



City of Southport



December 17, 2025

Via Email

NC Department of Environmental Quality
Division of Coastal Management
ATTN: Federal Consistency Coordinator
400 Commerce Avenue
Morehead City, NC 28557
Federalconsistencycomments@deq.nc.gov

Re: Federal Consistency: USACE Wilmington Harbor 403 Navigation Project

Dear Federal Consistency Coordinator,

Please accept these comments on behalf of the City of Southport in connection with the Wilmington Harbor 403 project as part of the Federal Consistency determination being performed by DCM.

The City of Southport is a coastal community residing along the Cape Fear River and associated Port of Wilmington shipping channel near the Battery Island and Lower Swash Reaches. This point of the channel includes a jug-handle turn around Battery Island and the eastern end of Caswell Beach and is a critical section of channel that will undergo some of the most radical changes with the proposed Wilmington Harbor 403 project. Not only will this curve be widened by 500 feet in places, it will also be 6 feet deeper in rocky areas (currently max 46' depth, potential new depth with rock of 52'). These changes are proposed to allow for New-Panamax/Ultra Post Panamax ships to call upon the Port of Wilmington and grow our local Port Industry with global trends. It is extremely important for our local economy to keep the Port of Wilmington competitive and ultimately that means growth of the Port itself as well as access facilities. However, these expansions and scaling operations need to thoroughly vet all options and weigh environmental and municipal impacts vs overall gains from the project.

Southport has several concerns regarding impacts to their shoreline, waterfront properties, and natural environments. The City would also like to propose an alternate route to be investigated, saving nearly a mile of transit, providing a more direct route between the Baldhead-Caswell and Snows March reaches. Previous reconnaissance was done in this area in relation to the Southport Port initial investigations and it was deemed a plausible route for further investigation. Results of this geotechnical work associated with the feasibility studies of the North Carolina International Port project are likely still available for review with the NC Port Authority. Project comments and suggestions are discussed below:

CITY OF SOUTHPORT

1029 N. HOWE STREET • SOUTHPORT, NORTH CAROLINA 28461
www.cityofsouthport.com • PHONE: (910) 457-7900 • FAX: (910) 457-7905



- The primary concern of Southport is continued and magnified ship wake impacts to its shorelines as Ultra Post Panamax ships sail past. Increased wake activity will exacerbate the ongoing erosional trend along Bay Street and further impact the integrity of its infrastructure along the shoreline parallel to the Cape Fear River/shipping channel. Bay Street has endured long term erosion due to wake impacts from the existing ship size and traffic, impacting the integrity of the sidewalk, pavement, and utilities. The City was forced to implement emergency measures (riprap/shoreline hardening to combat wake induced erosion) and is undergoing a more significant shoreline stabilization program to mitigate the impacts of ongoing erosion. The image below shows ongoing erosional issues along Southport shoreline and is further discussed below. These ongoing stabilization efforts not only cause monetary burden to the City of Southport, but also lead to shoreline hardening and habitat loss. The existing sandy portions of the beach are utilized by large congregations of White Ibis, Brown Pelicans, and other critical shorebirds—wake induced erosion will threaten this habitat not only through shoreline stabilization methods but also through erosional losses and shoreline encroachment onto established roadbeds and sidewalk infrastructure.





- The proposed channel alignment encroaches 400 feet closer to the Southport shoreline when compared to the current position. Although wake analysis was performed as part of the DEIS, Southport has concern over the parameters that were used to run this analysis. It appears that the frequency of passing ships was matched to the current TEU load the port of Wilmington experiences. Because the total freight inflow remained constant, the number of ships traversing the channel was reduced, thereby reduced to total frequency of wake impacts. The concern is that while this trend may hold true initially, ultimately the Port of Wilmington is a business and will likely look to maximize its potential capacity. The combination of navigability provided with this 403 Project, current and future landside expansions (as discussed in the DEIS), the potential addition of rail systems connecting Wilmington to Raleigh/Washington DC/Richmond/New York City (Southeastern North Carolina Passenger Rail Feasibility Study, NCDOT 2024), and the Wilmington, NC Rail Realignment Project (USDOT, Federal Railroad Administration) would all combine to greatly increase the overall capability of the Port of Wilmington. If the landside of operations can service a greater region and move TEU's more effectively it would lead to the increase of ships calling on the Port of Wilmington and likely drastically increase the wake influenced erosion on the shoreline. Limiting the number of passing ships in the DEIS is very likely underestimating the overall effects of ship wakes and overall energy impacting the adjacent shorelines. A more accurate approach to overall potential wake impacts would be to match ship traffic with the maximum capacity of the Port of Wilmington if all cranes were busy at all times.
- Additional concerns are focused around the overall alignment and its proximity to the Southport shoreline. As mentioned, and shown above, the shoreline along Bay Street in Southport has continued to experience wake induced erosion leading to the hardening (via rip rap and bulkhead) of the majority of the shoreline. In fact, of the 2,500 feet of shoreline between S Atlantic Avenue and the American Fish Company restaurant, only 900 feet of it is natural sandy beach (35 percent) remains. Southport is undergoing a shoreline stabilization study to mitigate the effects of ongoing erosion along 1,700 feet riverfront shoreline. The roadway and sidewalk structure along Bay Street have both been previously compromised by ongoing erosion. Water and sewer utilities, including a sanitary sewer pump station, that reside along the shoreline of Bay Street are at risk of adverse impacts if the wake induced erosion continues or worsens. Two separate projects are currently in the permitting phase with expected 2026 construction to reinforce the shoreline and protect it from wake and ship surge induced erosion. This included a series of breakwaters and backfill, rock revetment improvements and a stemmed breakwater along 1,700 feet of shoreline. A secondary project involving rip-rap/living shoreline along 725 feet of residential properties north of S. Atlantic Avenue is also in the permitting phase.

The proposed channel alignment is 400 feet closer to the Southport shoreline along Bay Street and is comprised of a jug handle turn around Battery Island, past Caswell Beach, and then out to sea past Baldhead Island. This large turn may exacerbate the wake problems as ships maneuver around the bend



and rotate almost perpendicular to the design channel. Any tug or push boat assistance in the turn will add to localized wake and prop wash erosion. Considering a 3H:1V side slope along the Lower Swash reach (and 5H:1V south of this location), the daylight line for this channel will be almost 700 feet closer to the Southport fishing pier. This portion of navigation channel is also used extensively by the Baldhead Island Ferry system and the wider channel area will allow the ferries to run closer to the Southport and Battery Island shorelines. The deepening and widening project brings about wake and shoreline consequences, in addition to that of the Post Panamax ships, caused by other local boat traffic that will be much closer to existing shorelines. As these wakes continue to negatively impact the riverfront shoreline, additional riprap and shoreline hardening tactics may be needed. Unfortunately, the armoring of a shoreline to protect critical infrastructure leads to habitat loss and creates an unnatural environment. The City of Southport aims to be proactive in maintaining as much natural environment as possible with its shoreline stabilization projects, but exponentially increasing wake energy along the shoreline may necessitate the use of shoreline armoring rather than softer solutions.

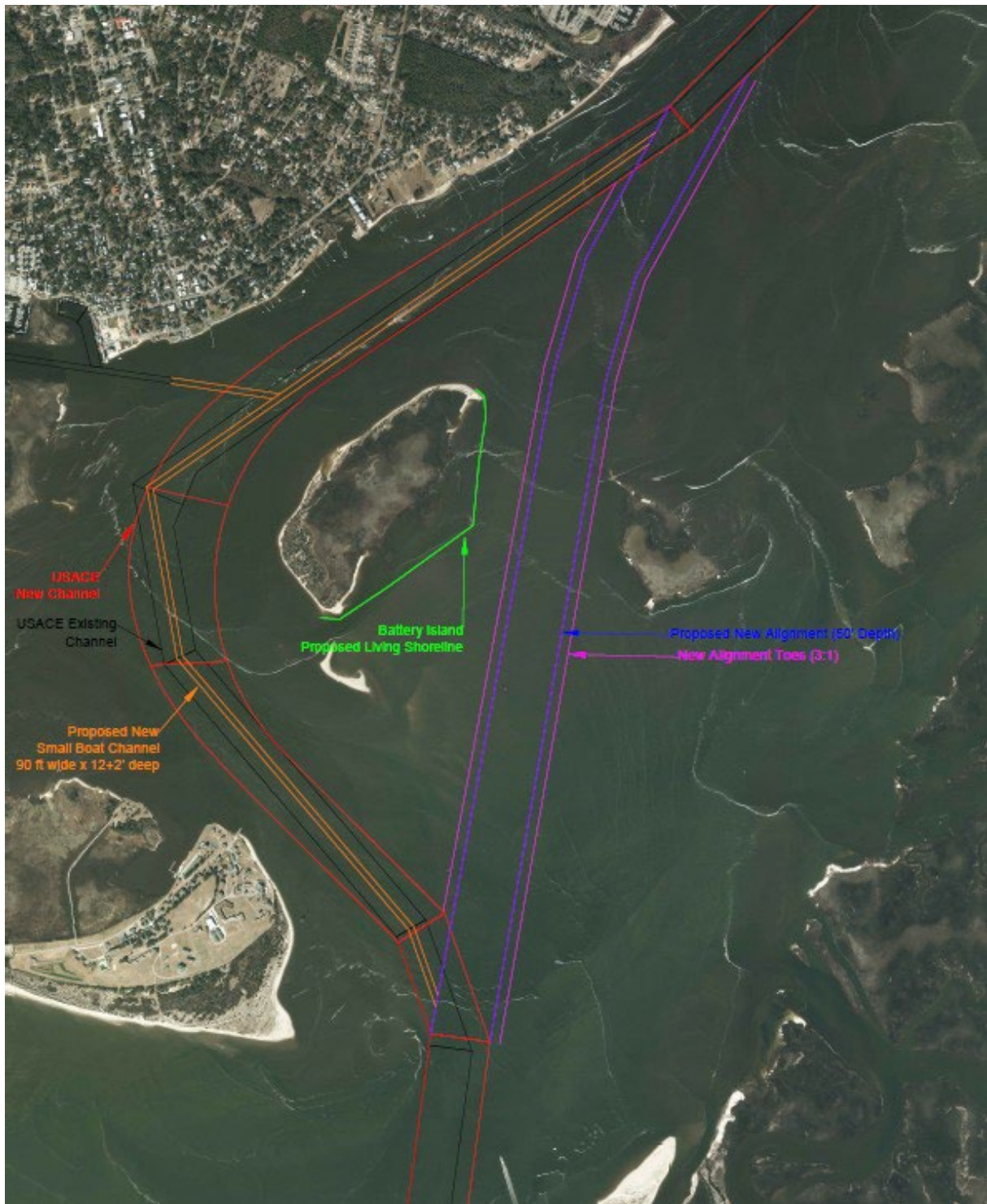




- In 2006, the NC State Ports Authority investigated the potential of constructing a North Carolina International Terminal on the property it purchased just north of Southport, between the Archer Daniels Midland Terminal and the Duke Nuclear Energy Plant. While the original proposal fizzled out by 2012, there was some renewed interest based upon the NCSPA 2015 strategic report and suggestions by Senator Lee regarding reopening an inlet at the southern end of Fort Fisher. Part of the original geotechnical work conducted in 2006-2008 for the NCIT project involved finding top of rock depths around this S Turn or Jug Handle turn. Jet probes were collected around the existing channel location (west of Battery Island) as well as a new cut through orientation to the east of Battery Island. Results of these probes exist in reports held by the NC State Port in Wilmington and indicate that top of rock depths are generally below required grade east of Battery Island. The image below shows a proposed alternative that should be investigated for impacts and cost savings—it truncates approximately 1 mile of channel from the existing bend and dredge material is predominantly beach quality sand, enough to beneficially use to renourish all of the Brunswick County beaches, infill a portion of the existing shipping channel, and bolster the bird roosting habitat along Battery Island. This alignment would also reduce wave impacts to Caswell Beach and Southport, while also simplifying overall navigation for ships entering the shipping channel. A living shoreline structure along the eastern edge of Battery Island would help combat erosion and preserve the rebuilt habitat. The image below shows the general orientation and design of a cut through channel. For continuity with the offshore channel segments, channel width was kept at 800 to 900 feet, however to minimize environmental impacts this width can likely be reduced to match the interior segment widths of 500 wide given the linear nature of this proposed alternative channel alignment.



City of Southport



CITY OF SOUTHPORT

1029 N. HOWE STREET • SOUTHPORT, NORTH CAROLINA 28461

www.cityofsouthport.com • PHONE: (910) 457-7900 • FAX: (910) 457-7905



- Additionally, Southport has concerns in relation to the increased channel prism and associated tidal, storm surge, and flooding implications associated with a larger volume of water entering and exiting the river. An increase in tidal range will exacerbate nuisance flooding during high tide cycles and will inundate storm water drains causing additional streetside flooding. What impacts to hurricane storm surge can be expected with the enlarged tidal prism in comparison to current surge models? Will lower category hurricanes cause storm surges on par with what a major hurricane would produce with the current channel dimensions? Alternatively, do low tide cycles allow more water to flow out of the interior basins and cause navigation issues for inland basins, personal docks, and interior channels?
- A final concern regards increased shoaling near the confluence of the Battery Island Reach and the AIWW and in the vicinity of the Southport Yacht Basin. Due to channel orientation and hydrodynamic flow, this area appears primed to become a hotspot shoaling area and becoming a detriment to local navigation. The Southport Yacht Basin, a federally authorized channel, is currently silted in, well beyond its authorized depth of 12.0 feet MLLW, and Southport is actively pursuing permits at its own cost to restore navigation within the Corps channel. The City has concerns that the proposed 403 project would exacerbate the shoaling issues and cause further burden upon Southport to continue to maintain its local infrastructure. Environmental risks associated with increased shoaling would include sedimentation over SAV and PNA oyster reefs, degradation of water quality, reduced flushing of tidal creeks due to reduction of water flow, and increased dredging impacts to invertebrate colonies to remove shoals and restore navigation and estuary flushing.

In summary, the City of Southport does not believe all alternatives have been fully vetted through the EIS process and deficiencies exist in the current impact analysis, particularly in the parameters utilized to run wake and ship surge impact models and economic outlook. Southport is already obligating significant financial resources into combatting ongoing shoreline erosion since the Wilmington Harbor 96 Act Deepening, including emergency measures to protect critical infrastructure along Bay Street. The 403 improvement plan will likely aggravate these conditions and trigger additional financial burdens on the City and endanger natural shoreline along the riverbank due to larger and more frequent ship traffic and associated destructive wakes. Long term shoaling and sedimentation trends will be accelerated and cause navigation issues within the commercial district and safe refuge of the Southport Yacht Basin while also potentially reducing water quality and estuary flushing. The City of Southport urges the Division of Coastal Management to require the USACE to explore all channel alignment alternatives for feasibility and fully vet adverse impacts based upon expanded land side Port capabilities as well as include erosion mitigation measures for adjacent shorelines of communities impacted by the 403 deepening project.



City of Southport



Finally, as a show of the City's concerns associated with the overall environmental, hydrodynamic, and economic impacts stemming from the proposed Wilmington Harbor 403 Project, a public hearing was held on December 2, 2025, at the City of Southport Community Building. The hearing included comments by the City engineer, Audubon Society, NC Coastal Federation, coastal attorneys, and the public in regard to potential environmental, morphological, and economic implications from moving forward with the project as proposed. This hearing resulted in adapting Resolution #25-1202.01 addressing the need for:

1. A comprehensive, long-term, and fully funded environmental mitigation and adaptive management plan
2. A dedicated adaptive management fund
3. Implementing mitigation measures that fully safeguard local environmentally critical habitats
4. All stakeholders and relevant agencies keep environmental protection, community values, and economic resilience at the forefront of all decision making associated with the Wilmington Harbor 403 Project.

A copy of the City of Southport Resolution is attached to these comments for your review.

Sincerely,

Jamie Pratt, MS, PG, PE
TI Coastal Services

Robert A. Jarvis, PE
Southport City Engineer

CITY OF SOUTHPORT

1029 N. HOWE STREET • SOUTHPORT, NORTH CAROLINA 28461
www.cityofsouthport.com • PHONE: (910) 457-7900 • FAX: (910) 457-7905



Resolution #25-1202.01

A RESOLUTION OF THE SOUTHPORT BOARD OF ALDERMEN URGING ROBUST MITIGATION, LONG-TERM MONITORING, AND ADAPTIVE MANAGEMENT FOR THE WILMINGTON HARBOR 403 PROJECT

WHEREAS, the City of Southport is located at the confluence of the Cape Fear River and the Atlantic Ocean, a uniquely sensitive estuarine environment that supports diverse wildlife, coastal communities, and natural systems; and

WHEREAS, the proposed Wilmington Harbor 403 Project seeks to deepen, widen, or otherwise modify the federal navigation channel, changes that may significantly alter hydrodynamic patterns, sediment transport, and shoreline stability in the Lower Cape Fear River region; and

WHEREAS, these alterations have the potential to increase erosion risk to sensitive shorelines, marsh platforms, and riverfront areas, and increase the likelihood of subsidence of adjacent riverbed and shoreline areas into the dredge prism, particularly within and adjacent to the City of Southport, threatening natural buffers that protect homes, public spaces, cultural resources, and community infrastructure; and

WHEREAS, the region's barrier and estuarine islands—including Battery Island, Shellbed Island, and others—play a critical ecological role in supporting fisheries, marsh nurseries, colonial waterbirds, and migratory shorebirds; and

WHEREAS, Battery Island in particular is recognized as one of the most significant colonial waterbird nesting sites on the East Coast, and in total all bird nesting islands on the Lower Cape Fear River provide habitat for approximately 30% of North Carolina's nesting coastal waterbird population, and are highly vulnerable to erosion, sea level rise, and habitat loss that may be exacerbated by channel deepening activities; and

WHEREAS, the environment surrounding Southport is an essential part of the city's core values, contributing to residents' quality of life, recreational enjoyment, cultural heritage, and long-standing community identity rooted in conservation and stewardship; and

WHEREAS, the economic resilience of Southport is directly connected to the integrity of its surrounding natural resources, with tourism, recreation, waterfront businesses, and property values all depending on a healthy, stable coastal environment; and

WHEREAS, any federal navigation project that increases environmental risk must include robust mitigation, long-term monitoring, and adaptive management measures proportionate to both the scale of the project and the sensitivity of the affected ecosystems and communities; and

WHEREAS, the billion-dollar Savannah Harbor Expansion Project (SHEP) spent approximately 500 million on mitigation and included funding for post-construction monitoring and adaptive management, ensuring that resources would be available to modify or enhance mitigation if environmental conditions changed unexpectedly; and

WHEREAS, the non-federal sponsor for SHEP, acting through the Georgia Ports Authority, agreed to set aside, in advance, their cost-shared portion of the monitoring and adaptive

management funds in an escrow account upon approval of the project, guaranteeing rapid response capability and honoring the principle that those benefiting from the project must share responsibility for preventing or repairing environmental harm; and

WHEREAS, projects such as the Wilmington Harbor 403 effort must match or exceed this level of commitment by establishing a dedicated and adequately funded adaptive management program that extends over the full period of environmental risk, not only the construction phase or initial years of project operation; and

WHEREAS, safeguarding Southport's environment, wildlife habitats, and economic well-being requires that mitigation and monitoring measures be both enforceable and financially secure before any project authorization or construction proceeds;

NOW, THEREFORE, BE IT RESOLVED that the City of Southport urges state and federal decision-makers, including the U.S. Army Corps of Engineers and the North Carolina General Assembly, to require a **comprehensive, long-term, and fully funded environmental mitigation and adaptive management plan** for the Wilmington Harbor 403 Project, modeled on or exceeding the commitments made in the Savannah Harbor Expansion Project; and

BE IT FURTHER RESOLVED that the City of Southport calls for the establishment of a **dedicated adaptive management fund**, placed in escrow prior to construction and sized proportionally to the project's potential impacts, ensuring that corrective actions, ecological restoration, and shoreline protections can be implemented promptly whenever monitoring indicates environmental degradation; and

BE IT FURTHER RESOLVED that the City of Southport urges all agencies and project sponsors to protect Battery Island and the surrounding Cape Fear River islands as irreplaceable ecological assets, ensuring that mitigation measures fully safeguard the habitats supporting 30% of North Carolina's coastal shorebird population; and


BE IT FINALLY RESOLVED that copies of this Resolution be forwarded to the North Carolina General Assembly, the North Carolina Congressional Delegation, the U.S. Army Corps of Engineers, the North Carolina Department of Environmental Quality, the Brunswick County delegation, and other relevant agencies, urging their support in ensuring that environmental protection, community values, and economic resilience remain at the forefront of all decisions related to the Wilmington Harbor 403 Project.

Approved and adopted by the City of Southport Board of Aldermen on this 2nd of December 2025.



Mayor, City of Southport

ATTEST:



City Clerk, City of Southport

