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

September 18, 2025

Mr. Cameron Luck
North Carolina Department of Environmental
Quality Division of Coastal Management
400 Commerce Avenue
Morehead City, North Carolina 28557

Dear Mr. Luck:

The U.S. Army Corps of Engineers (USACE), Wilmington District, has prepared the Draft Environmental Impact Statement (DEIS) for the Wilmington Harbor 403 Navigation Project, North Carolina, dated September 2025. The proposed Federal action would improve the Federal navigation channel to address transportation efficiencies and better accommodate the vessel fleet forecasted to serve Wilmington Harbor.

An electronic version of the DEIS is available on the USACE, Wilmington District, Wilmington Harbor 403 website at: https://www.saw.usace.army.mil/Missions/Navigation/Dredging/Wilmington-Harbor/Wilmington-Harbor-403-Letter-Report-and-EIS/

The USACE is requesting a consistency review under the North Carolina Coastal Area Management Program for the proposed extension and deepening of the entrance channel in combination with channel deepening and widening sections within the inner harbor channels. The project includes the placement of all dredged material into the ODMDS, bird islands, adjacent beaches, and other beneficial use sites. This letter, and the attached documentation serves as a formal consistency determination in which USACE requests your concurrence.

In accordance with Section 307(c)(1) of the Federal Coastal Zone Management Act of 1972, as amended, the USACE has determined that extending, deepening, and widening the channels of Wilmington Harbor is consistent, to the maximum extent practicable, with North Carolina's coastal management program. The proposed activities comply with the enforceable policies of North Carolina's approved coastal management program and would be conducted to the maximum extent practicable in a manner consistent with the program and any authorizations received.

New work, as well as operations and maintenance activities, would be undertaken in compliance with all conditions of applicable state and Federal authorizations. This determination is based on the review of the proposed project against enforceable policies of the State's Coastal Management Program, which are principally found in Chapter 7 of Title 15A of the NC Administrative Code.

Thank you for your attention to this matter. Should you have any questions or require additional information, please contact Mr. Eric Gasch by telephone at (910) 251-4553 or by email at Eric.K.Gasch@usace.army.mil.

Sincerely,

WALTERS.BRET.L.1231196745 Digitally signed by WALTERS.BRET.L.1231196745
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Bret L. Walters
Chief, Planning and Environmental Branch

US Army Corps of Engineers, Wilmington District Consistency Determination for the Wilmington Harbor 403 Navigation Project

Project Purpose

The United States Army Corps of Engineers (USACE) is seeking authorization to extend and deepen the Wilmington Harbor (**Figure 1**) entrance channel in combination with channel deepening and widening sections within the inner harbor channels.

The purpose of this request is to address the constraints that contribute to inefficiencies in the existing harbor's ability to safely serve forecasted vessel fleet and cargo types and volumes. The cargo transportation industry continues to shift to increased use of standardized containers for multimodal (marine, rail, and truck) freight transportation systems. Additionally, the marine vessel fleet is trending to larger, deeper-draft vessels, particularly for containerships. Most of the navigation channels serving Wilmington Harbor are currently authorized to a depth of -42 feet Mean Lower Low Water (MLLW) (the average lowest daily tide over a 19-year period for the respective area).

Channel depth and width constraints present problems that contribute to inefficiencies under existing conditions. These problems are projected to continue to occur and intensify in the future under without-project conditions, as cargo throughput increases, creating more vessel traffic, and larger vessels comprise a greater portion of the vessel fleet. The existing navigation channels was designed for use by sub-Panamax vessels. Under existing conditions, Panamax and Post-Panamax vessels use Wilmington daily and weekly. Under future conditions, the number and size of Post-Panamax vessels at the port are expected to increase with or without the proposed channel modifications.

The primary navigation problems at Wilmington affect bulk and container ship operations. They relate to the inefficient operation of containerships, tankers, and bulkers in Wilmington Harbor, which affect the Nation's overall waterborne transportation costs and competitiveness. Cargo shippers are experiencing increased operating costs due to light loading, congestion delays, and tidal delays. These inefficiencies will increase in the future as present harbor users increase their annual tonnage throughput and as larger ships that require deeper channels replace older, smaller, and less efficient ships.

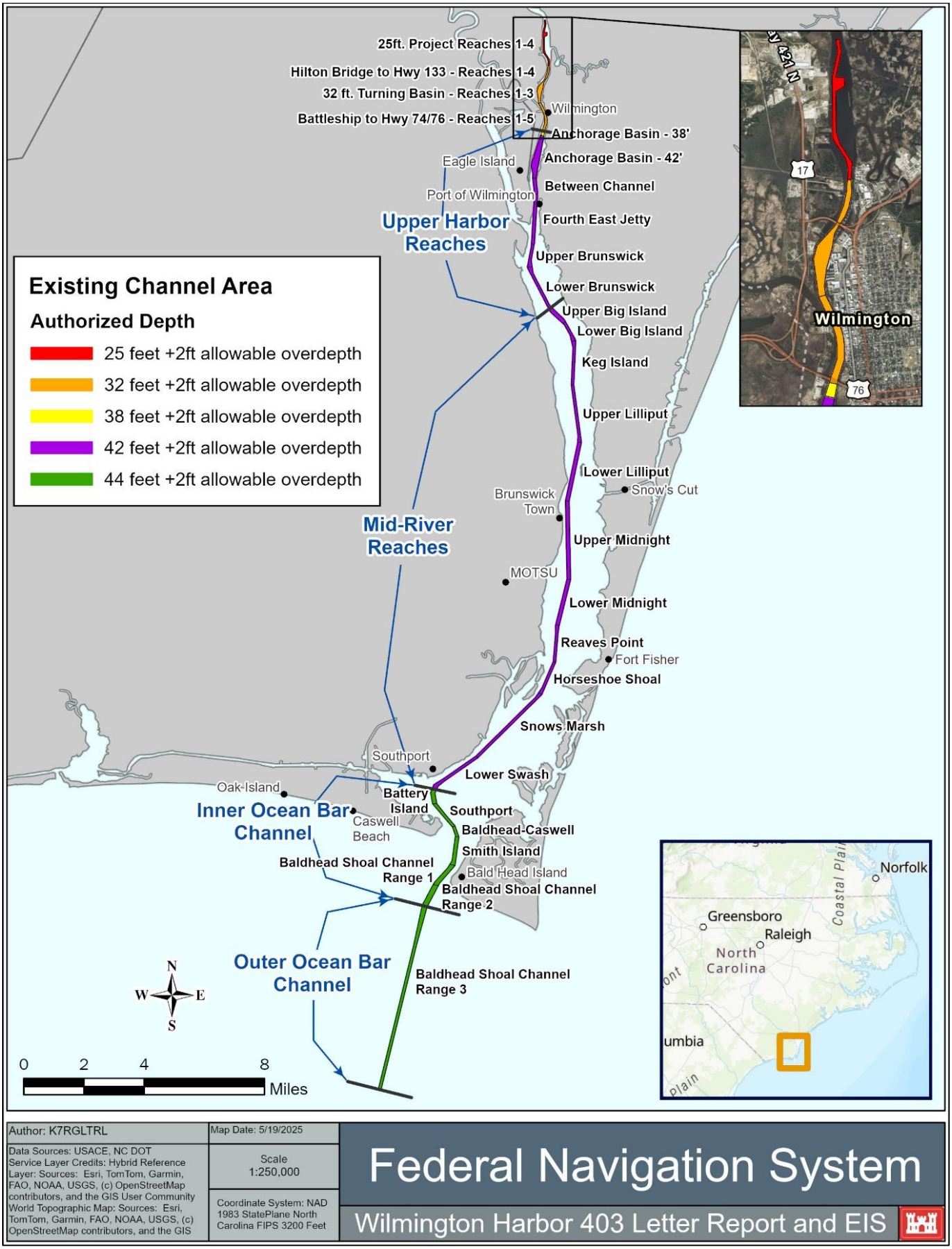

Figure 1. Existing Wilmington Harbor Federal Navigation Project and currently authorized depths

Existing Conditions

The navigation channels within the Wilmington Harbor include the Outer Bar Channel (Baldhead Shoal Range 3), the Inner Bar Channels (Baldhead Shoal Ranges 1 & 2, Smith Island, Baldhead-Caswell, Southport and Battery Island Channels), and the Mid-River channels (Lower Swash, Snows Marsh and Horseshoe Shoal). Material dredged from the Outer Bar is made of up of mostly silt that is not suitable for beach placement, therefore it is placed offshore in the Wilmington Harbor Ocean Dredged Material Disposal Site (ODMDS). Material in the Outer Bar channel accumulates rapidly and requires removal annually to maintain navigability for ships to safely enter the harbor.

The Inner Bar Channels are composed of mostly beach quality sand (≥90% sand) and dredged material from these channels is typically removed by hydraulic cutterhead/pipeline dredge and beneficially placed on the adjacent ocean beaches of Oak Island or Bald Head Island.

The lower channels of the Mid-River section of Wilmington Harbor contain beach quality sand as well, however these reaches are out of range for economical beach placement. In the past, this dredged material was pumped by pipeline dredge to an upland disposal area (DA 4) or onto adjacent bird islands managed by the State of North Carolina or Audubon or taken offshore to the ODMDS by means of bucket and barge or hopper dredge. When sediments accumulate within Horseshoe Shoal and Snows Marsh channels, USACE strives to use this beach quality dredged material beneficially when possible.

Alternatives Analysis

Feasible alternatives include:

- No Action Alternative
- 47-Foot Action Alternative (Proposed Action)
- 46-Foot Action Alternative

The No Action Alternative: The No Action or Future Without Project (FWOP) Alternative assumes that no actions would be taken by the Federal Government to address the problems identified. The USACE would continue operations and maintenance (O&M) of the currently authorized channel depths and widths, but no channel modifications would occur. Wilmington Harbor authorized channel depths vary based on location. The FWOP condition is described and evaluated throughout the Draft Environmental Impact Statement (DEIS). The USACE would continue to place dredged material in accordance with the 2023 Wilmington Harbor Dredge Material Management Plan (DMMP).

47-Foot Action Alternative (Proposed Action)

This alternative is the proposed action and includes:

Extend the existing entrance channel (**Figure 2**). The new channel would be dredged and extend approximately 48,000 feet (9.1 miles) seaward from Baldhead Shoal Channel - Reach 3 to waters that are consistently deeper than the currently maintained channel depth of -49 feet MLLW. The reach offshore of the existing pilot boarding station (Sta 490+00) would have a heading of approximately 30 degrees (inbound), which is an approximate 16-degree shift from the Baldhead Shoal Channel - Reach 3 (14-degree). This heading change would take advantage of the most direct navigation path, which is an existing deeper natural channel, minimizing dredging volumes and

environmental impacts, while reducing construction and maintenance costs.

Deepen the existing entrance channel from the Battery Island reach to the pilot boarding station (Sta 490+00) (**Figure 2**). The depth would increase from -44 feet MLLW to -49 feet MLLW to allow for adequate underkeel clearance for anticipated container vessels in areas affected by ocean waves.

1. Construct side slopes of 5:1 (horizontal to vertical) from the Entrance channel to Battery Island.
2. Deepen the existing inner harbor navigation channels, all reaches from Lower Swash to the Anchorage Basin from -42 feet MLLW to -47 feet MLLW.

Widen the existing inner harbor navigation channel as described in **Table 1**. Construct side slopes of approximately 3:1 (horizontal to vertical) from Lower Swash to the Anchorage Basin. The 3:1 design is to promote stability, and it is assumed that after construction, the slopes would settle into a stable condition at 3:1.

46-Foot Action Alternative

Extend and deepen the entrance channel in combination with deepening and widening the inner harbor channels within the same reaches as the 47-foot Action Alternative. The proposed navigation improvements include:

Extend the existing entrance channel to create Baldhead Shoal Channel – Reach 4. The new channel would extend approximately 48,000 feet (~9.1 miles) seaward from Baldhead Shoal Channel - Reach 3 to waters that are naturally deeper than -48 feet MLLW. The reach offshore of the existing pilot boarding station (Sta 490+00) would have a heading of approximately 30 degrees (inbound), which is an approximate 16-degree shift from the Baldhead Shoal Channel - Reach 3 (14-degree). This heading change would take advantage of the most direct navigation path to naturally deeper water, minimizing dredging volumes and environmental impacts, while also reducing construction and maintenance costs.

Deepen the existing entrance channel from the Battery Island reach to the pilot station (Sta 490+00) from -44 feet MLLW to -48 feet MLLW for adequate underkeel clearance for anticipated container vessels where ocean waves occur.

1. Deepen the existing inner harbor navigation channels, all reaches from Lower Swash to the Anchorage Basin from -42 feet to -46 feet MLLW.
2. Construct side slopes of 5:1 (horizontal to vertical) from the entrance channel to Battery Island.

Widen some existing inner harbor navigation channel reaches as identified in **Table 1.** Construct side slopes of approximately 3:1 (horizontal to vertical) from Lower Swash to the Anchorage Basin as over time, the slopes will naturally stabilize and remain in place without collapsing or eroding. The 3:1 design is to promote stability, and it is assumed that after construction, the slope would settle into a stable condition at 3:1.

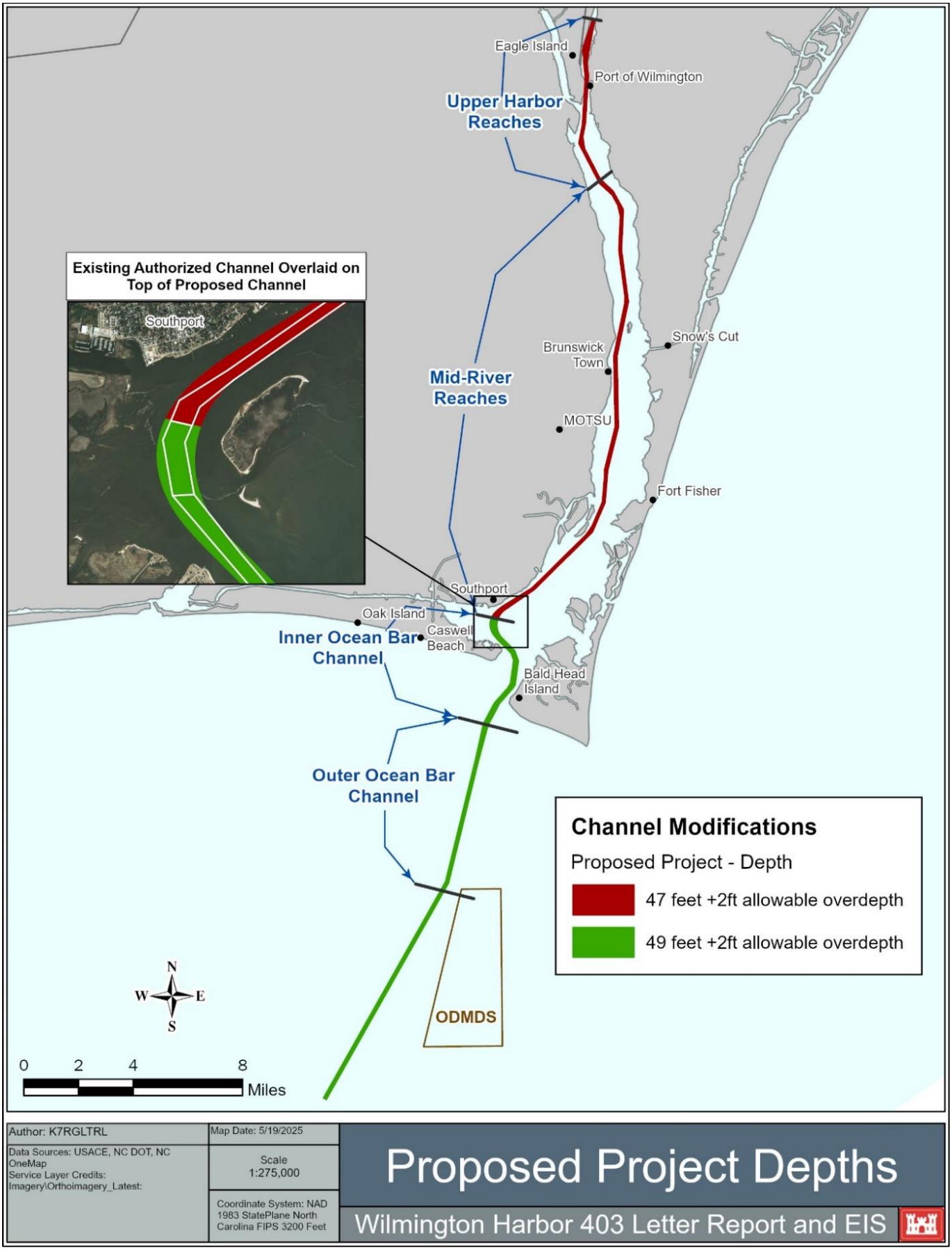

Figure 2. Wilmington Harbor Proposed Entrance Channel Extension and Proposed Authorized Depths

Table 1. Existing and Proposed Channel Widths

Reach Name	Reach Width (ft)		Widening Details
	Existing Channel	Proposed	
Baldhead Shoal Channel - Reach 4 (Proposed Entrance Channel Extension)	N/A	600	New
Baldhead Shoal Channel - Reach 3	500 - 900	600 - 900	Symmetric
Baldhead Shoal Channel - Reach 2	900	900	No Change
Baldhead Shoal Channel - Reach 1	700	900	West Side Only
Smith Island	650	900	East Side Only
Baldhead -Caswell	500	800	East Side Only
Southport	500	800	Re-orientation East Side then West Side
Battery	500	800 - 1300	Replaced with 4,000-ft Radius Curve and West Side at Apex
Lower Swash	400	800 - 500	West Side to Symmetric
Snows Marsh	400	500	Symmetric
Horseshoe Shoal	400	500	Symmetric
Reaves Point	400	500	Symmetric
Lower Midnight	600	600	No Change
Upper Midnight	600	600	No Change
Lower Lilliput	600	600	No Change
Upper Lilliput	400	500	Symmetric
Keg Island	400	500	Symmetric
Lower Big Island	400	500	Symmetric
Upper Big Island	660	660	No Change
Lower Brunswick	400	500	Symmetric
Upper Brunswick	400	500	Symmetric
Fourth East Jetty	500	550	West Side Only
Between Channel	550	625	West Side Only
Anchorage Basin	625-1200	625 - 1509	West Side at Southern End and East Side at Middle

Potential Blasting

Where rock is present within the proposed dredging footprint, an additional one foot of dredging below the project depth is required to remove the rock for safety purposes. In such areas, up to two additional feet of overdepth dredging is allowed, resulting in a potential total of three feet beyond the project depth; however, only the first foot is mandatory when rock is encountered. Overdepth dredging may occur during both initial construction and subsequent O&M dredging activities.

The top of rock was determined using existing geotechnical and geophysical data from the 1996 Deepening Act and the 2012 Channel Improvements Project, along with new geotechnical vibracore data collected in 2023. Additional geotechnical and geophysical information will be collected in Pre-Construction, Engineering, and Design (PED) to further refine the top of rock surface throughout the channel. Blasting occurred during the last deepening effort in the early 2000s and consisted of removing rock from Lower Brunswick, Upper Big Island, Lower Big Island, and Keg Island channel reaches. Blasting may be needed again to deepen these reaches to their specified project depths (**Figure 3**). Ultimately, it will be up to the contractor to determine the correct means and methods to remove dredge material depending on the type of material to be dredged and the placement site.

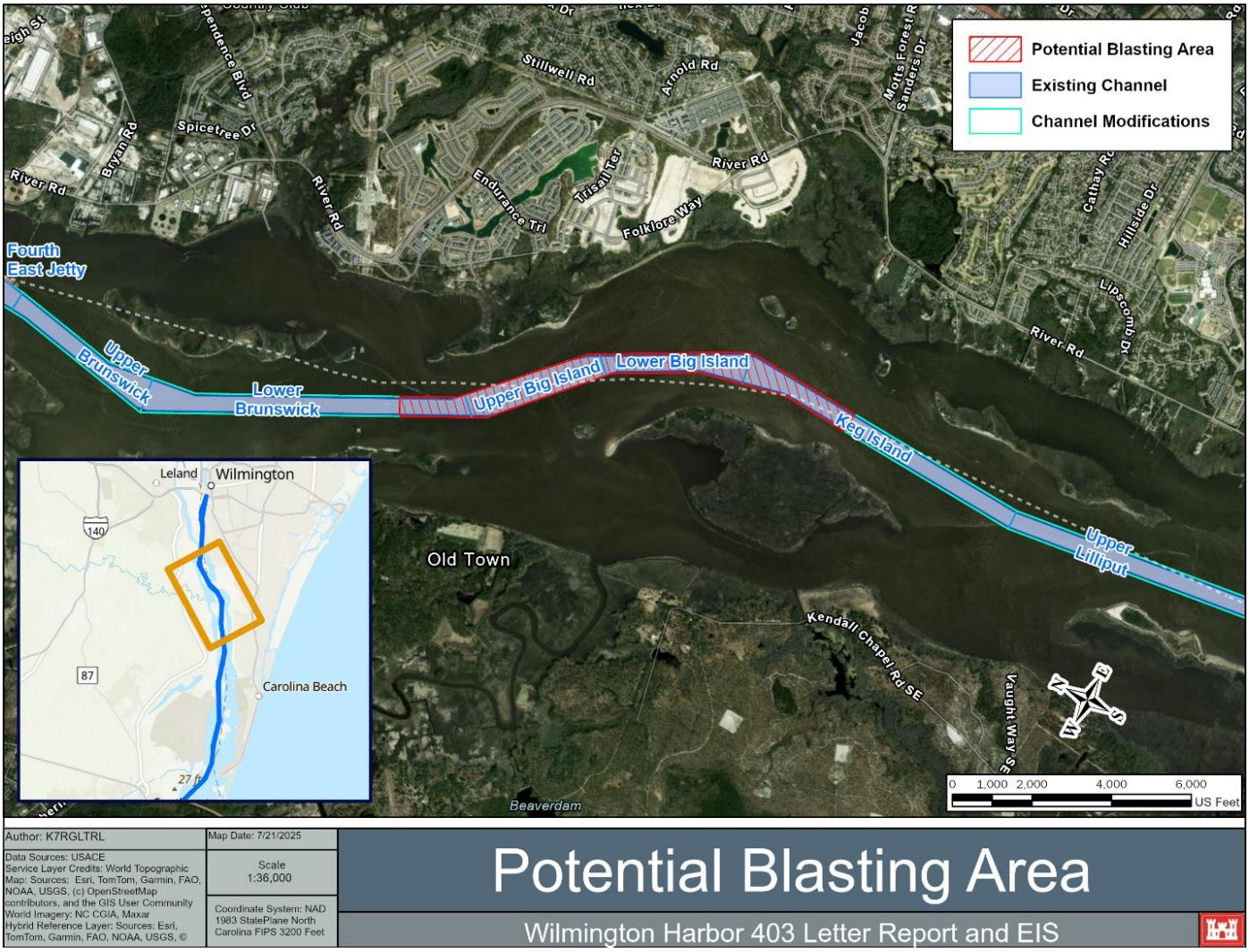

Figure 3. Potential blasting areas

Beneficial Use of Dredged Material

Proposed placement areas for both the initial action and O&M include the ODMDS and various beneficial use placement areas (beaches, bird islands, intertidal marsh restoration, fish habitat enhancement structures, riverbank protection, and back bay marsh restoration). Approximately half of the material dredged for initial construction would be used beneficially rather than placed in the ODMDS (**Figure 4**).

Approximately 50 percent of all material taken out of the Federal navigation channel with the initial deepening effort would be placed in a beneficial way with respect to the ecosystem and environment. These beneficial use of dredged material (BUDM) options include: (1) intertidal placement of fine-grained and sandy material along riverbanks, back barrier areas, surrounding bird island areas, and along marshes in the Cape Fear River; (2) beach nourishment in New Hanover and Brunswick Counties; (3) bird island placement, including those existing and historic footprints (renourishment); and (4) fish habitat rock placement at the existing Wilmington Offshore Fisheries Enhancement Structure (WOFES). These four categories of beneficial use describe the way in which approximately 50 percent of the material from the project area will be allocated, for all types of sediment including but not limited to: non-beach quality sediment (fine-grained material including organics, ≤90% sand); beach quality sediment (sand and minimal organics, ≥90% sand); soft rock (rock not requiring blasting that can be removed by cutterhead dredge); and hard rock (may require blasting or fracturing before removal). These sites may be utilized for additional O&M placement activities after initial construction.

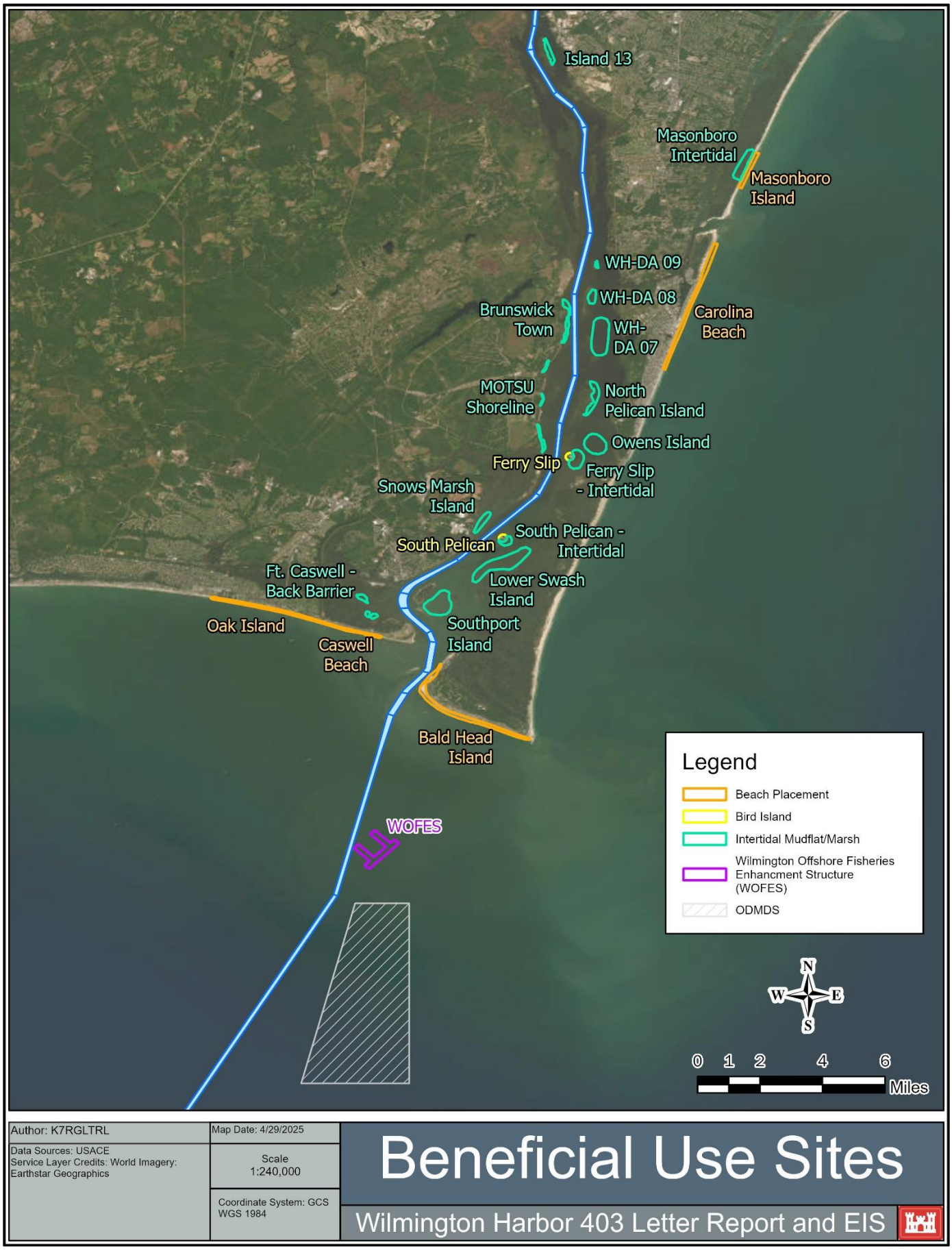

Figure 4. Beneficial Use Placement Sites

Intertidal Placement

Intertidal mudflat creation includes the deposition of silt and mixed sediments onto the benthic area of a tidal or nontidal area abutting a wetland environment and/or shoreline between the MHW and MLW lines of a system. These flats can provide substrate for additional sediment deposition over time, creating unique habitats for aquatic and land-based species. These BUDM sites can typically utilize 5,000 to 10,000 cubic yards of sediment per acre of placement. In North Carolina, bird island placements and beach nourishment can only receive beach quality sand (90% sand). Mudflats can receive any type of dredged material, including what typically would go to the ODMDS. The BUDM sites could include channelized or braided deposition areas that may provide essential fish habitat (EFH) below MLLW, and other engineering measures to ensure the design of each BUDM site benefits the location in the most ecologically resilient way. Coir logs and hay bales may also be utilized to maintain the placement site's footprint and trap sediment as it flows with the currents and tides. The majority of the beneficial use sites for the proposed channel improvements are intertidal creation (**Table 2**).

Table 2. Proposed intertidal mudflat beneficial use sites

Intertidal Placement Site (North to South)	Approximate Footprint (Acres)	Approximate Capacity - Quantity of Material (Cubic Yards)
Island 13	50.7	370,525
WH-PA[1] 09	7.5	84,718
WH-PA[1] 08	46.3	511,247
WH-PA[1] 07	302.0	2,554,077
North Pelican Island	92.5	351,489
Brunswick Town Fort Anderson	64.5	693,111
MOTSU	43.1	339,108
Owens Island	183.1	1,566,952
Masonboro Island[2]	130.8	583,606
Ferry Slip Island	106.9	906,446
South Pelican Island	34.6	443,777
Snow's Marsh Island	63.9	354,329
Lower Swash Island	353.9	3,314,046
Southport Island	254.1	1,742,910
Ft. Caswell Back-Barrier	48.6	202,891

[1]Hisotrically referred to as DA (Disposal Area), but is now referred to as a PA (Placement Area)
[2]Not currently economically feasible but may be in the future and/or during O&M. Included in impacts assessment.

Beach Placement

Placement of beach quality sand onto New Hanover and Brunswick County beaches is proposed during initial construction and O&M. Beach placement of dredged material removed from Federal navigation channels is a placement option, as opposed to Coastal Storm Risk Management projects, which are designed to renourish beaches that have been eroded over time, often dredging sand from the open ocean and bringing it back to shore. Some beach placement projects take sand out of the Federal navigation channel, improving navigability, and subsequently placing on beaches, benefiting local communities in a variety of ways. The proposed project includes five beaches identified for placement during construction, O&M, or both (**Table 3**).

Table 3. Proposed beach placement sites.

Beach Nourishment Site (North to South)	Approximate Footprint (Acres)	Approximate Capacity-Quantity of Sand (Cubic Yards)
Masonboro Island[1]	74.7	300,000
Carolina Beach[1]	233.8	1,00,000
Bald Head Island	269.5	1,600,000
Oak Island	190.3	2,000,000
Caswell Beach	20.2	

[1]Not currently economically feasible but may be in the future and/or during O&M. Included in impacts assessment.

Bird Island Placement

Bird islands are historically a more common form of BUDM USACE has implemented throughout North Carolina that involves the placement of beach quality sand above MHW, creating sandy islands for bird habitat. These islands are typically raised to higher elevations (typically no higher than 15 feet above MHW) and may hold 15,000 to 29,000 cubic yards of material per acre. The maximum area of a bird island as currently recommended by the North Carolina Wildlife Resources Commission is 25 acres so that larger predators do not have suitable habitat to live on the island. The sand from these islands erodes, particularly in higher energy systems like tidal rivers. Bird islands benefit from vegetation and adjacent mudflats, which can help trap sediment and create habitat. Two existing bird islands in the Cape Fear River have eroded over time and would be restored to their historically permitted footprint with initial construction measures. These two islands will also have intertidal placement around the island, creating different types of habitats, as well as a way to protect the islands from vessel wake and erosive currents (**Table 4**).

Table 4. Proposed bird island beneficial use sites.

Bird Island Site (North to South)	Approximate Footprint (Acres)	Approximate Quantity of Material (Cubic Yards)
Ferry Slip Island	25	336,000
South Pelican Island	25	227,000

Rock Placement

Rock structures below the MLLW line create EFH in riverine, brackish, and saline environments. The strategic deposition of rock would provide habitat. The existing WOFES is the proposed rock placement site for the project, which would receive about 1,142,600 cubic yards of rock from initial construction.

Beneficial Use Construction Methods

The placement of material would be via barges, pipelines, and scows, depending on the type of material and placement location. Geology and sediment reports provide guidance on what type and how much sediment would be found if the navigation channel is deepened to the proposed alternative, which aided in the proposed allocation of material among beneficial and non-beneficial use placement sites.

Beach placement at Masonboro Island and Carolina Beach, along with intertidal placement on the back barrier side of Masonboro Island, are included in assessments in the DEIS as potential placement areas; however, because the cost for these placement options exceeds the cost to dispose of the material at the ODMDS, they are not part of the initial construction. Additional consideration of these options would be performed during the PED phase. For the purposes of cost and benefits assessments, the three placement areas were not included, and their allocated material is assumed to be disposed of at the ODMDS or the most economically feasible location. These placement sites could be used during O&M of the project in the future should it become economically feasible.

Compensatory Mitigation

Compensatory mitigation is intended to replace ecological services lost as a result of unavoidable project impacts. Detailed information and analysis related to unavoidable impacts and associated mitigation is provided in Section 3 and in Appendices H, I, and M of the draft DEIS. The proposed action would result in impacts to wetlands and aquatic habitat that would require compensatory mitigation.

Mitigation for wetland impacts includes the preservation of at least approximately 550 acres of forested freshwater wetlands and the restoration and enhancement of approximately 120 acres of *Phragmites australis* and brackish marsh wetlands; mitigation for aquatic habitat includes the construction of two fish passage structures in the Cape Fear River to restore access to historic spawning grounds for anadromous fish. The four proposed mitigation sites for unavoidable wetland and aquatic impacts are located in southeast North Carolina, specifically:

- Wetland mitigation site 1 - Black River Corridor
- Wetland mitigation site 2 - Eagle Island/Alligator Creek
- Aquatic habitat improvement site 1 – Cape Fear River Lock and Dam 1 Fish Passage (bypass)

- Aquatic habitat improvement site 2 – Cape Fear River Lock and Dam 2 Fish Passage (rock ramp)

Minimization Measures

For either action alternative, the USACE would follow the environmental commitments listed below as coordinated with resource agencies:

1. The USACE will abide by NMFS's 2020 South Atlantic Regional Biological Opinion (SARBO) and relevant Project Design Criteria (PDC).

2. The USACE will abide by the USFWS 2017 Statewide Programmatic Beach Placement Biological Opinion (SPBO), or superseding Biological Opinion (BO), and 2017 Manatee Guidelines.

3. Beach placement and bird island placement would only occur during the appropriate timeframes for the protection of nesting sea turtles and birds. Work would follow the reasonable and prudent measures, and terms and conditions of the 2017 USFWS SPBO for all beach placement activities.

   Specifically, an environmental timeframe of **November 16 to April 30** would be observed for all sand placement activities above the MHW line per Reasonable and Prudent Measure A.3 of the 2017 USFWS SPBO. Placement on bird islands would only occur between **September 1 to March 31** to protect bird nesting. Placement onto Masonboro Island beaches would occur during the **November 16 to March 31** timeframe.

4. Dredging would only occur during the following timeframes that were determined to be appropriate based on the protection of federally listed species and/or fisheries habitat. These timeframes depend on type of dredge vessel and location of dredging. Work would follow the reasonable and prudent measures as agreed to with resource agencies. The following timeframes would be applied based on the historical dredging timeframes that have been applied by regulatory agencies:

   a. Pipeline dredging from Reaves Point to Wilmington is subject to an environmental timeframe of **August 1 to January 31**.

5. The USACE would abide by the conditions of the Section 401 Water Quality Certification, which would be obtained before construction of the project.

6. The USACE would abide by the conditions of the National Marine Fisheries Service Biological Opinion and Incidental Take Authorization, which would be obtained before the initiation of any underwater blasting activity.

Areas of Environmental Concern

Wilmington Harbor project areas are located in an area of environmental concern (AEC) as defined by Section 113A-113 of the North Carolina Coastal Area Management Act (CAMA). Specifically, the proposed actions will be occurring in the Coastal Wetlands, Estuarine Waters, Public Trust Areas, Coastal Shorelines (Estuarine and Public Trust) and Ocean Hazard.

The NC Division of Water Resources (NCDWR) classifies waters within harbor inlets and estuaries as "tidal salt water; high quality waters" (SA), and waters of the Atlantic Ocean as "tidal salt water; aquatic life" (SC). The Masonboro Sound and Black and South Rivers Areas are located in Outstanding Resource Waters (ORW), as defined by NCDWR. The Masonboro Sound Area ORW is one of the possible BUDM placement sites and the Black and South Rivers Areas are in the mitigation site located north of the project. Primary Nursery Areas (PNA) (15A NCAC 07H.0208(a)(4)) are those areas in the estuarine system where initial post-larval development takes place. These areas are usually located in the uppermost sections of a system where populations are uniformly very early juveniles. The Division of Marine Fisheries is responsible for preserving, protecting and developing PNA for commercially important finfish and shellfish. The following dredge areas are in PNA; Fourth East Jetty, Between Channel, and Anchorage Basin.

Submerged aquatic vegetation (SAV) has not been identified in waters adjacent to the Wilmington Harbor navigation channels (15A NCAC 07H.0208(a)(6)). It is unlikely that any SAV are present within the areas to be dredged, since they are too deep for light to penetrate, routinely navigated and located in dynamic areas having a lot of tidal and current action, in addition to frequent sand movement. Based on the most recent Geographic Information System (GIS) data available to USACE (2020-2021), there are no mapped SAV beds within dredging or placement areas.

There are no shellfish beds in the project areas (15A NCAC .0208(a)(2).

Project modeling indicates that erosive forces to shorelines and riverbanks would be reduced under the action alternative as compared to the No Action Alternative. Time and budgetary constraints preclude USACE from conducting all necessary surveys to sufficiently identify and evaluate cultural resources, fully determine adverse effects of the action alternative on historic properties, or establish methods to avoid, minimize, or mitigate those adverse effects, prior to completion of the DEIS. As such, USACE is deferring final identification and evaluation of historic properties until the preconstruction, engineering and design phase when additional funding would become available, and prior to construction by executing a Programmatic Agreement (PA) with the North Carolina State Historic Preservation Office (SHPO), the Advisory Council on Historic Preservation (ACHP), pursuant to 36 CFR § 800.4(b)(2). This PA details additional historic property inventories necessary in planning, engineering, and design to identify and assess the eligibility of historic properties and determine effects of the study on these properties. The PA presented in Appendix E of the DEIS outlines the process by which additional historic property surveys would be conducted, effects determined, and avoidance, minimization, and/or mitigation strategies are implemented. The PA also describes monitoring requirements, minimization and mitigation procedures, and procedures in case adverse effects to historic properties occur

inadvertently. Furthermore, should additional modelling suggest an increase in erosive forces to any locations along the shoreline, effects to historic properties would be assessed pursuant to the PA.

Analysis of the Project in Relation to North Carolina's Chapter 07 Coastal Management Program

15A NCAC 07H .0205 (Coastal Wetlands)
Coastal Wetlands are defined as any salt marsh or other marsh subject to regular or occasional flooding by tides, including wind tides, that reach the marshland areas through natural or artificial watercourses, provided this does not include hurricane or tropical storm tides. It is the objective of the Coastal Resources Commission to conserve and manage coastal wetlands so as to safeguard and perpetuate their biological, social, economic and aesthetic values, and to coordinate and establish a management system capable of conserving and utilizing coastal wetlands as a natural resource necessary to the functioning of the entire estuarine system. The project is not expected to have any negative impacts to coastal wetlands.

15A NCAC 07H .0206 (Estuarine Waters)
Estuarine Waters are defined to include all the waters of the Atlantic Ocean within the boundary of North Carolina and all the waters of the bays, sounds, rivers and tributaries thereto seaward of the dividing line between coastal fishing waters and inland fishing waters. It is the objective of the Coastal Resources Commission to conserve and manage the important features of estuarine waters so as to safeguard and perpetuate their biological, social, aesthetic, and economic values; to coordinate and establish a management system capable of conserving and utilizing estuarine waters so as to maximize their benefits to man and the estuarine and ocean system.

Under the proposed action, evaluation of potential surface and bottom water quality impacts were modeled across 14 monitoring locations with two Sea Level Change (SLC) change scenarios. This analysis focused on changes in dissolved oxygen, water temperature, salinity, and total suspended solids to identify any notable trends, hotspots, or periods of concern. Overall, minimal changes were observed throughout the project area and upper estuary, with SLC emerging as the primary driver of water quality changes compared to the channel modifications. All water quality parameters would meet the state criteria. In addition, USACE would obtain a State Section 401 of the Clean Water Act Water Quality Certificate (WQC) prior to conducing any proposed work and would follow all terms and conditions of the WQC.

15A NCAC 07H .0207 (Public Trust Areas)
Public trust areas are all waters of the Atlantic Ocean and the lands thereunder from the mean high water mark to the seaward limit of state jurisdiction; all natural bodies of water subject to measurable lunar tides and lands thereunder to the normal high water or normal water level; all navigable natural bodies of water and lands thereunder to the normal high water or normal water level as the case may be, except privately-owned lakes to which the public has no right of access; all water in artificially created bodies of water containing public fishing resources or other public resources which are accessible to the public by navigation from bodies of water in which the public has rights of navigation; and all waters in artificially created bodies of water in which the public has acquired rights by prescription, custom, usage, dedication, or any other means. It is the objective of the Coastal Resources Commission to protect public rights for navigation

and recreation and to conserve and manage the public trust areas so as to safeguard and perpetuate their biological, economic and aesthetic value. The project is not expected to have any negative impacts to public trust areas.

15A NCAC 07H .0209 (Coastal Shorelines)
The coastal shorelines category includes estuarine shorelines and public trust shorelines.

Estuarine shorelines AEC are those non-ocean shorelines extending from the normal high-water level or normal water level along the estuarine waters, estuaries, sounds, bays, fresh and brackish waters, and public trust areas.

Public trust shorelines AEC are those non-ocean shorelines immediately contiguous to public trust areas, as defined in Rule 07H .0207(a) of this Section, located inland of the dividing line between coastal fishing waters and inland fishing waters as set forth in that agreement and extending 30 feet landward of the normal high-water level or normal water level.

Development within coastal shorelines influences the quality of estuarine and ocean life and is subject to the damaging processes of shore front erosion and flooding. The coastal shorelines and wetlands contained within them serve as barriers against flood damage and control erosion between the estuary and the uplands.

It is the objective of the Coastal Resources Commission that all shoreline development shall be compatible with the dynamic nature of coastal shorelines as well as the values and the management objectives of the estuarine and ocean system. Other objectives are to conserve and manage the important natural features of the estuarine and ocean system so as to safeguard and perpetuate their biological, social, aesthetic, and economic values; to coordinate and establish a management system capable of conserving and utilizing these shorelines so as to maximize their benefits to the estuarine and ocean system and the people of North Carolina.

Under the proposed project, beach placement operations would have temporary indirect impacts on foraging, roosting and nesting habitat, aesthetics, and beach recreational opportunities but would decrease shorefront erosion and flooding, reducing the longer-term risk to biological, social, aesthetic, and economic values.

15A NCAC 07H .0301 (Ocean Hazard Categories)
The Ocean Hazard categories of AECs encompass the natural hazard areas along the Atlantic Ocean shoreline where, because of their vulnerability to erosion or other adverse effects of sand, wind, and water, uncontrolled or incompatible development could endanger life or property. Ocean hazard areas include beaches, frontal dunes, inlet lands, and other areas in which geologic, vegetative and soil conditions may subject the area to erosion or flood damage. It is the Coastal Resources Commission 's objective that development in ocean hazard areas shall be sited to minimize danger to life and property and achieve a balance between the financial, safety, and social factors that are involved in hazard area development.

15A NCAC 07H .0304 (AEC's Within Ocean Hazard Areas)
The ocean hazard AECs contain all of the following areas:

Ocean Erodible Area - This is the area where there exists a substantial possibility of excessive erosion and significant shoreline fluctuation.

Inlet Hazard Area - The inlet hazard areas are natural hazard areas that are especially vulnerable to erosion, flooding, and other adverse effects of sand, wind, and water because of their proximity to dynamic ocean inlets.

Unvegetated Beach Area - Beach areas within the Ocean Hazard Area where no stable and natural vegetation is present may be designated as Unvegetated Beach Areas on either a permanent or temporary basis.

State Ports Inlet Management Area - These are areas adjacent to and within Beaufort Inlet and the mouth of the Cape Fear River, providing access to a State Port via a channel maintained by the Unites States Army Corps of Engineers. These areas are unique due to the influence of federally maintained channels, and the critical nature of maintaining shipping access to North Carolina's State Ports. These areas may require specific management strategies not warranted at other inlets to address erosion and shoreline stabilization.

Under the proposed action, the fleet analysis showed a decrease in yearly passages from 1,214 to 949, helping reduce bottom stress which in turn would reduce river shoreline erosion throughout the project area. The project also includes placement of new work and O&M dredged material along the riverbanks, offering significant benefits for shoreline stabilization and habitat enhancement. These efforts protect vegetation, spawning areas, and infrastructure, while increasing resilience to storm events and sea level change.

Other Required Approvals

No other permits, authorizations, or approvals are necessary at this time for the proposed action. The USACE is soliciting comments via Public Notice on the DEIS. Comments from Federal and state resource agencies have been requested. All comments received will be addressed and all agency coordination will be satisfactorily concluded prior to the beginning of work associated with this project.

Consistency Determination

In accordance with Section 307 (c)(1) of the Federal Coastal Zone Management Act of 1972, as amended, the Corps has determined that the proposed project for the Wilmington Harbor area is consistent, to the maximum extent practicable, with North Carolina's Coastal Management Program. This determination is based on the review of the proposed project against the enforceable policies of the State's coastal management program, which are principally found in Chapter 7 of Title 15A of North Carolina's Administrative Code. The USACE requests that NCDCM concur with this consistency determination.

Conclusion

Based on the findings described in this consistency determination and the DEIS, it is in the Federal interest to implement the 47-foot Action Alternative. Deepening and widening of existing channels will result in minor and short-term impacts to water quality, benthic organisms, important fisheries and protected marine reptiles and mammals. The overall benefit of the proposed action is to remove constraints that contribute to inefficiencies in the existing harbor's ability to safely serve forecasted

vessel fleet and cargo types and volumes.

The proposed action conforms to the management objectives of all enforceable policies of the North Carolina Coastal Management Program, since it would result in more efficient operation of containerships, tankers, and bulkers in Wilmington Harbor, which affect the Nation's overall waterborne transportation costs and competitiveness while minimizing adverse impacts to Coastal Wetlands, Estuarine Waters, Public Trust Areas, Coastal Shorelines (Estuarine and Public Trust) and Ocean Hazard Areas.

The proposed action would not adversely affect any biota recognized by the State as species of concern, would not adversely impact water quality, and would result in minimal, temporary and short-lived impacts to fisheries and the aquatic habitat. Placement of dredged material would be conducted using previously employed and approved methodologies.

In accordance with Section 307 (c)(1) of the Federal Coastal Zone Management Act of 1972, as amended, the USACE has determined that the proposed action and continued maintenance dredging of the project channels are consistent, to the maximum extent practicable, with North Carolina's coastal management program. The proposed activities comply with the enforceable policies of North Carolina's approved coastal management program and will be conducted to the maximum extent practicable in a manner consistent with the program and any received authorizations.