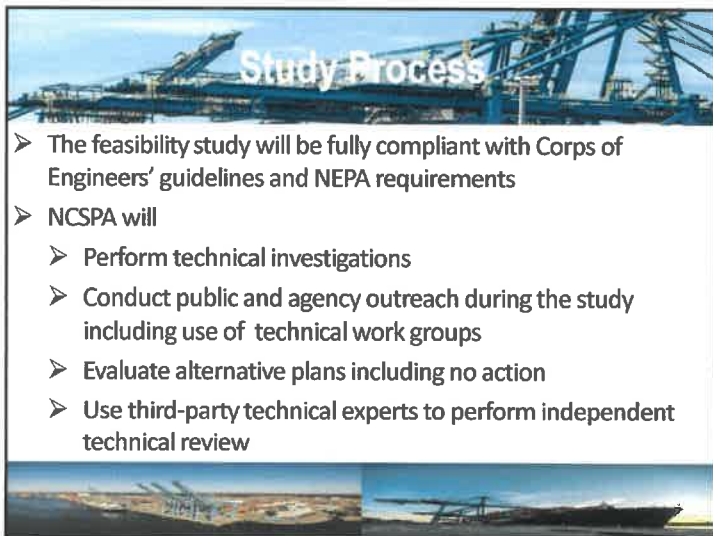
Map showing channel realignment and extension. Key features include:

- NEW CHANNEL:** Total Length: 200 FT, 2.00 Miles of Water, 1.00 Mile of Bank.
- NEW CHANNEL:** Total Length: 17,417 FT (3.30 MI), 1.00 Mile of Bank.
- NEW CHANNEL:** Total Length: 17,417 FT (3.30 MI), 1.00 Mile of Bank.



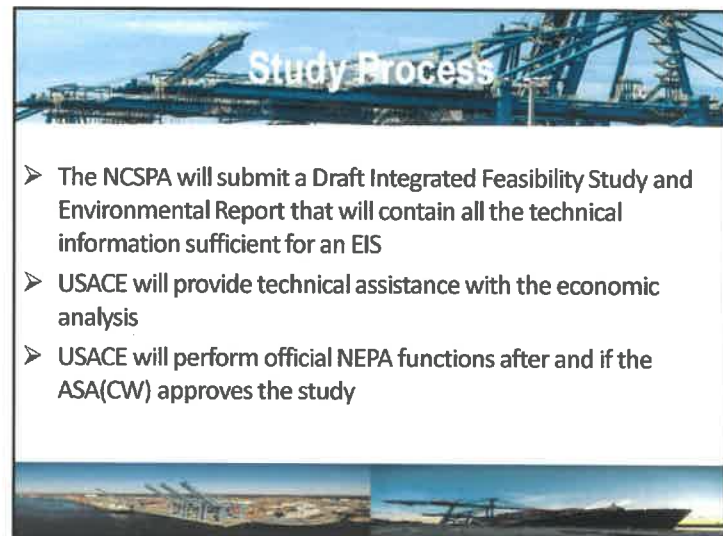
**Study Process**

- Section 203 of the Water Resources Development Act of 1986, as amended states (in part) that “A non-federal interest may on its own undertake a feasibility study of a proposed harbor or inland harbor project and submit it to the Secretary of the Army.”
- The feasibility study is being performed with 100% non-federal funds.



**Study Process**

- The feasibility study will be fully compliant with Corps of Engineers’ guidelines and NEPA requirements
- NCSPA will
  - Perform technical investigations
  - Conduct public and agency outreach during the study including use of technical work groups
  - Evaluate alternative plans including no action
  - Use third-party technical experts to perform independent technical review



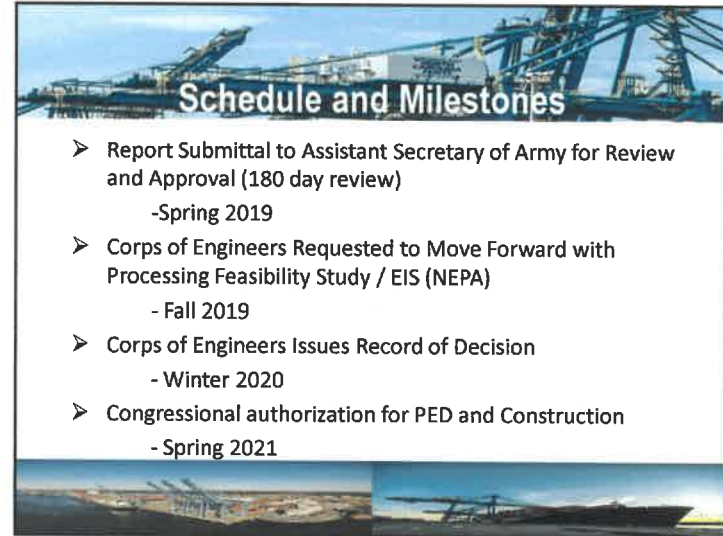
**Study Process**

- The NCSPA will submit a Draft Integrated Feasibility Study and Environmental Report that will contain all the technical information sufficient for an EIS
- USACE will provide technical assistance with the economic analysis
- USACE will perform official NEPA functions after and if the ASA(CW) approves the study



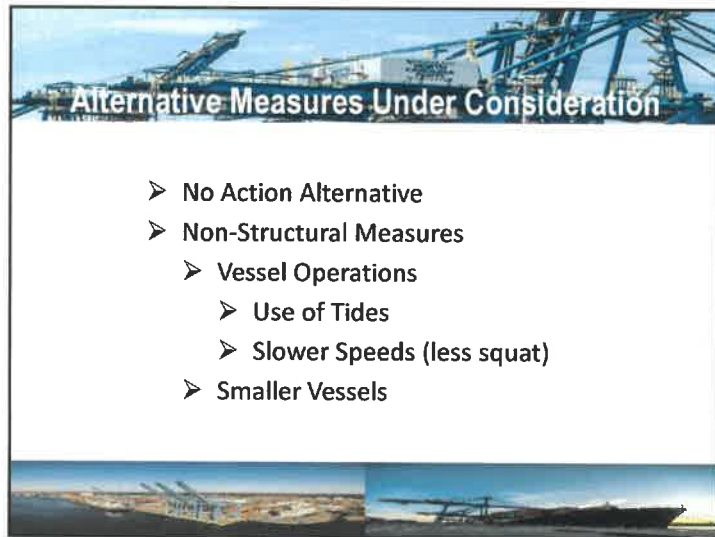
### Schedule and Milestones

- Existing Conditions & Baseline Modeling
  - August 2017 – August 2018
- Technical Advisory Group Meetings
  - September 2018 – February 2019
- Alternative Plan Evaluation
  - August 2018 – March 2019



### Schedule and Milestones

- Report Submittal to Assistant Secretary of Army for Review and Approval (180 day review)
  - Spring 2019
- Corps of Engineers Requested to Move Forward with Processing Feasibility Study / EIS (NEPA)
  - Fall 2019
- Corps of Engineers Issues Record of Decision
  - Winter 2020
- Congressional authorization for PED and Construction
  - Spring 2021



### Alternative Measures Under Consideration

- No Action Alternative
- Non-Structural Measures
  - Vessel Operations
    - Use of Tides
    - Slower Speeds (less squat)
  - Smaller Vessels




### Alternative Measures Under Consideration

- Structural Measures
  - Terminal Improvements
    - Improve Berth Productivity
  - Terminal Relocation
  - Channel Improvements
    - Widening
    - Deepening



### Measures Advanced for Detailed Evaluation

- No Action Alternative
- Channel Widening
  - Improve Navigation Safety
  - Not Widening for Two-way Traffic
- Channel Deepening
  - Evaluation of One-foot Increments
    - -44 feet to - 50 feet
- Dredged Material Placement

### No Action Alternative USEC Port Depths & Vessel Drafts

Port	Depth 2030	Maximum Drafts	
		Vessel Size	Feet
Boston*	48 feet	Sub-Panamax	40
New York*	50 feet	Panamax	42
Philadelphia	45 feet	Post Panamax	44
Baltimore*	50 feet	Super Post Panamax	48
Norfolk*	55 feet	Ultra Post Panamax	51
<b>Wilmington</b>	<b>42 feet</b>	<b>New Post Panamax</b>	<b>53</b>
Charleston	52 feet		
Savannah*	47 feet		
Jacksonville*	47 feet		
Port Everglades	48 feet		
Miami	50 Feet		

\*Typical service loop partners



### Plan Formulation Process

- Identification of Effective Measures
- Development of Alternative Plans
- Evaluation of Alternative Plans
  - Environmental Effects
  - Economic Benefits Analysis
  - Social and Local Effects
  - Construction and Maintenance Costs
  - Mitigation and Monitoring Plans
- Economic Justification (Benefits>Costs)




### Plan Formulation Process


- Assistant Secretary of the Army for Civil Works
  - Study Approval
- Record of Decision
- Chief of Engineers Report
  - Recommendation to Congress
- Congressional Approval



Engineering and Numerical Modeling

### Data Collection


- Existing
  - ✓ Bathymetry & Geotechnical
  - ✓ Water Levels & Water Quality
- New Field Work
  - ✓ Bathymetry & Geophysical
  - ✓ Water Levels, Discharge & Velocity
  - ✓ Salinity, Temperature, pH & DO
  - ✓ Turbidity & Suspended Solids



Engineering and Numerical Modeling

### Numerical Modeling


- Hydrodynamic (Delft3D)
- Wave Transformation (Delft3D)
- Shoreline Evolution (Gencade)
- Cohesive Sediment (Delft3D)
- Inlet Morphology (Delft3D)
- Water Quality (Delft3D)
- Groundwater (FEMWATER / NCDWR)



Engineering and Numerical Modeling

### Channel Design

- Vessel Maneuvering Simulations
- Channel Configuration
  - Alignment / Bends
  - Width
- Depths
- Turning Basin
- Ship Wakes



Engineering and Numerical Modeling

### Cost Estimate

- Dredging Quantities
- Mechanical or Hydraulic Dredging
  - ✓ Sand / Silt – Offshore Disposal
  - ✓ Hard Material – Offshore Disposal
- Mechanical with Blasting
  - ✓ Hard Material – Offshore Disposal
- Hydraulic Dredging
  - ✓ Sand – Beach Placement
- Maintenance Dredging
- Mitigation & Monitoring




### Environmental and Cultural Resources to be Assessed

- Coastal and Marine Processes
- Sea-Level Changes
- Water Quality (Surface and Groundwater)
- Tidal Wetlands
- Fish and Wildlife
- Marine Biological Resources
- Essential Fish Habitat
- Protected Species
- Noise and Air Quality
- Cultural and Historic Resources
- Socio-economics



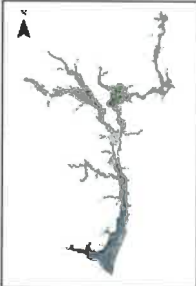

### Wetland Baseline Mapping Technical Approach

- Acquired Imagery
- Defined Study Area
- Evaluated Separability of Training Classes
- Performed Supervised Classification
- Post Classification Filtering
- Ground Truthing/Field Surveys
- Calibrated Model
- Performed Accuracy Assessment
- Refined Model






### Wetland Baseline Mapping Imagery

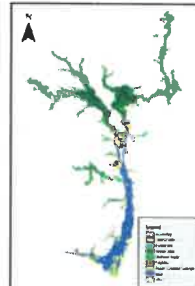
True Color





False Color (NIR)



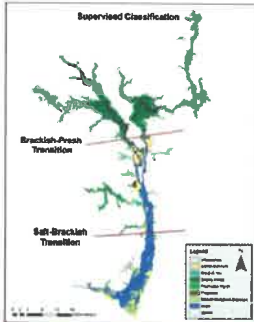
Supervised Classification





### Transition Zones

Supervised Classification




### Tidal Wetland Effects Analysis Technical Approach

- Updated Mapping of Lower Cape Fear Tidal Wetland Communities
- Define Community-based Assessment Reaches  
*Salt-brackish-freshwater Wetland Zones*
- Establish Wetland Baseline for each Assessment Reach  
*Wetland Acres/Linear-river-foot*
- Interpolate Modeled Salinity Changes  
*FWP Alternatives Relative to FWOP*
- Sensitivity Analysis/SLR Scenarios
- Assess and Quantify Salinity-driven Wetland Conversions (Acres)  
*FWP Alternatives Relative to FWOP*
- Determination of Mitigation Requirements  
*USACE-approved Functional Assessment Model*

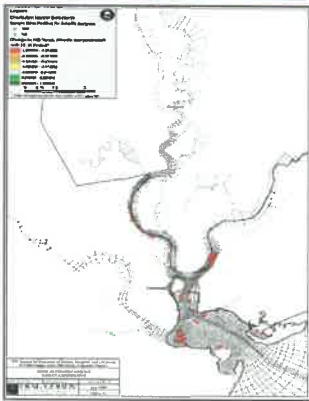


### Fish Habitat Effects Analysis Technical Approach

- Application of USACE-approved Habitat Suitability Index (HSI) Models
- HSI Models are a Component of USFWS HEPs that Were Developed to Support Impact Analyses
- Quantitative Prediction of Habitat Quality on a Scale (Index) of 0.0 to 1.0  
*0.0 = Unsuitable 1.0 = Optimal*
- Model Predictions Based on Key Habitat Variables that are Easily Measured
- HSI Models for Representative Species will be Applied to Existing Conditions, FWOP, and FWP Alternatives
- Model Results Used to Quantify Change in Habitat Suitability  
*FWP Alternatives Relative to FWOP*




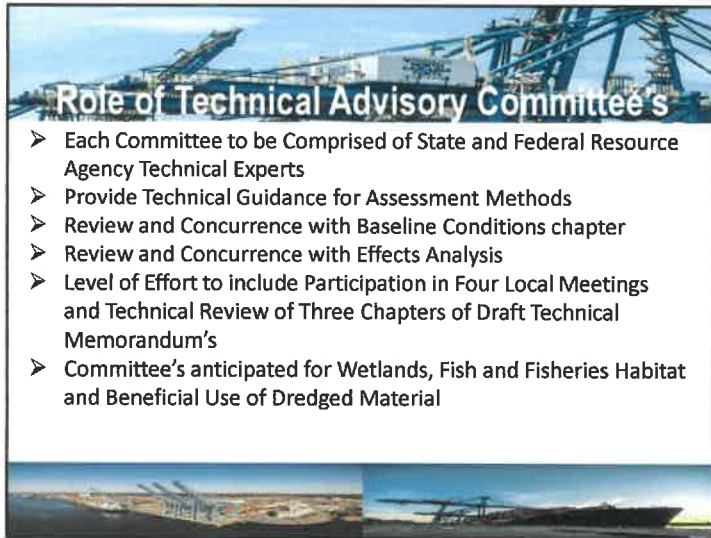
### Fish/Fisheries Effects Analysis Technical Approach



### Habitat Suitability Index Models for Fish Species: Effects Analysis

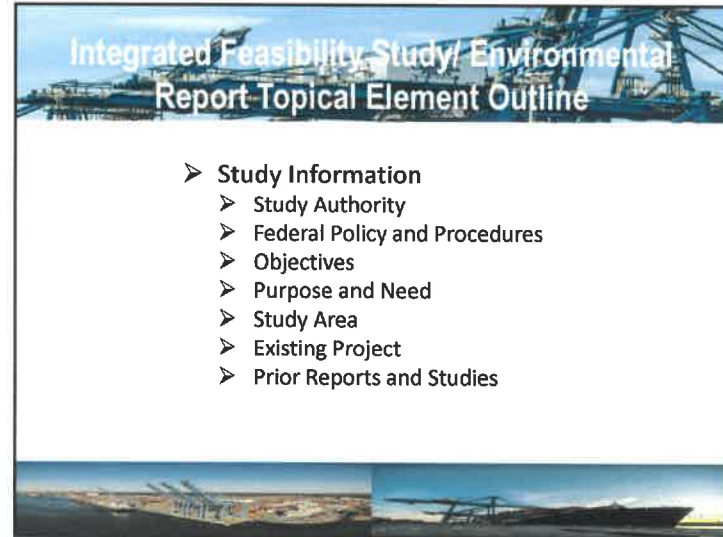
- Atlantic Sturgeon
- River Herring and Shad
- Flounder
- Redfish
- Striped Bass





### Role of Technical Advisory Committee's

- Each Committee to be Comprised of State and Federal Resource Agency Technical Experts
- Provide Technical Guidance for Assessment Methods
- Review and Concurrence with Baseline Conditions chapter
- Review and Concurrence with Effects Analysis
- Level of Effort to include Participation in Four Local Meetings and Technical Review of Three Chapters of Draft Technical Memorandum's
- Committee's anticipated for Wetlands, Fish and Fisheries Habitat and Beneficial Use of Dredged Material



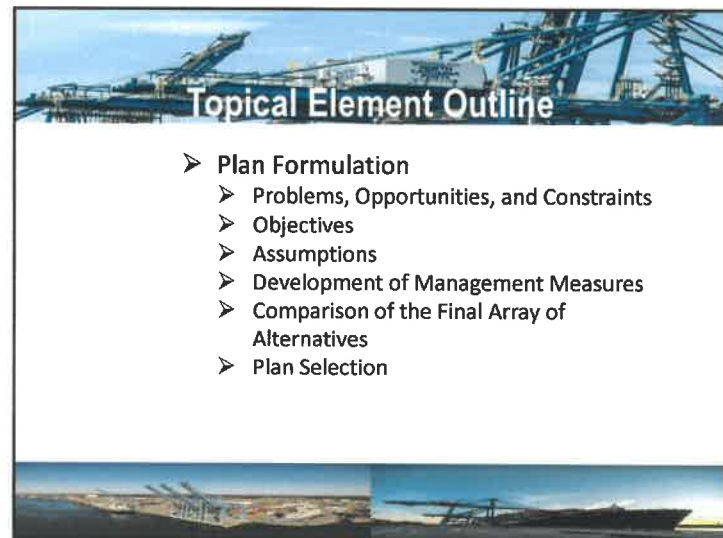
### Integrated Feasibility Study/ Environmental Report-Topical Element Outline

- Study Information
  - Study Authority
  - Federal Policy and Procedures
  - Objectives
  - Purpose and Need
  - Study Area
  - Existing Project
  - Prior Reports and Studies



### Topical Element Outline

- Existing and Future without Project Conditions Affected Environment
  - General Setting
  - Economic Conditions
  - Navigation Features
  - Environmental Conditions




### Topical Element Outline

- Plan Formulation
  - Problems, Opportunities, and Constraints
  - Objectives
  - Assumptions
  - Development of Management Measures
  - Comparison of the Final Array of Alternatives
  - Plan Selection





### Topical Element Outline

- **Recommended Plan (RP)**
  - Description of the Recommended Plan
  - Dredging and Dredged Material Management
  - Mitigation and Monitoring Plan
  - Lands Easements Rights of Way and Relocation Considerations
  - Detailed Cost Estimates and Benefits



### Topical Element Outline

- **Environmental Effects of the Proposed Project**
  - General Setting
  - Economic Conditions
  - Navigation Environment
  - Environmental Conditions
- **Environmental Compliance and Commitments**

### Wilmington Harbor Study Work Completed to Date

- Field Data Collection for Hydrodynamic Modeling
- Preliminary Model Development
- Ship Simulation to Assess Navigational Issues and Design
- Marine Cultural Resources Remote Survey and Draft Report
- Bathymetric/Geophysical Survey
- Tidal Wetland Mapping of Lower Cape Fear River watershed – Baseline Conditions
- Fish and Fisheries - Baseline Conditions Assessment
- Literature and Data Collection for Study Preparation
- Public and Interagency Meetings

### Wilmington Harbor Study Proposed Work FY 18/19

- Public and Interagency Meetings Summary Report
- Hydrodynamic and Water Quality Model Runs
- Draft Design, Plan Formulation and Cost Estimating
- Technical Advisory Committee's Meetings (4)
- Wetland, Fish and Fish Habitat and Beneficial Use Committee's with Technical Memorandum's Prepared
- Prepare Draft Feasibility/Environmental Report and Supporting Documents
- Mitigation, Monitoring and Adaptive Management Plan
- Draft and Final Marine Cultural Report
- Beneficial Use Evaluation Report
- Agency Coordination



**Discussions and Recommendations**

**Send Comments to [WH203@ncports.com](mailto:WH203@ncports.com)**

The image is a composite graphic. The top portion features a blue industrial structure, possibly a port crane or conveyor system, against a clear sky. The bottom portion shows a yellow boat moving across a body of water, leaving a white wake. The text is overlaid on the white background between the two images.

# SIGN UP SHEET

## SCOPING MEETING

Wilmington Harbor Workgroup Meetings  
~~Fish~~ Wildlife Habitat  
 New Hanover County

December 20, 2018

Name	Agency	Phone	Email
Cameron Weaver	NCDEQ-DEACS	910-796-7265	<a href="mailto:Cameron.Weaver@ncdenr.gov">Cameron.Weaver@ncdenr.gov</a>
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Jerry Diamantides	DMA	802-223-2040	<a href="mailto:Jerry@dma-us.com">Jerry@dma-us.com</a>
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*Dan Holliman	USEPA	404-562-9531	<a href="mailto:Holliman.Daniel@epa.gov">Holliman.Daniel@epa.gov</a>
X Unavailable *conf. line 919-571-4762			

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# SIGN UP SHEET SCOPING MEETING

Wilmington Harbor Beneficial Use Working Group Meeting

New Hanover County

February 19, 2019

Name	Agency	Phone	Email
Cameron Weaver	NC DEACS	910-796-7265	<a href="mailto:Cameron.Weaver@ncdenr.gov">Cameron.Weaver@ncdenr.gov</a>
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Todd Walton	NCSPA	910-251-678	<a href="mailto:Todd.Walton@ncports.com">Todd.Walton@ncports.com</a>
Steve Dial	Dial Cordy	910-251-9790	<a href="mailto:SDial@dialcordy.com">SDial@dialcordy.com</a>
*Mike Wicker	USFWS	919-856-4520 x 22	<a href="mailto:mike_wicker@fws.gov">mike_wicker@fws.gov</a>
X Anne Deaton	NC DMF	910-796-7311	<a href="mailto:Anne.Deaton@ncdenr.gov">Anne.Deaton@ncdenr.gov</a>
Heather Coats	NC DCM	910-796-7302	<a href="mailto:Heather.Coats@ncdenr.gov">Heather.Coats@ncdenr.gov</a>
Twyla Cheatwood	NOAA-NMFS	252-758-2958	<a href="mailto:Twyla.Cheatwood@noaa.gov">Twyla.Cheatwood@noaa.gov</a>
Curt Weychert	NC DMF	252-808-8050	<a href="mailto:Curt.Weychert@ncdenr.gov">Curt.Weychert@ncdenr.gov</a>
*Andy Herndon	NOAA-NMFS	(727) 824-5312	<a href="mailto:andrew.herndon@noaa.gov">andrew.herndon@noaa.gov</a>
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Walker Golder	Audubon	910-686-7527	<a href="mailto:WGolder@audubon.org">WGolder@audubon.org</a>
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Kristian Rogers	Dial Cordy	832-567-1705	<a href="mailto:KRogers@dialcordy.com">KRogers@dialcordy.com</a>
*Jeff Shelden	Moffatt&Nichol	919-781-4626	<a href="mailto:JShelden@MoffattNichol.com">JShelden@MoffattNichol.com</a>
X Unavailable *Conference Call			910-571-4162

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# SIGN UP SHEET

## SCOPING MEETING

Wilmington Harbor Technical Workgroup Meeting  
 Wetland Assessment Team  
 New Hanover County

April 2019

Name	Agency	Phone	Email
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Todd Walton	NCSPA	910-251-5678	<a href="mailto:Todd.Walton@ncports.com">Todd.Walton@ncports.com</a>
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Rahlff Ingle	Dial Cordy	910-228-0212	<a href="mailto:RIngle@dialcordy.com">RIngle@dialcordy.com</a>
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Curt Weychert	NCDMF	252-808-8050	<a href="mailto:Curt.Weychert@ncdenr.gov">Curt.Weychert@ncdenr.gov</a>
Courtney Spears	NCDCM	910-796-7426	<a href="mailto:Courtney.Spears@ncdenr.gov">Courtney.Spears@ncdenr.gov</a>
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Twyla Cheatwood	NMFS		<a href="mailto:Twyla.Cheatwood@noaa.gov">Twyla.Cheatwood@noaa.gov</a>
Maria Dunn	NCWRC	252-948-3916	<a href="mailto:Maria.Dunn@ncdenr.gov">Maria.Dunn@ncdenr.gov</a>
Keith Walls	Dial Cordy	301-536-0698	<a href="mailto:KWalls@dialcordy.com">KWalls@dialcordy.com</a>
*Dan Holliman	USEPA	404-562-9531	<a href="mailto:Holliman.Daniel@epa.gov">Holliman.Daniel@epa.gov</a>
X Unavailable			
*conf. line 919-571-4762			

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