Audubon | NORTH CAROLINA

July 22, 2024

807 E. Main Street
Suite 2-220
Durham, NC 27701

Andrea Stolba
U.S. Army Corps of Engineers
Wilmington District
ATTN: Wilmington Harbor 403
69 Darlington Avenue
Wilmington, NC 28403
Sent via email to: WilmingtonHarbor403@usace.army.mil

Dear Ms. Stolba,

Thank you for the opportunity to comment during the U.S. Army Corps of Engineers' Wilmington Harbor 403 Letter Report and Environmental Impact Statement public comment period. As the state office of the National Audubon Society, Audubon North Carolina protects birds and their habitat throughout the state, including through its coastal islands and sanctuary program. This program directly manages and collects data at nesting sites, including islands on the Lower Cape Fear River (LCFR) that collectively support about one-third of North Carolina's coastal nesting waterbirds. As our June 2023 letter describes, the LCFR is one of the most important strongholds for migratory birds on North Carolina's coast. To help ensure that this federally protected natural resource is represented in all of the port expansion proposals, we have attended all possible meetings and information sessions and will be glad to continue to meet to discuss the information we have further and we provide these comments now.

1. Updated and additional bird data collected on the LCFR.

As the primary bird management entity on the LCFR, Audubon North Carolina provided comments and data during the early scoping public comment period last June, including species composition, distribution, and abundance. For ease of reference, we will attach the letter and files sent last June and provide updates where new data is available. Last summer, the 2023 colonial (group-nesting) waterbird census had not been completed, so we have updated the file called "CFR CWB 2014-2024 - updated" to include 2023's results. We are also adding a file listing the locations and flock sizes of our incidental (seen while we were doing other work) sightings of Red Knots on the LCFR. There are no comprehensive, targeted surveys for Red Knots, so this is the most information we have available at this time. The Bald Head Island Conservancy may be able to provide counts from their beaches, and we encourage the Corps to contact them for information they may have, if they have not already.

2. Threats to birds from anthropogenic alterations to the LCFR.

The low-lying islands and marshes that support such abundant bird life on the LCFR already suffer from erosion, made worse by current ship wakes, dredging and removal of sediment from the system, and rising seas. While the Corps doesn't plan to gather new data to model how the port expansion would exacerbate these issues, we know from observations and past port expansions that the impacts will be significant for birds. A deeper, wider channel will lead to bigger wakes, more wave energy, a wider tidal prism, and substantially more erosion of these nesting islands, significantly compromising the quality and sustainability of the habitat, and thus threatening the larger population of these bird species in the state.

Our 2023 letter describes direct observations of how the bird nesting islands' shorelines have changed over the years and how and where ship wakes impact nesting birds and interact with the LCFR's shorelines. In fact, the shorelines of all nesting islands on the LCFR are subject to impacts from ship wakes and increased water and wave energy in a system that has been deepened and widened over the years. Birds can choose nest sites based on predictable, repeated tides, but they cannot anticipate what are, in effect, rogue waves, that strike without warning and overtake areas that would otherwise remain above water (Fig. 1).

Figure 1. A typical American Oystercatcher nest (left) on the LCFR located very near, horizontally and vertically, to the high tide line (indicated by black arrow) and Laughing Gulls nesting in the marsh on the LCFR.

We have observed when boating on the river, that passing ships—tankers and especially container ships—throw large tsunami-like wakes that inundate shorelines, and nests, up and down the LCFR (Figs. 2 and 3). These ship wakes travel all the way to the eastern shoreline of the LCFR and are not confined to the immediate vicinity of the dredged channel. Severity depends on a variety of conditions, including but not limited to tidal stage and direction, wind speed and direction, ship speed and direction, and ship weight and displacement, and generally, the larger the ship, the more dramatic the impacts we observe. These wakes, as well as changes to the hydrodynamics in the system caused by deepening and widening, affect erosion along other LCFR shorelines as well, so that developed areas such as the Southport waterfront and neighborhoods along the banks of the river are impacted as well as bird habitat.


Figure 2. A ship wake strikes a nesting area on Shellbed Island on the eastern shore of the LCFR.

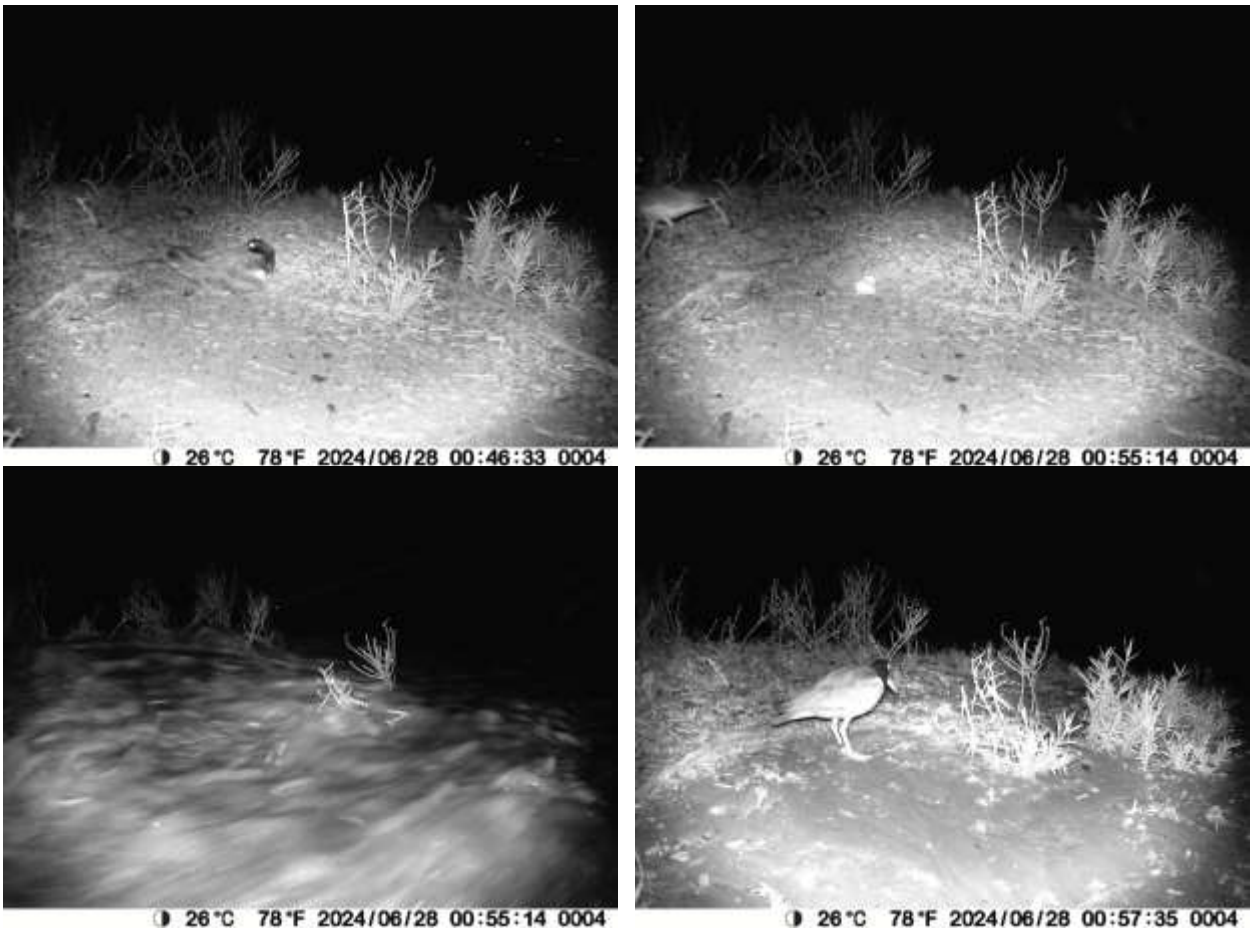


Figure 3. An American Oystercatcher's nest that was situated well above the high tide line is inundated by a ship wake on the LCFR, washing away the eggs.

3. The best available information must be used to evaluate impacts to migratory birds on the LCFR.

While these impacts are observable, we do not have the type of technical data—bathymetry, shoreline contours, island topography, waveforms, and more—that would serve to best model how changes to the depth and width of the river channel, and the tonnage of ships traversing the channel would affect bird habitat, nests, and young. It was therefore disappointing to learn last

fall that the Corps does not plan to collect any new data as part of this 403/EIS process, especially as during presentations in the 203 process in 2019-2020, we were told more data would be collected to improve on the analyses that were being used at the time—analyses that did not capture the observed impacts that existing dredging and shipping traffic have on the nests, chicks, and habitats of migratory birds. We therefore hope that the Corps' understanding of these impacts will go beyond what was in the 203 report.

Developing a complete, fine-scale understanding of the erosional impacts, or even the full impacts to nests or chicks could consume several graduate students' degrees. However, some shoreline and coastal processes work has been done in specific areas of interest, and if it hasn't been done already, we encourage the Corps to contact resources at UNC-Wilmington including the Coastal and Estuarine Studies Lab and the faculty in the Department of Physics and Physical Oceanography's Coastal Engineering program to determine if existing data or analyses would be available and applicable.

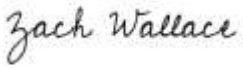
Given constraints on this process that prevent more data from being collected specifically for the Corps' assessment, and given the easily observable qualitative impacts, we encourage the Corps to be careful in any conclusions it draws as regards impacts to migratory birds, their nests and young, and the habitats they rely on. A lack of granularly quantified data for a specific island's shoreline change and wake characteristics should not be taken to indicate that there is no impact, just that thattype of data was not able to be collected. No additional information is needed to know that bringing larger and heavier ships up river will create larger wakes and more severe impacts, and the Corps' environmental analysis should reflect that fact.

4. The permanence and magnitude of the proposed deepening and widening.

We encourage the same caution broadly because the proposed project is massive in scope and cannot be undone if impacts are worse or different than anticipated. In a specific example we drew attention to in our 2023 letter, the Corps proposes some of the most drastic widening in the vicinity of Battery Island, a globally significant Important Bird Area for White Ibis and an important nesting island on the LCFR. Widening the channel between Southport, Oak Island, and Battery Island by 800-1300 feet, as the Corps proposes, would not only exacerbate erosion that is already occurring but decrease the space available to implement shoreline protection measures for the human communities as well as the bird island. Impacts to Battery Island (or migratory birds in general) were not considered in the previous deepening and widening project's 1996 EIS, and later the U.S. Fish and Wildlife Service attempted to mitigate some impacts by installing geotextile tubes, which proved to be temporary and not effective. This analysis is an opportunity to revisit these oversights and misunderstandings and ensure that migratory birds are not overlooked again.

Finally, beyond any specific island, deepening and widening the LCFR's navigational channel will have irreversible system-wide impacts, from the conversion of bottomland swamp from fresh to brackish water to a wider tidal prism and greater potential for flooding both during usual high tides and storms. These will have impacts on human communities as well as natural ecosystems and wildlife, and we look forward to a thorough and thoughtful review of the alternatives presented by the Corps in the scoping documents.

Sincerely,



Zach Wallace, Policy Director
Audubon North Carolina

Attached: *Audubon NC early scoping comments 6-30-2023.pdf*
CFR CWB 2014-2023 - updated.xls
CFR census AMOY 2013-2022.xls
CFR REKN incidental sightings fall 2021- summer 2024.xls