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February 24, 2026

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Chief, Planning and Environmental Branch
Wilmington District, U.S. Army Corps of Engineers
69 Darlington Avenue
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SUBJECT: **North Carolina Division of Coastal Management's Response to the U.S Army Corps of Engineers Consistency Determination for the Wilmington Harbor 403 Navigation Project, North Carolina (CD 2026009)**

Dear Mr. Walters,

The North Carolina Division of Coastal Management (DCM) received the U.S. Army Corps of Engineers' (USACE) federal Consistency Determination for the Wilmington Harbor 403 Navigation Project (the 403 Project) dated September 18, 2025 (received by DCM on October 17, 2025). USACE determined that the 403 Project, as described and analyzed in the September 2025 Draft Environmental Impact Statement (DEIS), is consistent, to the maximum extent practicable, with North Carolina's Coastal Management program. Pursuant to 16 U.S.C § 1456(c), USACE has requested DCM's review and concurrence on behalf of the State of North Carolina.

After review of the Consistency Determination, the DEIS, and stakeholder and public comment, DCM informally advised the USACE of concerns it had, particularly with regard to the lack of necessary information. In response, on January 16, 2026, the USACE, in coordination with the non-Federal sponsor of the 403 Project (North Carolina Ports Authority), asked DCM to pause its review of the Consistency Determination to allow time for more thorough and detailed discussion of DCM's concerns. During the pause, the USACE and DCM discussed DCM's concerns and possible resolutions that might allow DCM to concur with USACE's Consistency Determination, including in a meeting on February 5, 2026. During that pause, DCM detailed its concerns along with possible paths forward to address the information deficiencies. By email of February 16, 2026, the USACE informed DCM that it wished to resume the Consistency Determination review. Accordingly, DCM's concurrence or objection decision became due on February 24, 2026.

While DCM must issue its determination now, the USACE is still authorized to postpone final federal action on the 403 Project until DCM's concerns have been resolved through the dispute resolution mechanisms as described in the CZMA regulations at 40 C.F.R. § 930.43(d). If the USACE invokes the dispute resolution mechanisms, DCM will continue to work with the USACE to address the concerns detailed below that prevent the agency's concurrence.

A. The 403 Project

The Consistency Determination pertains to the proposed extension, deepening, and widening of the Wilmington Harbor Federal Navigation System (FNS), including new and modified channel reaches authorized under Section 403 of the Water Resources Development Act of 2020. As part of its consistency submission, the USACE provided a link to the DEIS, which was prepared pursuant to the National Environmental Policy Act (NEPA).The DEIS describes a federal activity which intends to extend, deepen, and widen up to 35 miles of the FNS to accommodate larger commercial container vessels, reduce tidal and loading restrictions, and improve overall navigation efficiency at the Port of Wilmington.

In the DEIS, three alternatives for the 403 Project were evaluated in detail: a No Action Alternative, which would maintain the FNS at its currently authorized depth of −42 feet Mean Lower Low Water (MLLW), and two action alternatives that would deepen most of the FNS to either −47 feet MLLW under Alternative 1 (AA1) or −46 feet MLLW under Alternative 2 (AA2).The USACE identified AA1 as the tentatively selected and conditionally authorized plan for the 403 Project. Under AA1, approximately 35 million cubic yards of material would be excavated from the Wilmington Harbor FNS, including the offshore Entrance Channel and newly proposed extension, as well as multiple lower, middle, and upper reaches of the Cape Fear River where channel deepening and widening are proposed, while AA2 would require approximately 30 million cubic yards, or about five million cubic yards less than AA1. Under both alternatives, several existing channel reaches would also be widened, and a new reach would be added to the Entrance Channel, extending the FNS further offshore. The proposed Entrance Channel extension (Baldhead Shoal Channel Range 3) would be approximately nine miles long and would connect the channel to the nearest naturally occurring area of sufficient depth. Dredged sediment generated from the proposed deepening and widening, as well as from future maintenance dredging, would be placed at the Ocean Dredged Material Disposal Site (ODMDS) and at multiple beneficial use sites. Proposed beneficial use of dredge material (BUDM) placement areas were generally identified in the DEIS and include beaches, bird islands, intertidal marsh restoration areas, fish habitat enhancement structures, riverbank protection projects, and back-bay marsh restoration areas. Approximately half of the material dredged during initial construction is proposed for beneficial use, with the remaining material being placed at the ODMDS.

B. DCM's Consistency Determination Review

To better assess the USACE's proposed 403 Project, DCM provided public notice of and an opportunity to comment in writing on the Consistency Determination for the 403 Project along with a link to the DEIS on both the Department of Environmental Quality's (DEQ) and DCM's website for a period of 45 days, ending on December 20, 2025. In total, 132 written comments were received by DCM, with 7 comments supporting and 125 comments opposing the proposed deepening and widening of the FNS. Among the submissions were detailed comment letters from Orton Plantation, the Village of Bald Head Island, Bald Head Island Conservancy, City of Wilmington, Clean Cape Fear, and the Southern Environmental Law Center (SELC) on behalf of (Audubon North Carolina, Cape Fear River Watch, Center for Biological Diversity, CleanAIRE NC, Defenders of Wildlife, NAACP North Carolina State Conference, North Carolina Coastal

Federation, North Carolina Conservation Network, and North Carolina Sierra Club), each providing extensive technical, legal, and resource-specific analysis of the DEIS and raising substantive concerns regarding the impacts of the proposed action. Additionally, DCM received Letters of Resolution from the Town of Kure Beach, Town of Southport, Town of Caswell Beach, Town of Leeland, and the Village of Bald Head Island opposing the USACE's Consistency Determination and the 403 Project as currently described in the DEIS and collectively requesting the USACE develop and implement an Adaptive Management Plan for the proposed 403 Project.

DCM also conducted a public hearing on November 17, 2025, in Wilmington, North Carolina to provide additional opportunity to comment on the 403 Project and the USACE's Consistency Determination in person. DCM documented an attendance of 72 individuals at this hearing, with unanimous opposition towards both AA1 and AA2. In both written and verbal comments received by DCM at the hearing, speakers raised concerns about the presence, disturbance, and placement on land of Per- and Polyfluoroalkyl substances (PFAS) believed to be located within the sediment which would be dredged as part of the 403 Project. Commenters raised concerns about the anticipated short-term and long-term impacts deepening would have on the coastal ecosystems, including impacts to bird nesting areas, loss of habitat due to changes in salinity, as well as a general lack of need for the project and concerns over increased shoreline erosion due to increased vessel traffic along the length of the 403 Project. Several speakers also raised concerns over the exacerbation of Sea Level Rise (SLR) and sunny day flooding due to the deepening. Several individuals cited their experiences during and after the previously authorized Wilmington Harbor Section 96 deepening project which took place during the early 2000s, noting long-lasting effects on shoreline erosion, wetland loss, and estuarine quality, and expressing concern that similar or more severe impacts could result from the proposed deepening and widening of the FNS. An audio recording of the public hearing is available at: www.deq.nc.gov/about/divisions/division-coastal-management/coastal-management-permits/federal-consistency/usace-wilmington-harbor-403-dredging-project

As part of North Carolina's Consistency Determination review process, DCM also solicited input from interested state resource agencies and received substantive comments from the N.C. Division of Marine Fisheries (DMF), the N.C. Wildlife Resources Commission (WRC), the N.C. Natural Heritage Program (NHP), N.C. State Historic Preservation Office (SHPO), and the N.C. Coastal Reserve and National Estuarine Research Reserve (Reserve). These agencies identified concerns regarding potential impacts to North Carolina's coastal zone resources that could result from the actions proposed in the USACE's Consistency Determination and the 403 Project as currently described in the DEIS, including potential mobilization and redistribution of PFAS and other contaminants during dredging and disposal activities; increased erosion risk and shoreline instability associated with channel deepening, vessel wake energy, and altered sediment transport dynamics; and adverse impacts to fisheries resources such as essential fish habitat, oyster reefs, submerged aquatic vegetation, and nursery areas. The agencies also identified deficiencies in the USACE's assessment within the DEIS, including insufficient site-specific analysis, limited baseline data, inadequate modeling resolution, and a lack of detailed avoidance, minimization, and mitigation measures within the proposed mitigation plan. Many of these comments have been submitted directly to the USACE during their own public comment period. These comments can also be found on the North Carolina Department of Environmental Quality's website at: https://www.deq.nc.gov/about/divisions/division-coastal-management/coastal-management-

permits/federal-consistency/usace-wilmington-harbor-403-dredging-project#Tab-RelatedDocuments-20537

C. North Carolina's Approved Coastal Management Program and Enforceable Policies

North Carolina's Coastal Management Program consists of approved enforceable policies within, but not limited to, the Coastal Area Management Act (N.C.G.S. § 113A-100 et seq., (the CAMA)), the State's Dredge and Fill Law (N.C.G.S.§ 113-229 et seq.), and Chapter 7 of Title 15A of North Carolina's Administrative Code. As set forth in the CAMA at N.C.G.S. § 113A-102, North Carolina's Coastal Management Program goals include the preservation and enhancement of the recreational and aesthetic values of the coastal area; ensuring the orderly and balanced use and preservation of our coastal resources; protection, preservation, and conservation of natural resources including but not limited to water use, scenic vistas, fish and wildlife; economic development of the coastal area, including but not limited to construction, location, and design of industries; and protection of present common-law and statutory public trust rights in the lands and waters of the coastal area.

The specific North Carolina enforceable policies that apply to USACE's Consistency Determination for the 403 Project and related DEIS include the following:

- **G.S. § 113A-102(a):** "In the implementation of the coastal area management plan, the public's opportunity to enjoy the physical, esthetic, cultural, and recreational qualities of the natural shorelines of the State shall be preserved to the greatest extent feasible; water resources shall be managed in order to preserve and enhance water quality and to provide optimum utilization of water resources; land resources shall be managed in order to guide growth and development and to minimize damage to the natural environment; and private property rights shall be preserved in accord with the Constitution of this State and of the United States."

- **G.S. § 113A-120:** "The responsible official or body shall deny an application for a permit upon finding:…
  (4) In the case of a fragile or historic area, or other area containing environmental or natural resources of more than local significance, that the development will result in major or irreversible damage to one or more of the historic, cultural, scientific, environmental or scenic values or natural systems identified in subdivisions a through h of G.S. 113A-113(b)(4)
  (8) In any case, that the development is inconsistent with the State guidelines or the local land-use plans..."

- **G.S. § 113-229(e):** "Applications for permits except special emergency permit applications shall be circulated by the Department among all State agencies and, in the discretion of the Secretary, appropriate federal agencies having jurisdiction over the subject matter which might be affected by the project so that such agencies will have an opportunity to raise any objections they might have. The Department may deny an application for the dredge or fill permit upon finding: (1) that there will be significant adverse effect of the proposed dredging and filling on the use of the water by the public; or (2) that there will be significant adverse effect on the value and enjoyment of the property of any riparian owners; or (3)

that there will be significant adverse effect on public health, safety, and welfare; or (4) that there will be significant adverse effect on the conservation of public and private water supplies; or (5) that there will be significant adverse effect on wildlife or fresh water, estuarine or marine fisheries."

- **15A NCAC 07H .0205:** "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."

- **15A NCAC 07H .0206(c):** The management objectives of the Estuarine Waters AEC require DCM "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."

- **15A NCAC 07H .0206(d):** "Suitable land and water uses shall be those consistent with the management objectives in this Rule. Highest priority of use shall be allocated to the conservation of estuarine waters and their vital components. Second priority of estuarine waters use shall be given to those types of development activities that require water access and use which cannot function elsewhere such as simple access channels; structures to prevent erosion; navigation channels; boat docks, marinas, piers, wharfs, and mooring pilings. In every instance, the particular location, use, and design characteristics shall be in accord with the general use standards for coastal wetlands, estuarine waters, and public trust areas described in Rule .0208 of this Section."

- **15A NCAC 07H .0207(d):** "In the absence of overriding public benefit, any use which jeopardizes the capability of the waters to be used by the public for navigation or other public trust rights which the public may be found to have in these areas shall not be allowed. The development of navigational channels or drainage ditches, the use of bulkheads to prevent erosion, and the building of piers, wharfs, or marinas are examples of uses that may be acceptable within public trust areas, provided that such uses shall not be detrimental to the public trust rights and the biological and physical functions of the estuary."

- **15A NCAC 07H .0209(c):** Within the Estuarine Shorelines and Public Trust Shorelines AECs, "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. Included in management objectives are the necessity 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."

- **15A NCAC 07H .0209(d):** "Acceptable uses shall be those consistent with the management objectives in Paragraph (c) of this Rule. These uses shall be limited to those types of development activities that will not be detrimental to the public trust rights and the biological and physical functions of the estuarine and ocean system. Every effort shall be made by the permit applicant to avoid or minimize adverse impacts of development to estuarine and coastal systems through the planning and design of the development project. To ensure a project avoids and minimizes adverse impacts, development shall comply with the following standards:…

  (4) Development shall not have a significant adverse impact on estuarine and ocean resources. Significant adverse impacts include development that would directly or indirectly impair water quality increase shoreline erosion, alter coastal wetlands or Submerged Aquatic Vegetation (SAV), deposit spoils waterward of normal water level or normal high water, or cause degradation of shellfish beds. Development shall not interfere with existing public rights of access to, or use of, navigable waters or public resources…

  (5) Development shall not interfere with existing public rights of access to, or use of, navigable waters or public resources…

  (7) Development shall not cause irreversible damage to valuable, historic architectural or archaeological resources as documented by the local historic commission or the North Carolina Department of Natural and Cultural Resources."

- **15A NCAC 07H .0301:** "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 07M .0801(a):** "The waters of the coastal area are a valuable natural and economic resource of statewide significance. Traditionally these waters have been used for such activities as commercial and recreational fishing, swimming, hunting, recreational boating, and commerce. These activities depend upon the quality of the waters. Due to the importance of these activities to the quality of life and the economic well being of the coastal area, it is important to ensure a level of water quality which will allow these activities to continue and prevent further deterioration of water quality. It is hereby declared that no land or water use shall cause the degradation of water quality so as to impair traditional uses of the coastal waters. To the extent that statutory authority permits, the Coastal Resources Commission will take a lead role in coordinating these activities."

D. The 403 Project Proposal and USACE's Supporting Documentation Fail to Supply Sufficient Information to allow DCM to adequately evaluate Consistency with North Carolina's Enforceable Coastal Policies.

State agencies are explicitly authorized to object to Federal Consistency Determinations when the Federal agency fails to provide sufficient information 15 C.F.R. § 930.43(b). Here, USACE did not provide any information or evaluation regarding PFAS in sediment that would be dredged and

disposed of in coastal areas, including in Areas of Environmental Concern; failed to provide sufficient information to evaluate cumulative flooding impacts, including the interaction of project-induced changes with sea level rise and storm-driven water levels; and did not include site-specific details regarding the proposed placement of beneficial use dredged material, such as defined placement footprints, design elevations, stabilization measures, or proximity to sensitive coastal resources. Additionally, based on the information provided, the Corps' proposed mitigation measures do not adequately address the scope and magnitude of anticipated resource impacts. These deficiencies are described in detail below.

PFAS and Sediment Contaminants

Of particular concern was the lack of information regarding PFAS, including consideration of the risks associated with dredging in areas known to contain these "forever chemicals", and management of potentially contaminated material. According to the DEIS, comprehensive sediment sampling was conducted in the mid-2010s (2013 for the entire Wilmington Harbor Navigation Project and then again in 2016 for Battery Island improvements) to support evaluation of dredging and placement alternatives. Sediment samples were analyzed for a suite of conventional contaminants (i.e., metals, PAHs, PCBs, pesticides and semi-volatile contaminants) in accordance with Section 103 of the Marine Protection, Research, and Sanctuaries Act, and in coordination with EPA Region 4 to ensure compatibility for ocean disposal. Based on these analyses, the USACE concluded in the DEIS that dredged material generally meets applicable criteria for proposed placement options. However, while the USACE acknowledges in the DEIS that historic and ongoing concerns regarding marine and industrial contaminants in the Cape Fear River Basin (CFRB), it relies primarily on legacy contaminant screening and does not include any characterization of emerging contaminants, particularly for PFAS chemicals which are of significant concern in North Carolina and specifically in the Cape Fear River and Wilmington Harbor. PFAS is such a concern because it is well known that this region is home to one of the largest PFAS manufacturing facilities in the country and other industries that use PFAS material whose emissions and discharges have been released to environment through air deposition, surface water/groundwater releases, and soil/sediment contamination. The DEIS does not evaluate the potential for contaminant resuspension during dredging and the resulting fate and transport of these chemicals into nearby water bodies and land areas. This is of particular concern since extensive scientific research has documented the presence and persistence of PFAS over the past decade within the CFRB, including a growing body of research indicating significant negative ecological implications of PFAS in fish, birds, and reptiles. Of the 82 written comments received during the public comment period and the 25 additional comments provided during the public hearing, no fewer than 44 raised concerns regarding PFAS and the lack of consideration within the DEIS.

Studies beginning as early as 2016 identified elevated concentrations of legacy and replacement (also considered "emerging" in the environment) PFAS compounds in surface water, sediments, and drinking water supplies downstream of industrial discharges, demonstrating that PFAS are widely distributed and environmentally persistent within the CFRB. Subsequent monitoring and research conducted through the late 2010s and into the mid-2020s by academic institutions and state agencies confirmed the presence of dozens of PFAS compounds in surface waters (river, streams, tributaries, lakes, etc.), sediments, and aquatic organisms, including commercially and recreationally important fish species, resulting in a growing number of fish consumption advisories

and requiring ongoing monitoring and remediation efforts. One NCDEQ study also showed that PFAS compounds would adsorb to organic carbon such that sediments with higher total organic carbon (TOC) values would also have higher PFAS concentrations. More importantly, the serum levels of residents living in the CFRB have been documented to contain higher levels of PFAS compared to residents in other parts of the state and nationally.

Much of the material proposed to be excavated in the middle and upper reaches of the Cape Fear River FNS likely contains high levels of TOC, causing concerns over the remobilization and further dispersion of PFAS compounds within the ecosystem and public trust areas among state resource agencies and the public. Additionally, the placement of PFAS containing dredged material along riverbanks, back barrier island areas, surrounding bird island areas, marshes in the Cape Fear River, beach nourishment in New Hanover and Brunswick Counties, fish habitat rock placement, and other areas are of great concern. The potential exposure to humans and wildlife, water quality impacts, and long-term effects to the environment and ecosystems must be considered.

DCM finds that the DEIS does not demonstrate consistency with State water quality and dredge and fill standards under G.S. § 113A-102(a), G.S. § 113-229(e), and 15A NCAC 07M .0801(a) due to the absence of PFAS characterization and evaluation of mitigation strategies. Without such information, DCM's implementation of the coastal area management plan is hindered; particularly related to the public's opportunity to enjoy the physical, aesthetic, cultural, and recreational qualities of the natural shorelines of the State; preservation of water quality; negative effects on the natural environment; and preservation of private property rights. Additionally, under its current authorization, DCM is not able to assure that the project will not result in major or irreversible damage to one or more of the historic, cultural, scientific, environmental or scenic values or natural systems. The absence of adequate PFAS assessment introduces the risk of PFAS resuspension, redistribution, bioaccumulation, and human exposure associated with dredging and/or beneficial use. Without this analysis, the project cannot be shown to avoid significant adverse effects on the value and enjoyment of property, on public health, safety and welfare, on the conservation of public and private water supplies, and on wildlife, freshwater, estuarine or marine fisheries.

Cumulative Flooding Impacts and Sea Level Rise

The Cape Fear River Basin (CFRB) is a complex estuarine system with a substantial freshwater component, wetland adjacent "blackwater" streams, and a wide mouth opening to the Atlantic Ocean. Wilmington and other CFRB communities are increasingly experiencing compound flooding driven by the interaction of drivers of flooding such as storm surge, extreme precipitation, and tidal flooding. The region is frequently affected by tropical systems during hurricane season, including Florence (2018), Dorian (2019), Isaias (2020), Ian (2022), and Potential Tropical Cyclone 8 (2024), all of which have produced damaging flooding from storm surge and heavy precipitation. Research indicates that historical channel deepening has altered the tides in Wilmington, contributing to a rise in sunny day flooding. Tidal changes led to an additional 123 days of sunny day flooding in 2019 alone when compared to historical baseline[1].

[1] *S. Li, T. Wahl, S. A. Talke, D. A. Jay, P. M. Orton, X. Liang, G. Wang, L. Liu, Evolving tides aggravate nuisance flooding along the U.S. coastline. Sci. Adv. 7, eabe2412 (2021).*

In the DEIS, the USACE evaluated potential flooding impacts associated with channel deepening and widening under existing conditions and multiple sea level rise (SLR) scenarios, concluding that the proposed action would result in minimal changes to flood levels when considered independently of SLR. Hydrodynamic modeling indicates that increases in tidal prism and conveyance associated with the deeper and wider navigation channel would result in slight increases in tidal range but would not meaningfully increase flood elevations during extreme river flow or storm events when compared to baseline conditions. The DEIS further notes that projected increases in Mean High Water attributable solely to channel modifications are small relative to those driven by long-term sea level rise in 2086, which is 50 years beyond the start date of the project.

Considering end-of-century sea level rise in isolation neglects the impacts to the region in the intervening decades in an area that is already exposed to more frequent flooding. Under higher SLR scenarios, the DEIS acknowledges that flooding frequency, duration, and extent would increase throughout the lower Cape Fear River system but attributes these changes primarily to sea level rise rather than the proposed action. DMF and WRC commented, however, that the Corps analytical framework within the DEIS may underestimate the effects of channel deepening and SLR by evaluating them largely in isolation and not synergistically. Both agencies emphasized that project-induced increases in tidal extent and water levels would occur on a much shorter timescale than SLR, effectively accelerating situations like sunny day flooding and flooding due to storm surge).

DCM finds that the USACE, in their Federal Consistency Determination, does not adequately evaluate cumulative flooding impacts in a manner consistent with G.S. § 113A-102(a) and G.S. § 113-229(e). By largely assessing channel deepening and sea level rise in isolation, without consideration of the other drivers of flooding in this region and their interactions with one another, the USACE underestimates how project-induced changes may accelerate tidal flooding and storm surge impacts on a shorter timescale than the end of the century. This approach does not sufficiently demonstrate that the project would minimize risk to life, property, and coastal resources as required under the State's Enforceable Policies.

Proposed Beneficial Use of Dredge Material

Compared to the No Action Alternative, both AA1 and AA2 would require the excavation of substantially greater volumes of material to achieve the proposed channel depths, thereby increasing the amount of dredged material requiring management and disposal over the life of the project. The DEIS indicates that an estimated 46 percent of this material would be beneficially used in accordance with USACE policy goals to reach a BUDM capacity of 70 percent by 2030. However, both DMF and WRC raised concerns regarding the adequacy of information provided to evaluate the environmental implications of proposed placement strategies. From DCM's perspective, the DEIS does not explicitly state that dredge material would be placed directly on top of intertidal areas that contain coastal wetlands, yet the boundaries identified in the DEIS for intertidal BUDM placement sites are coarsely drawn and currently encompass large areas of Coastal Wetlands. Coastal Wetlands are managed under North Carolina's Coastal Management Program and are identified as an Area of Environmental Concern (AEC). North Carolina's enforceable policies [G.S. § 113A-113, 15A NCAC 07H .0208(b)(1)(C)] currently do not allow

for the placement of fill material, dredged or otherwise, on Coastal Wetlands. Coastal Wetlands are specifically defined within State Dredge and Fill law [G.S. § 113-229 and -230] as marshlands and proposed dredging or filling requires prior Department approval. Additionally, DCM does not believe sufficient site-specific information has been provided for each of the potential intertidal placement sites provided within the DEIS, excluding areas with active authorizations for dredge placement (e.g. South Pelican Island, Ferry Slip Island).

DCM finds that the lack of site-specific detail for dredged material placement prevents a determination that the project is consistent with Coastal Wetlands and estuarine protection policies under G.S. § 113-229 and 15A NCAC 07H .0205, .0206, and .0209. The inclusion of intertidal placement areas that encompass Coastal Wetlands conflicts with State prohibitions on fill placement in these AECs absent specific authorization. Without defined footprints, stabilization measures, and avoidance criteria, the project has not been shown to minimize impacts to wetlands, nursery areas, and water quality.

Mitigation of Proposed Impacts

Currently, the DEIS proposes compensatory mitigation to replace ecological services lost as a result of unavoidable direct loss of fish habitat and the indirect loss of freshwater wetland function. Proposed mitigation includes preservation of forested freshwater wetlands, restoration and enhancement of brackish marsh through invasive species removal using herbicides, native plantings on Eagle Island, and construction of fish passage structures at Lock and Dam 1 and 2 to improve anadromous fish access to upstream habitats. While both DMF and WRC acknowledge the effort to identify mitigation opportunities, they raised concerns that the proposed measures may not fully account for the scale, permanence, and uncertainty of project-induced impacts, particularly those affecting Primary Nursery Areas, Anadromous Fish Spawning Areas, and tidal freshwater wetlands. Both agencies noted that functional losses associated with salinity intrusion, hydrologic change, and vessel wake effects may be underestimated, and questioned whether reliance on preservation alone, limited restoration acreage, and conceptual fish passage designs would provide sufficient ecological function to offset the impacts. DMF and WRC further emphasized the need for clearer success criteria, adaptive management commitments, and consideration of alternative or additional mitigation strategies to ensure impacts to fisheries resources and wetlands are adequately addressed over the long term. Additionally, DCM is aware that the Division of Water Resources (DWR) is currently reviewing a submitted 401 Individual Water Quality Certification application for the activities outlined in the DEIS. DCM has also been notified that DWR has issued the USACE a Request for Additional Information seeking clarification on several aspects of the project, including data sources and modeling assumptions, methodologies used for mitigation credit determination, and whether the proposed mitigation adequately satisfies the requirements of applicable State and Federal Laws.

DCM finds that the proposed mitigation framework does not adequately demonstrate consistency with mitigation requirements under G.S. § 113A-120 and 15A NCAC 07H .0206 and .0209. Agency comments indicate that the scale and permanence of salinity-driven habitat losses may exceed the functional replacement capacity of the proposed mitigation measures. The absence of defined performance standards and adaptive management commitments further limits assurance that impacts would be adequately offset.

E. Substantial Data and Information Demonstrate the 403 Project Would Result in Significant Adverse Impacts to Coastal Resources and is Not Consistent, to the Maximum Extent Practicable, With North Carolina's Enforceable Coastal Policies.

State agencies are authorized to object to a Federal Consistency Determination when the State agency finds that a proposed project is not consistent, to the maximum extent practicable, with enforceable policies of the State's coastal management program. 16 U.S.C § 1456(c); 15 CFR C.F.R. § 930.43(a).

The USACE's consistency determination evaluates the proposed action largely through citation to Areas of Environmental Concern definitions and general policy objectives, with limited project-specific analysis linking those policies to the anticipated impacts of the proposed channel extension, deepening, and widening. In many instances, the Federal Consistency Determination relies on summary conclusions of consistency without demonstrating how identified uncertainties, modeling limitations, or unresolved impact questions were reconciled under North Carolina's enforceable coastal policies. In consideration of the enforceable policies of North Carolina's Coastal Management Program identified above, the following sections outline where the USACE's DEIS and Federal Consistency Determination fails to demonstrate, with reasonable certainty, that the proposed actions would avoid significant adverse impacts or comply with those policies to the maximum extent practicable. These sections draw from the DEIS, public comments, and agency input to identify critical data gaps and analytical deficiencies that preclude a reliable consistency finding.

Loss of Fisheries Habitat and Freshwater Wetland Functions

Both the USACE's DEIS and Federal Consistency Determination identifies two primary types of meaningful adverse impacts that would directly result from channel widening and deepening presented in AA1 and AA2. These impacts include the direct loss of fish habitat and indirect impacts to wetland functions associated with increased salinity in the lower Cape Fear River. Following excavation, the deeper and wider navigation channels would allow increased mixing of ocean water with riverine freshwater, resulting in elevated salinity levels farther upstream. The USACE indicates that this shift in salinity would cause salt-tolerant wetland vegetation to migrate upstream within and adjacent to the deepened reaches of the river. Although the DEIS concludes that total wetland acreage would not be reduced, the proposed action would convert freshwater forested wetlands to more saline wetland types, resulting in a functional loss of freshwater wetland resources. DCM received comments from both the DMF and the WRC expressing concern that the USACE underestimates the ecological significance of projected salinity changes associated with channel deepening and widening. While acknowledging that the DEIS presents hydrodynamic and water quality modeling results, both agencies emphasized that even small increases in salinity can cause substantial and permanent changes to aquatic and wetland communities. WRC noted that slight salinity increases are sufficient to shift entire wetland community types, such as converting tidal freshwater wetlands to oligohaline systems, with corresponding losses of habitat suitability for freshwater-dependent species and raised concerns regarding potential impacts to submerged aquatic vegetation (SAV) that were not fully evaluated within the DEIS. DMF similarly emphasized that the proposed action could accelerate saltwater

intrusion upstream over a much shorter timescale than sea level rise, thereby reducing the ability of aquatic organisms and habitats to adapt. Both agencies further noted that project-induced salinity changes and sea level rise represent additive stressors, concluding that salinity-driven impacts to wetlands and aquatic habitats may be more extensive and consequential than characterized in the DEIS. The Reserve also expressed concerns over the impacts of salinity regime shifts would have on protected habitats within Zeke's Island Reserve, adding that continued monitoring would be required to assess project impacts on these public trust resources

State regulations prohibit new or expanded dredging within Primary Nursery Areas unless proposed actions are appropriately mitigated and the applicant has demonstrated public benefit outweighs any identified adverse environmental impacts. The USACE acknowledges that dredging in the upper reaches of the FNS would result in both direct and indirect impacts to Primary Nursery Areas and Anadromous Fish Spawning Areas. As a result, DMF and WRC raised concerns that salinity-driven shifts in wetland function and habitat composition, when combined with direct dredging effects, could adversely affect nursery and spawning habitats by increasing turbidity, reducing water quality and clarity, and elevating the likelihood of larval and post-larval burial and mortality. Both agencies emphasized that these impacts are particularly consequential in designated nursery and spawning areas, where relatively small changes in salinity and hydrology can alter habitat function and reduce the capacity of these areas to support early life stages of fish. Based on this analysis, DMF concluded that the proposed deepening and widening of the Wilmington Harbor FNS would have significant adverse impacts to fisheries resources due to the permanent loss of state-designated nursery and anadromous fish spawning areas along the Cape Fear River estuary and its tributaries. DMF also concluded that the project may also have significant adverse impacts on documented low salinity SAV species and shellfish resources found within the project area.

DCM finds that the functional conversion of tidal freshwater wetlands and impacts to designated nursery and spawning areas are inconsistent with G.S. § 113A-102(a), G.S. § 113A-120, and the wetland and estuarine protection standards of 15A NCAC 07H .0205 and .0206. The conversion of freshwater wetlands to more saline systems represents a permanent loss of ecological function, even where total acreage is maintained, and conflicts with the State's priority to conserve estuarine and wetland resources. Additionally, salinity-driven degradation of Primary Nursery Areas and Anadromous Fish Spawning Areas is inconsistent with G.S. § 113-229(e).

Erosion Risk and Shoreline Instability

In the DEIS, the USACE states that channel deepening and widening under both AA1 and AA2 would not result in substantial increases in shoreline erosion when compared to existing conditions. Based on hydrodynamic modeling, the DEIS states that changes in tidal range, water levels, and current velocities would be relatively small and that erosion patterns along riverbanks and wetlands would be driven primarily by sea level rise rather than the proposed navigation improvements. In the DEIS, the USACE also indicates that, although vessel size would increase, the overall number of vessel transits is expected to decrease which would suggest vessel wake–related erosion would not increase in a manner that results in significant additional impacts. As a result, the USACE has characterized erosion-related effects as minor and manageable and does not identify erosion as a primary driver of adverse impacts differentiating AA1 from AA2.

Both DMF and WRC questioned whether erosion risks were adequately characterized in the DEIS. WRC specifically raised concerns that the USACE does not sufficiently evaluate shoreline and wetland erosion resulting from increased vessel wakes associated with the expectedly larger container ships, noting that even small increases in wake energy can inundate nesting and roosting habitats, destabilize shorelines, and accelerate erosion of wetlands and islands. WRC emphasized that wake-induced erosion may occur independently of changes in tidal range and water levels and could lead to direct habitat loss not fully captured by the modeling approach used in the DEIS. DMF similarly expressed concern that the DEIS underestimates indirect and cumulative effects, including erosion associated with altered hydrodynamics, increased tidal extent, and vessel activity. DMF noted that erosion, when combined with salinity intrusion and rising water levels, could contribute to loss of wetland elevation, conversion of freshwater habitats, and degradation of nursery areas and anadromous fish spawning habitat, even if individual stressors (e.g. SLR, vessel wake) appear modest when evaluated in isolation.

DCM finds that the USACE, in their Federal Consistency Concurrence, does not demonstrate consistency with 15A NCAC 07H .0207(d) and .0209, which require shoreline development to avoid significant erosion and protect public trust resources. State resource agencies identified credible mechanisms by which increased vessel wakes and altered hydrodynamics could accelerate erosion beyond what is captured in the DEIS modeling. Without adequately evaluating these effects, the project has not been shown to avoid or minimize adverse impacts to shorelines and wetlands.

Direct and Indirect Impacts to State, Historic, and other Properties

The identification and lack of detail provided for utilizing the Masonboro Island Reserve as a proposed BUDM site is of particular concern. While the USACE identified proposed disposal sites in the DEIS as not economically feasible for BUDM during initial construction, the site's consideration as an option for potential placement in the future conflicts with the Reserve program and the NHP's management plans which dedicate uses of the state-owned properties managed by the Reserve. As noted by comments submitted to both USACE and DCM by the Reserve and NHP, intertidal placement at Masonboro Island Reserve is not currently permissible under the State Nature Preserve dedication. While the dedication could possibly be amended, and Reserve approval given through the required compliance with applicable federal and state requirements, this is not certain to happen. Additionally, even though beach nourishment may offer sediment benefits, its suitability depends on further coordination to refine placement areas within the Reserve given ecological sensitivities, ongoing research, and existing State agreements and use standards.

The State Historic Preservation Office (SHPO) raised additional concerns that the DEIS does not adequately identify or evaluate indirect and foreseeable effects associated with channel deepening, ongoing maintenance dredging, dredge material placement, and erosion that may affect historic properties within the area of potential effects. SHPO further noted that based on their assessment, the USACE has not sufficiently identified, notified, or consulted all potentially affected historic property owners, site stewards, and interested parties, limiting the ability of those entities to meaningfully participate in the review process or raise site-specific concerns. SHPO emphasized

that these consultation and notification gaps, combined with the lack of detailed, site-specific analysis of long-term effects, undermine the DEIS's ability to assess impacts to historic resources over the life of the project.

In general, the USACE provides limited site-specific detail for proposed estuarine and intertidal placement locations, making it difficult to fully assess potential impacts to aquatic habitats, wetlands, and designated nursery areas. DCM similarly remains concerned that the lack of detailed placement design, footprint, and site-specific stabilization information prevents meaningful evaluation of indirect and cumulative impacts of these large-scale placement efforts, including water quality and contaminant-related considerations that warrant significant review and assessment prior to proceeding with dredging operations.

DCM finds that the identification of state-owned conservation lands, including Masonboro Island Reserve, as potential dredged material placement sites is inconsistent with G.S. § 113A-102(a) and 15A NCAC 07H .0207(d). The DEIS does not demonstrate that such uses would be compatible with reserve management objectives or public trust protections. Additionally, insufficient identification and consultation regarding historic properties conflicts with G.S. § 113A-120 and 15A NCAC 07H .0209(d)(7).

Economics

In addition to resource impacts, significant economic concerns accompany the proposed deepening and widening of the Wilmington Harbor Federal Navigation System. The DEIS frames economic benefits primarily in terms of enhanced navigation efficiency and forecasted vessel usage, but provides limited rigorous analysis of net economic benefits versus project costs and risks compared to similar port expansions. Unlike comprehensive analyses in other large East Coast port DEIS/FEIS documents, such as the Charleston Harbor Deepening and Savannah Harbor Expansion Projects, which included detailed cost-benefit modeling, regional trade projections, and sensitivity analyses tied to global shipping trends, the Wilmington Harbor DEIS does not adequately address key economic uncertainties. It lacks in-depth evaluation of alternatives, does not fully quantify potential economic losses associated with environmental degradation (e.g., impacts to commercial and recreational fisheries, tourism, and waterfront property values), and does not compare projected benefits under changing global shipping patterns or the increasing prevalence of extreme weather and supply chain shifts. These economic unknowns, when paired with the environmental and community risks identified throughout this letter, leads DCM to conclude that the economic rationale for the proposed project remains insufficiently substantiated and fails to demonstrate that the purported benefits outweigh foreseeable costs to North Carolina's coastal economy and public welfare.

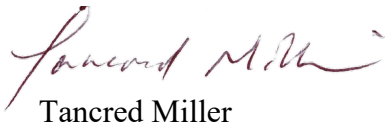
DCM finds that the DEIS does not sufficiently demonstrate consistency with G.S. § 113A-102(a), which requires balancing economic development with protection of coastal resources and public welfare. The DEIS lacks rigorous analysis of net economic benefits and does not adequately evaluate potential economic losses associated with environmental degradation. Without this information, the 403 project has not been shown to represent a balanced use of North Carolina's coastal resources.

Conclusion

DCM has completed its review of the USACE's Consistency Determination for the 403 Project proposal. In accordance with 15 C.F.R. §§ 930.41 and 930.43, DCM objects to the 403 Project proposal because USACE has failed to supply sufficient information to determine consistency with the relevant enforceable policies of North Carolina's coastal management program. Further, to the extent the 403 Project proposal does include sufficient information to evaluate consistency, DCM concludes that the 403 Project, as proposed, would cause significant adverse impacts to coastal resources in violation of North Carolina's enforceable coastal management policies. The USACE has not fully demonstrated how these adverse impacts will be avoided, minimized or mitigated. The USACE's Consistency Determination and DEIS fail to demonstrate, with reasonable certainty, that the deepening and widening of the Wilmington Harbor FNS would avoid significant adverse impacts or be consistent to the maximum extent practicable with North Carolina's enforceable coastal policies. As detailed above, substantial data gaps, modeling limitations, and unresolved questions remain regarding the severity of salinity-driven loss of wetland functions, degradation of Primary Nursery Areas and Anadromous Fish Spawning Areas, erosion and shoreline instability associated with altered hydrodynamics and vessel wakes, cumulative flooding risks under accelerating sea level rise, the handling and potential remobilization of PFAS-contaminated sediments, the adequacy and feasibility of proposed mitigation measures, and clear economic necessity justifying a determination of overriding public benefit. For these reasons, DCM concludes that the proposed project is inconsistent with North Carolina's Coastal Management Program and the enforceable policies cited herein, which mandate the conservation and careful management of the State's estuarine and ocean systems and the resources and uses they support.

DCM recognizes the North Carolina Ports Authority's interest in the Wilmington Harbor 403 Navigation Project and the benefits it could provide. Accordingly, should the USACE choose to postpone final federal action on the 403 Project and participate in the dispute resolution mechanisms described at 40 C.F.R. § 930.43(d), DCM is committed to working with the USACE to try to resolve the concerns detailed in this objection.

Sincerely,



Tancred Miller
Director,
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Cc: D. Reid Wilson, Secretary, N.C. Department of Environmental Quality
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