Environmental Resources Section

Mr. Daniel Govoni  
North Carolina Department of Environment and Natural Resources  
Division of Coastal Management  
400 Commerce Avenue  
Morehead City, North Carolina 28557

Dear Mr. Govoni:

The U.S. Army Corps of Engineers Wilmington District (Corps) has prepared the Wilmington and Morehead City Harbor Maintenance Dredging and Bed Leveling Draft Environmental Assessment (EA), dated August 2020. The EA is available on the USACE website at:


The Corps is requesting a consistency review under the North Carolina Coastal Area Management Program for the proposed year-round maintenance dredging in the outer portions of Wilmington and Morehead City Harbors. The request involves maintenance dredging and bed leveling of several reaches of both deep draft projects and placement of material either into the designated Offshore Dredged Material Disposal Sites (ODMDS) or nearshore placement areas (Morehead City only). Dredging events will occur annually as in the past; the only alteration requested is the removal of the 1 December – 15 April dredging window. This letter serves as a formal consistency determination in which we request your concurrence.

In accordance with Section 307 (c)(1) of the Federal Coastal Zone Management Act of 1972, as amended, the Corps has determined that continued maintenance dredging of the project channels 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 will be conducted to the maximum extent practicable in a manner consistent with the program and any received authorizations.

As you are aware, the maintenance of safe navigation in federal channels is essential to ensure our Nation’s maritime safety and security. The Corps has determined that year-round dredging and bed leveling will help accomplish our mission of providing safe access to our ports and harbors while meeting the Federal Standard of being the least cost, engineeringly sound, environmentally acceptable alternative.
Maintenance activities will 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 Ms. Emily Hughes by telephone at (910) 251-4635 or by email at Emily.b.hughes@usace.army.mil.

Sincerely,

GATWOOD.ELDE
N.J.1228965177
Elden Gatwood
Chief, Planning and Environmental Branch

cc:
Braxton Davis
Project Name: Wilmington Harbor and Morehead City Harbor Year-Round Maintenance Dredging and Bed Leveling

The United States Army Corps of Engineers (Corps) is seeking authorization to eliminate the existing hopper dredging window for the outer portions of the Wilmington and Morehead City Harbors (Figure 1) to allow for year-round hopper dredging and bed leveling with offshore and/or nearshore placement of dredged material. Hopper dredge availability is limited, making it very challenging to adequately maintain the District’s two deep draft navigation projects within the existing environmental window (1 December – 15 April). Eliminating the window will allow more flexibility and increase efficiency in maintaining the harbors while improving navigability and safety.

Project Purpose

The purpose of this request is to increase flexibility and assurance in maintaining the Wilmington and Morehead City Harbor entrance channels (Figures 2 and 3). There is currently a shortfall in the national supply of hopper dredges as the demand for dredging continues to increase. The current environmental window for hopper dredging limits work to the period of 1 December - 15 April (approximately 135 days). The result has been several failed contract awards in the Wilmington District, with either bids exceeding the independent government estimate (IGE) or no bids received at all.

The ability to dredge any time of year is necessary for maintaining the proposed reaches of the Wilmington and Morehead City Harbors to full project depth and width at reasonable cost. Eliminating the dredging window would provide maximum flexibility to obtain contract dredges when maintenance dredging is most needed. Removing the window restriction would also allow dredges to continue working until project completion, rather than having to stop and return at a later date to complete the work. Additionally, elimination of the hopper dredging window would alleviate the need to limit the scope of dredging to the bare minimum needed to keep channels open, thus allowing the Corps to perform maintenance dredging to full authorized project dimensions.

Bed leveling is a dredging practice that is performed using a tugboat to pull a drag bar or I-beam across the channel bottom. After the hopper dredge passes through an area, it often leaves behind peaks and valleys that require smoothing or leveling. Bed leveling simply moves material from high spots to low spots and avoids the need for additional hopper dredging. Bed leveling year-round is a necessary accompaniment to hopper dredging.
Existing Conditions

**Wilmington Harbor:** 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) (Figure 2). 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 (material ≥90% sand) and dredged material from these channels is typically removed by cutter-suction/pipeline dredge and beneficially placed on the adjacent shorelines of Oak Island or Bald Head Island, approximately every 2-3 years. However, during years when there is no beach placement, accumulated material is removed by hopper dredge and taken to the ODMDS.

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 taken offshore to the ODMDS by means of bucket and barge or hopper dredge. When sediments accumulate within Horseshoe Shoal and Snows Marsh channels, the District strives to use this beach quality dredged material beneficially when possible.

**Morehead City Harbor:** The Morehead City Harbor sections of the project maintained by hopper dredge include the Outer Entrance Channel and the Outer Harbor. The Outer Entrance Channel (Range A Station 110+00 outbound) is authorized to a project depth of -47 feet + 2 feet overdepth. This portion of the channel requires annual maintenance by hopper dredge and contains material that is not beach quality, and therefore is placed into the Morehead City ODMDS (Figure 3).

Most of the Outer Harbor channels (lower half of South Range C, Range B, and the Cutoff) are maintained to -45 feet + 2 feet overdepth, by a hopper or pipeline dredge. Dredged material is beach quality sand that is placed either in the approved nearshore placement areas to the east and west of Beaufort Inlet, on the shoreline at Fort Macon State Park and Atlantic Beach, or in the designated sand placement zone (northern half) of the Morehead City ODMDS. Beach placement occurs about every 3 years as described in the Morehead City Harbor Dredged Material Management Plan (DMMP). Hopper or pipeline placement in the nearshore placement areas is also an option, as covered in the DMMP. For hopper dredges, nearshore placement is limited to those
dredges that can navigate the relatively shallow nearshore areas and open the hopper doors to release material safely.

Alternatives Analysis

Feasible alternatives to the proposed project are discussed below.

The No Action Alternative: The No Action Alternative would mean continuing with maintenance dredging in the future while abiding by the existing hopper dredging window of 1 December – 15 April. The Wilmington District currently abides by self-imposed windows and/or windows coordinated with National Marine Fisheries Service Habitat Conservation Division (NMFS HCD) or imposed through the Federal Coastal Zone Management Act (CZMA), which is enforced by State resource agencies. These window restrictions significantly limit the period when dredging may be accomplished, resulting in dredging price increases by either cost per cubic yard of material dredged, per dredge/equipment mobilization, or both. Often, the Wilmington District does not receive adequate funds to cover these cost increases, so maintenance dredging is often reduced to the bare minimum to keep channels open to navigation. This routinely leads to the need for draft restrictions and in some cases, impedes safe navigation.

In the last ten years, hopper dredges have been in high demand across the country, and widespread increased shoaling due to storm events has made it difficult and expensive to secure hopper dredges to perform maintenance when needed.

Currently, at Wilmington and Morehead City Harbors, hopper dredging and bed leveling are restricted to 1 December - 15 April by the federal consistency concurrences, dated June 15, 2017.

The Expanded Window and Bed Leveling Alternative: A proposed alternative assessed in this document is the expansion of environmental windows for hopper dredging and bed leveling in the Wilmington Harbor and Morehead City Harbor identified reaches. An expanded window of 1 July to 15 April would offer more flexibility for dredges. Based on existing research and scoping comments received from resource agencies, the months prior to the existing window (July – November) are a less sensitive time period to dredge than the months following (April – June).

Expanding the hopper dredging window to 1 July to 15 April reduces window restrictions, however it does not eliminate restrictions, which are needed to adequately maintain the Wilmington and Morehead City Harbors. The Corps needs as much flexibility as possible to accomplish maintenance dredging of the harbors and an expanded window does not meet the purpose and need.
Elimination of Window and Bed Leveling Alternative (Proposed Action): The Corps is proposing to eliminate the 1 December – 15 April hopper dredging window within the Wilmington and Morehead City Harbors. Removing the window restriction is necessary for maintaining the proposed reaches to full project depth and width at reasonable cost. A cost analysis of the alternatives resulted in the proposed action being the least cost alternative, saving a minimum of $13 million in taxpayer dollars over the next 20 years. The removal of the hopper dredging window will allow hopper dredging to occur any time of year; however, it should not be assumed that hopper dredging will occur every year within the spring and summer months when biological activity is highest. Year-round hopper dredging and bed leveling will provide the flexibility and assurance needed to achieve successful contract awards and allow our Ports to remain competitive, thus sustaining the regional economy.

Minimization Measures

All work will be completed within existing navigation channels that have been previously disturbed. No deepening or widening of the channels is proposed. There are no identified Primary Nursery Areas (PNAs), Secondary Nursery Areas (SNAs), Special Secondary Nursery Areas (SSNAs) or Submerged Aquatic Vegetation (SAV) habitat within the project areas and effects of hopper dredging (increased turbidity, sedimentation and noise; entrainment) are not expected to have a significant impact on these resources.

It is understood that by eliminating the 1 December – 15 April window, dredging may occur during the warmer months when biological activity is much higher. Benthic invertebrates and bottom-feeding fish would be most at risk, as well as critical life stages (egg, larvae, juveniles) of important fisheries. An Essential Fish Habitat (EFH) analysis has been conducted and provided to the National Marine Fisheries Service (NMFS) Habitat Conservation Unit for review and response.

In March 2020, the NMFS Protected Resources Division finalized the 2020 SARBO to protect federally protected marine species, such as sturgeon, sea turtles and North Atlantic right whales from the harmful effects of dredging. All dredging conducted by the Corps will adhere to the terms and requirements of the 2020 SARBO. Protective measures include: shutting off draghead pumps when not embedded six inches within the sediment; rigidly attached turtle deflectors on the dragheads to reduce species entrainment; two 24-hour Protective Species Observers conducting on-board monitoring year-round; tracking and recording protected species through the Operations and Dredging Endangered Species System (ODESS); and daily monitoring with the Dredging Quality Management (DQM) software to verify dredge position, dredging depth, vessel speed and slurry float rate and density. Bed leveling requires specific attachments and design to avoid impingement and is operated at a slow rate, so as not to harm underwater species.
The Corps, Wilmington District, is currently partnering with the state of North Carolina to collect water samples adjacent to the hopper dredge in Beaufort Inlet, and is open to participating in future studies in the Cape Fear River Inlet if needed. The Corps and the dredging industry continue to develop and use technologies and methodologies to reduce risks to species. As more information of dredging effects is collected and understood, solutions to combat the negative effects will result.

Areas of Environmental Concern

Both the Wilmington and Morehead City 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 Estuarine and Ocean System, the Ocean Hazard System (Inlet) and Public Trust AECs.

The NC Division of Water Resources (NCDWR) classifies waters within harbor inlets and estuaries as SA, and waters of the Atlantic Ocean as SC. None of the project areas (dredging and disposal sites) are located in Outstanding Resource Waters (ORW), as defined by NCDWR.

The North Carolina Division of Marine Fisheries does not classify the project areas (dredging and disposal sites) as a Primary Nursery Area (PNA) (15A NCAC 07H .0208(a)(4)).

Submerged aquatic vegetation (SAV) has not been identified in waters adjacent to the Wilmington and Morehead City 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.

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

The project areas are not designated as a “Natural and Cultural Resources Area” (15A NCAC 07H .0501) and the proposed action impacts only the existing channel footprint, therefore no impact to cultural resources will occur.

Analysis of the Project in Relation to North Carolina’s Coastal Management Program

15A NCAC 07H .0206 establishes management objectives for estuarine waters in order to conserve and manage the important features of estuarine waters in a manner that
safeguards and perpetuates their ecological and economical values and to coordinate and establish a management system capable of conserving and using estuarine waters that maximize their benefits to humans and the estuarine and marine systems.

15A NCAC 07H .0207 establishes management objectives to protect public rights for navigation and recreation and to conserve and manage the public trust areas to safeguard and perpetuate their biological, economic and aesthetic value.

The proposed action will not result in the loss of coastal uses nor impact coastal resources or prohibit access to coastal resources by the public. Elimination of windows for hopper dredges will provide for safe navigation in channels of the Wilmington and Morehead City Harbor project areas for the public. The project will not result in adverse effects on biological, economic or aesthetic values of public trust areas.

15A NCAC 07H .0208(b)(1) requires that impacts to various resources, such as primary nursery areas, outstanding resource waters, shellfish, and submerged vegetation be avoided or minimized.

Dredging (hopper dredging and bed leveling) will occur within existing navigation channels. Placement of dredged material will be in the previously approved nearshore placement areas off Bogue and Shackleford Banks, and the Wilmington and Morehead City ODMDSs using previously employed methodology. No adverse impacts will occur to any PNAs, ORWs, shellfish, and SAVs.

15A NCAC 07H .0208 (b)(2) addresses the case-by-case review of publicly funded hydraulic dredging projects with respect to dredging methods and dredged material placement. The general use standards are listed below. Following each standard is a brief description explaining how the proposed project meets each standard.

(a.) The need for and implementation of the proposed action shall be consistent with the stated management objective.

The proposed action involves year-round dredging of existing publicly funded (federally authorized) navigation channels and placement within existing nearshore placement areas off Bogue and Shackleford Banks, and the Wilmington and Morehead City ODMDSs. Because any environmental impact would be minimal and short-lived, it is the Corps’ opinion that no mitigation is required for the proposed action.

(b.) The proposed action shall not violate water and air quality standards.

On September 30, 2019, the North Carolina Division of Water Quality (NCDWQ) reissued general 401 certifications to cover multiple maintenance dredging and placement activities. The placement of dredged material into approved nearshore placement areas off Bogue and Shackleford Banks is covered under NCDWQ Certificate #4146. A copy of this general water quality certificate is found in Appendix B
of the EA. All conditions and requirements of the water quality certification will be adhered to during implementation of the proposed action (see paragraph 15A NCAC 07M .0800 below). There will be no unregulated discharge into waters or wetlands subject to the Clean Water Act. The project will comply with all North Carolina air quality standards; therefore, no authorization is required.

(c.) The proposed action shall not cause major or irreversible damage to valuable documented archaeological or historic resources.

There are known archaeological or historical resources within the Wilmington and Morehead City project areas. Known resources will not be affected by maintenance dredging in previously maintained channels and use of established placement areas.

(d.) The proposed action shall not measurably increase siltation.

The proposed action will entail placement of dredged material in the nearshore and/or ODMDS and will temporarily increase suspended sediments in the immediate vicinity of dredging and placement operations. Past experience has shown the suspension to be short-lived and localized. Impacts are expected to be minimal to negligible.

(e.) The proposed action shall not create stagnant water bodies.

There will be no stagnant water bodies created as a result of the proposed project.

(f.) The proposed action shall not impede navigation or create undue interference with access to, or use of, public trust areas or estuarine waters.

Implementation of the proposed action will provide for safe navigation in the reaches of the Wilmington and Morehead City Harbor projects covered in this consistency determination and in the EA.

15A NCAC 07M .0800 establishes that the quality of coastal waters is to be protected. The proposed year-round dredging will create de minimis suspended sediments within the vicinity of the work. These coarse-grained sediments are anticipated to settle quickly and result in localized, short-lived, and minimal to negligible impacts. The dredged material will be placed in the nearshore placement areas off Bogue and Shackleford Banks and the Wilmington and Morehead City Ocean Dredged Material Disposal Sites (ODMDS). Discussions of siltation effects are described above. Because regulated discharge into waters of the U.S. will occur in the nearshore areas, pursuant to the Clean Water Act, appropriate authorization from the North Carolina Division of Water Resources is required. The proposed action is covered by General Water Quality Certification #4146.
15A NCAC 07M .0700 requires that there is no reasonable or prudent alternative for the project that would avoid potential impacts. The proposed project involves year-round maintenance dredging of existing navigation channels. There are no other reasonable locations for these features. In addition, the proposed methods of dredged material placement have been previously approved and determined to have minimal environmental impacts. No new dredged material placement locations are proposed. Eliminating dredging windows will improve safe navigation to the Wilmington and Morehead City Ports.

It is the understanding of the Wilmington District that North Carolina’s Dredge and Fill Law, NCGS 113-229, applies to those entities seeking permits from NCDCM, and not to federal agencies making determinations of consistency with the enforceable policies of the CAMA. Specifically, federal agencies are not identified in section (m) of the law as entities which are subject to these provisions; the law specifically identifies “State government or local governments,” but not the federal government, as entities which must comply. It is our understanding that the intent of the dredge and fill law is expressed adequately in the enforceable policy found at 15A NCAC 07M.1102, which does apply to federal agencies, and with which the draft EA is consistent, as described below.

15A NCAC 07M.1102 states in section (a) that “clean, beach quality material from navigation channels within the active nearshore, beach, or inlet shoal systems must not be removed permanently from the active nearshore, beach or inlet shoal system unless no practicable alternative exists. Preferably, dredged material will be disposed of on the ocean beach or shallow active nearshore area where environmentally acceptable and compatible with other uses of the beach.”

As stated in the Draft EA, large volumes of beach quality material from the Wilmington Harbor reaches are placed onto adjacent beaches by pipeline dredge every three years, approximately. On alternating years, when small volumes of material require removal, that material will be removed by a hopper dredge and placed in the Wilmington ODMDS. This allows the majority of the beach quality material to stay within the littoral system.

A component of the Morehead City Harbor project is the beneficial use of dredged material by placement in the Nearshore Placement Areas to the east and west of Beaufort Inlet with the expected benefit of reducing erosion of the ebb tide delta, also referred to as ebb tide delta deflation. For this reason, in years 2 and 3 of the 3-year maintenance cycle, the Morehead City Harbor DMMP recommends placement of coarse-grained material (≥90% sand) in the Nearshore Placement Areas.

The placement of dredged material on the ebb tide delta, which is part of the littoral system, is expected to contribute to the stability of the ebb tide delta thus positively
affecting the littoral system and the associated features. However, anytime dredged material is not placed in the ebb tide delta, it may adversely affect (deflating) the ebb tide delta. An understanding of coastal inlet processes suggests that continued erosion of the ebb tide delta complex is likely to eventually impact the adjacent beaches. Every practical and sound effort, including reasonable use of light-loaded vessels, will be made to retain littoral material dredged from the navigation channels within the inlet complex to minimize this ebb tide delta deflation. A comprehensive physical monitoring program, (as outlined in the final Morehead City Harbor DMMP), will provide data to potentially modify and assess ongoing operations and its impacts.

It is also important to note that the logistics involved with the dredging of material from the Outer Harbor channel to a great degree define the ideal location of the nearshore placement area. Specifically, in order to maintain this section of the Morehead City Harbor project, a dredge vessel must be able to remove material to a depth of 47 feet, dredge shoals that are long, shallow, and roughly linear, and work in the rough sea conditions mandated by the District’s voluntarily-imposed dredging window in the winter months. Ocean-going hopper dredges have so far been the only vessels able to accomplish such tasks. These dredges generally must operate in at least 20-22 feet of water to avoid colliding with the bottom. When working in seas of several feet, or at lower tides, deeper operating depths are necessary. Therefore, it is not practicable to place material in a nearshore area at depths much less than 25 feet. The average depth of the existing nearshore area is roughly 26 feet, and it has been placed across the 25- and 30-foot contours, allowing for enough space to contain sufficient material and provide vessels with an adequately large target for material placement.

From time to time, wave and wind conditions make it unsafe for hopper dredges to place material in the nearshore areas. To date, the Corps has allowed dredge captains the discretion to place dredged material in the Morehead City ODMDS when those captains believe that weather conditions prohibit safe operation within the nearshore area. Placement of some beach quality material in the ODMDS when safety factors require has been the only circumstance where beach-quality material from the Morehead City Harbor project has been placed outside the active nearshore or beach system. The District notes, however, that much of the beach-quality material placed in the ODMDS is not being removed from the system permanently. The District takes care to place beach-quality material in certain designated areas within the Morehead City ODMDS, so that it may be retrieved at a later date for beach placement. On at least three occasions, and as recently as 2019, local governments have used the Morehead City ODMDS as a borrow source for placement of beach-quality material onto the beaches of Bogue Banks. Even so, the District works to minimize placement of beach-quality material into the ODMDS.
Other Required Approvals

No other permits, authorizations, or approvals are necessary at this time for the proposed action. The Corps is soliciting comments via Public Notice on the draft EA to implement year-round maintenance dredging of portions of Wilmington and Morehead City Harbors. Comments from federal and state resource agencies have been requested to ensure that the proposed action will not have more than minimal adverse environmental impacts. 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

Pursuant to North Carolina CAMA Regulations for hydraulic dredging, 15A NCAC 07H .0208(b)(2)(g), “development shall be timed to have minimum adverse significant effects on life cycles of estuarine and ocean resources.” Based on the summary of impacts described above, conducting hopper dredging and bed leveling at Wilmington and Morehead City Harbors any time of the year are not expected to have significant adverse effects on water quality, noise levels, shellfish, submerged aquatic plants, and/or primary fishery nursery areas. Placement of material will be in the approved Wilmington ODMDS, the Morehead City ODMDS or in the nearshore placement areas east and west of Beaufort Inlet. There are no environmental windows associated with the placement areas.

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 elimination of the 1 December – 15 April environmental window for the Wilmington and Morehead City Harbor project areas 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. We request that the NCDCM concur with this consistency determination.

Conclusion

Based on the findings described in this consistency determination and the Draft EA, it is in the federal interest to implement year-round hopper dredging and bed leveling. Maintenance dredging 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 allow flexibility in maintaining the Wilmington and Morehead City Harbor navigation channels, reduce maintenance dredging costs, and provide a safer, more navigable channel for ships calling on the Ports. Additionally, with bed leveling, the duration of each dredging event may be
reduced, thereby lessening temporary impacts to benthos, water quality, and noise levels.

Monitoring and mitigation are important and effective tools for reducing impacts to the environment. The Corps and the dredging industry continue to develop and use technologies and methodologies to reduce risks to species. As more information regarding dredging effects is collected and understood, solutions to combat the negative effects will result.

The proposed action conforms to the management objectives of all enforceable policies of the North Carolina Coastal Management Program, since it will result in maintenance of existing navigation features while minimizing adverse impacts to Estuarine Waters, Ocean Hazard and Public Trust Areas.

The proposed action will not adversely affect any biota recognized by the State as species of concern, will not adversely impact water quality, and will result in minimal, temporary and short-lived impacts to fisheries and the aquatic habitat. Placement of dredged material will be in the existing Nearshore Placement Areas at Beaufort Inlet and the Wilmington and Morehead City ODMDSs and will be conducted using previously employed and approved methodologies.

Implementation of the proposed action will result in the continued provision of safe navigation through Cape Fear River and Beaufort Inlets for the existing Wilmington and Morehead City Harbors.

In accordance with Section 307 (c)(1) of the Federal Coastal Zone Management Act of 1972, as amended, the Corps, Wilmington District 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.

Figures (1, 2 & 3)
Figure 1. Wilmington Harbor Project Area
Figure 2. Wilmington Harbor Project Area
Figure 3. Morehead City Harbor Project Area